



HOT SPRINGS NATIONAL PARK

Cultural Landscape Report and Environmental Assessment



January 2010



Cover Illustration: View of Bathhouse Row facing north, April 2005 (source: Quinn Evans Architects)

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HOT SPRINGS NATIONAL PARK
CULTURAL LANDSCAPE REPORT
AND
ENVIRONMENTAL ASSESSMENT

PREPARED FOR:
NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE
AND
HOT SPRINGS NATIONAL PARK

PREPARED BY:
QUINN EVANS | ARCHITECTS
219½ NORTH MAIN STREET
ANN ARBOR, MICHIGAN 48104
AND
MUNDUS BISHOP DESIGN
333 WEST COLFAX AVENUE, SUITE 350
DENVER, COLORADO 80204
AND
WOOLPERT, INC.
1910 PINE STREET, SUITE 420
St. LOUIS, MISSOURI 63103

TASK ORDER: Q6068060019

January 2010

PROJECT CREDITS

NATIONAL PARK SERVICE
HOT SPRINGS NATIONAL PARK
Josie Fernandez, Superintendent
Dale Moss, Assistant Superintendent
Stephen Rudd, Resource Manager
Leonard Lawson, Facilities Manager
Lisa Garvin, Chief of Interpretation
Sharon Shugart, Museum Specialist
Mark Blaeuer, Ranger of Interpretation
and Cultural Resources
Dianne East, Management Assistant
Gail Sears, Interpretive Program Assistant
Jeff Heitzman, Ranger of Interpretation
Mitch Hunter, Grounds Supervisor

NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE
Marla McEnaney, Historical Landscape Architect
Nick Chevance, Regional Environmental Coordinator
Sandra Washington, Division Chief, Planning and Compliance
Ron Cockrell, Historian
Geoff Burt, Historical Landscape Architect
Rachel Franklin-Weekley, Architectural Historian

QUINN EVANS | ARCHITECTS
Steven C. Jones, AIA, Principal-in-Charge
Brenda W. Williams, ASLA, Project Manager
Catherine Dammann, MALA
Ruth Mills, Historian

MUNDUS BISHOP DESIGN
Tina Bishop, ASLA, Historical Landscape Architect
Robyn Bartling, ASLA

WOOLPERT, INC.
Will Ballard, Environmental Specialist
David Dister, Environmental Specialist

TASK ORDER: Q6068060019
January 2010

Finding of No Significant Impact

Cultural Landscape Report Hot Springs National Park, Arkansas

Background

Hot Springs National Park was established as the Hot Springs Reservation in 1832. In 1921, the reservation was designated as the eighteenth national park in the National Park Service system. The intent of the park was to preserve the unique natural resource of the hot springs for public use. The significance of the historic resources at Hot Springs National Park was reflected in the listing of Bathhouse Row as a National Register Historic District in 1974 and as a National Historic Landmark in 1987. The unique water resources at Hot Springs National Park continue to attract visitors from throughout the United States and abroad to provide visitor experiences associated with the park's historic landscapes, historic structures and the health benefits of the hot springs.

The NPS has completed a Cultural Landscape Report (CLR) and Environmental Assessment (EA) that provides an analysis of the environmental consequences for the management concept of rehabilitating the historic landscapes (Reservation Front; Whittington Park; West Mountain; Hot Springs Mountain; Gulpha Gorge) of Hot Springs National Park.

Internal scoping addressed issues and possible facilities design. Public input was sought before and after the environmental assessment was written. Concerns identified during scoping and evaluated in the environmental assessment included natural and cultural resources, parking areas, restroom facilities and shelters, accessibility and safety, implementation costs, and future interpretive plans, programs and facilities.

Preferred Alternative

The Preferred Alternative (Alternative #4) is described in detail in the CLR/EA. This alternative would reestablish selected historic characteristics of the Reservation Front including Architectural Park (Magnolia Promenade and Bathhouse Row) and Mountain Sideground parks (South Park, Foreground Park, Tufa Park, and Wooded Park). Arlington Lawn would be rehabilitated to suggest the earliest circulation design for the area as a park. The Hot Water Cascade pools and amphitheater would be rehabilitated to display a more naturalistic appearance and to recapture the essence of the natural features that originally drew visitors to Hot Springs. Historic resources associated with Hot Springs and West mountains are preserved and select non-contributing elements would be replaced with features that complement the historic character of the mountains. Whittington Park would be reestablished as a formal entrance to West Mountain and revitalized to enhance historic resources. The historic resources at Gulpha Gorge Campground would be stabilized, enhanced and preserved.

The Preferred Alternative is also the environmentally preferable alternative when measured against the six criteria listed in Section 101 of NEPA.

Criterion 1

Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations, is best met by the Preferred Alternative, which emphasizes:

- Use of existing lands already disturbed by past activity,
- Minimal disturbance of new areas with relatively undisturbed ecological communities,
- Minimal disturbance of new areas and no expected disturbance to archeological sites, and
- Restoration of previously disturbed sites.

Criterion 2

Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings, is best met by the Preferred Alternative, which emphasizes:

- Reestablishment of visual connections between physical features of the park,
- Restoration and enhancement of the natural elements,
- Construction of aesthetically pleasing landscape features that are compatible with the historic period, and
- Increased accessibility to the historic landscape.

Criterion 3

Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences, is best met by the Preferred Alternative, which emphasizes:

- Minimizing new construction in undisturbed areas focusing new construction in already disturbed sites, thus minimizing degradation of areas with higher natural or cultural values.

Criterion 4

Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice, is best met by the Preferred Alternative, which emphasizes:

- Maximizing the rehabilitation of significant cultural features in the historic landscapes and reduction of the non-contributing and incompatible landscape features,
- Increasing the ability of visitors to experience the historic landscapes through reestablishment of pedestrian entrances,
- Minimizing disturbance to undisturbed areas, and avoiding disturbance to archeological sites,
- Restoration of selected sites to original topographic contours and revegetating with native and hardy plant species, and
- Restoration of appropriate natural communities by conversion of manicured landscapes to native vegetation.

Criterion 5

Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities, is best met by the Preferred Alternative, which emphasizes:

- Providing increased accessibility for physically challenged visitors, and
- Making use of existing land space.

Criterion 6

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources, is best met by the Preferred Alternative, which emphasizes:

- That to the extent possible the park would use renewable or recycled materials for appropriate elements of new facilities.

Other Alternatives Considered

Three other alternatives, including the No-Action Alternative, were evaluated in the EA. The other alternatives included:

Alternative 1 – This is the no-action alternative, and would result in the continuation of current NPS management philosophies for the historic landscapes. The current management philosophy is to maintain the historic landscapes in their current condition, which includes non-compatible landscape features. No new landscape management policies would be implemented.

Alternative 1 was not selected as the Preferred Alternative because this alternative would not preserve important cultural landscape elements as well as other treatment alternatives due to the presence of numerous non-contributing landscape features. This alternative would not allow for restoration of significant landscape elements or introduction of features that compliment the landscape.

Alternative 2 – This alternative provides for the protection and preservation of extant historic resources while accommodating change within the park's historic landscapes. This alternative allows the most extensive change to the existing conditions in order to reestablish the significant historic landscape to the greatest extent possible.

Alternative 2 was not selected as the Preferred Alternative because it would not create a reasonable balance between historic preservation and resources available to implement the alternative.

Alternative 3 – This alternative provides for the protection and preservation of extant historic resources with a minimal amount of change within the park's historic landscapes. Although minimal alterations to the existing features are acceptable, the emphasis is on preserving the resources that currently exist.

Alternative 3 was not selected as the Preferred Alternative because it would not strike a balance between resources available and the desire to reestablish the landscape to its period of significance.

Why the Preferred Alternative Will Not Have a Significant Effect on the Human Environment

The intensity or severity of impacts resulting from implementation of the Preferred Alternative is evaluated using ten (10) criteria listed in 40 CFR 1508.27. Key impact areas evaluated included soils, surface water quality, vegetation and wildlife, visitor experience, safety, aesthetic resources, archeological and historic resources, river access, visitor facilities and accessibility. As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Criterion 1: Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The Preferred Alternative would result in some long-term minor and moderate beneficial impacts to scenic resources and visitor experience. There is a potential for short-term minor adverse impacts to visitor use and experience during restoration or rehabilitation of historic features; however, these short-term impacts would only be experienced during the length of construction. Mitigation will be established to reduce these impacts. However, the Preferred Alternative would not have a significant impact on the environmental, scenic, cultural or recreational resources of Hot Springs National Park, nor would it result in impairment of any of these resources.

Criterion 2: The degree to which the proposed action affects public health or safety.

The Preferred Alternative would improve public safety and health for both NPS staff and visitors by minimizing pedestrian and vehicle conflicts, while improving pedestrian access and circulation throughout the park. Any new facilities would be accessible, as specified by the criteria of the Architectural Barriers Act of 1968. Implementation of NPS Best Management Practices (BMPs) would mitigate safety hazards to visitors and workers during periods of construction.

Criterion 3: Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The preferred alternative does not impact any prime farmlands, wetlands or wild and scenic rivers. Some existing historic and cultural resources will be rehabilitated; while some landscape features that are incompatible or non-contributing to the historic significance of landscapes within Hot Springs National Park will be eliminated. There are no known federally listed species within the park. There may be minor beneficial long-term impacts to the state listed blue-green algae and the wood stonecrop, which will benefit by an increase in available critical habitat. The improvement of natural conditions would provide a slight benefit for wildlife.

Criterion 4: The degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The Preferred Alternative is not highly controversial. No issues arose during the preparation of the CLR/EA from the staff and no issue was brought to the park's attention during the public review that indicated a dispute with either the methodology or results of the analysis of impacts, as evidenced from public input and agency coordination throughout the environmental assessment process.

Criterion 5: The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The characteristics of the site are well known and present no unknown risks.

Criterion 6: The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Preferred Alternative does not establish a precedent for future actions with significant effects since the alternative improves existing facilities while reducing impacts to the Park at an already disturbed site. Furthermore, this level of development at this site is well within the guidelines set by the Park's Resources Management Plan and General Management Plan for this portion of the Park.

Criterion 7: Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

This plan was prepared to protect the Park from both individual impacts associated with the Preferred Alternative and cumulative impacts. Likely future actions taken individually or collectively under the Resources Management Plan and General Management Plan as currently written would not have a significant cumulative impact.

Criterion 8: The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The Preferred Alternative would not have an adverse impact on known archeological or historical resources listed in, or eligible for listing in the National Register of Historic Places. In a letter dated April 28, 2008, the Arkansas SHPO expressed concern that there may be adverse impacts to unknown archeological resources and recommended that the NPS pursue a Programmatic Agreement (PA). In response, the park worked with the SHPO and the Advisory Council on Historic Preservation (ACHP) to initiate an agreement document to provide for consideration of impacts to historic resources that may be required in implementing the preferred alternative. In addition to the State Historic Preservation Officer (SHPO), two tribes (Caddo and Quapaw) were offered an opportunity to concur with the recommendations for mitigation of impacts. On February 27, 2009, the Advisory Council on Historic Preservation determined that they required no further involvement in the PA process unless requested.

Criterion 9: The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

There are no expected impacts to federally listed plant or animal species known in Garland County, and no federal listed species are known within the boundaries of Hot Springs National Park. There would be negligible to minor beneficial long-term impacts to the state listed blue-green algae and wood stonecrop

by this alternative. The U.S. Fish and Wildlife Service office in Conway, Arkansas, reviewed the environmental assessment and stated in a memorandum dated April 24, 2008 that they concur with the National Park Service assessment that there would be no impacts to federally endangered or threatened species due to this project.

Criterion 10: Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

The Preferred Alternative would not violate any environmental protection law or regulation. Appropriate consultation, coordination, and permitting actions would be necessary prior to implementing the Preferred Alternative. These actions would include Section 106 consultation under the National Historic Preservation Act, Section 7 of the Endangered Species Act, and Section 404 and 401 permits under the Clean Water Act, as necessary.

Mitigation

If previously unknown and significant archeological resources are unearthed during construction, work would be stopped in the area of discovery and the NPS would consult with the Arkansas State Historic Preservation Office (SHPO) and as appropriate, the Advisory Council on Historic Preservation. If impacts to significant resources could not be avoided by redesign, mitigating measures would be developed in consultation with the SHPO to help ensure that the informational significance of the sites would be preserved. If appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990 would be implemented.

The use of NPS Best Management Practices (BMPs) would minimize short-term and long-term adverse impacts to water quality and visitor experience.

Public Involvement

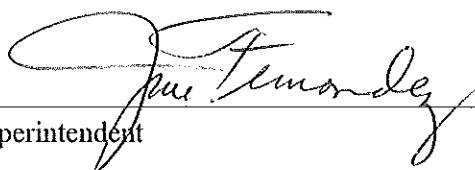
A public open house was held on May 9, 2007 to introduce the project to the community and stakeholders. Tentative alternatives were presented to attendees. The park issued a press release and made personal invitations to a number of community members. Approximately 8 people attended the workshop. The environmental assessment was available for public review and comment during a 30-day period ending May 29, 2008. The environmental assessment was available at the Park's administrative office, on the Park's website through PEPC, and individual copies were mailed to those involved in consultation. Two comments were received in writing; neither was deemed to be pertinent to the Cultural Landscape Report. Following their review, the Arkansas SHPO recommended that a PA be completed to address potential adverse impacts to unknown archeological resources. Based on their review of the environmental assessment and subsequent draft PA, the Caddo Nation expressed a desire to be signatories for the agreement in an email dated July 1, 2008. No correspondence from the Quapaw was received, so the park responded to both tribes with a letter dated May 14, 2009 asking for a formal response. At this time, consultation with Quapaw has not yet concluded but it is believed that they will not have concerns that will cause a change in the preferred alternative. According to 36 CFR 800.6(c)(1), the agreement document may be implemented once signed by the park and the SHPO without the signature of an invited

party; however, the park is continuing their effort to obtain the Quapaw concurrence with these recommendations.

Finding of No Significant Impact and No Impairment

Based on my review of the facts and analysis contained in this environmental assessment, which is incorporated herein, I conclude that the Preferred Alternative for the Rehabilitation of Historic Landscapes at Hot Springs National Park would not have a significant impact either by itself or in consideration of cumulative impacts. Accordingly, the requirements of the National Environmental Policy Act, regulations promulgated by the President's Council on Environmental Quality, and provisions of National Park Service (NPS) Director's Order-12 and Handbook (Conservation Planning and Environmental Impact Analysis and Decision-Making) have been fulfilled. Furthermore, the Preferred Alternative selected for implementation would not impair park resources or values and would not violate the NPS Organic Act. The Preferred Alternative supports the enabling legislation establishing Hot Springs National Park under the Antiquities Act of 1906 with the intended purpose of preserving the scientific and public interests for future generations. An environmental impact statement is not required and will not be prepared for implementation of the Preferred Alternative.

Recommended:

 14 dec 09

Superintendent Date

Approved:

 12/21/09
A.W. _____
Midwest Regional Director Date

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Chapter I: Introduction

Chapter I: Introduction (*Purpose and Need*)

Scope of the Report

The intent of this combined *Cultural Landscape Report and Environmental Assessment (CLR / EA)* is to guide treatment and use of the above-ground resources associated with the significant historic landscapes at Hot Springs National Park. A thorough investigation and evaluation of the historic landscapes has been conducted using National Park Service (NPS) and National Register of Historic Places guidelines. The documentation of significance and evaluation of integrity of the historic landscapes serves as a framework upon which treatment recommendations are based. The report provides park managers with a comprehensive understanding of the physical evolution of the historic landscape, and guidance for management of the landscapes. The report has been prepared by a project team composed of Quinn Evans | Architects (QEA), Mundus Bishop Design (MBD), and Woolpert, Inc., to fulfill a contract with the Midwest Regional Office of the National Park Service.

Report Methodology (Applicable Regulatory Requirements)

The report was prepared according to federal standards guiding cultural landscape projects and environmental assessments include *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*, *The Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, federal regulations (40 CFR 1500-1508) implementing the *National Environmental Policy Act of 1969 (NEPA)*, regulations of the *Council on Environmental Quality* (40 CFR 1508.9), *NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-Making*, and the *National Historic Preservation Act of 1966* (as amended). Other applicable regulatory requirements include: the *National Park Service Organic Act*, the *American Indian Religious Freedom Act*, the *Act for the Preservation of American Antiquities of 1906*, the *Historic Sites Act of 1935*, the *National Park Service Director's Order #28, Cultural Resource Management*, the *2006 National Park Service Management Policies*, and the *Archaeological Resources Protection Act*.

Field inventories of existing conditions and landscape features were conducted by Quinn Evans | Architects and Mundus Bishop Design in June 2005 and June 2006. Archival research was conducted utilizing primary and secondary sources to produce the landscape history and conduct the landscape analysis. The majority of the research was conducted at the park library and archives. The park has an extensive and well organized collection of historic photographs, brochures, maps, landscape plans, landscape planning documents, and administrative archives (from 1870 to the present including original plans, monthly and annual superintendents reports, and master plans). Other collections utilized to obtain historical documentation included the archives at the Frederick Law Olmsted National Historic Site for correspondence between the Olmsted firm and Robert Stevens regarding the early design of the park and the Sterling Morton Library Archives located at the Morton Arboretum located in Lisle, Illinois for historic photographs of the park taken by Jens Jensen in 1915.

The *Environmental Assessment (EA)* analyzes the impacts on the natural and cultural environment of each of the treatment alternatives. The *EA* portion of the project was coordinated by Woolpert, Inc., a consulting firm that specializes in environmental planning. Quinn Evans | Architects and Mundus Bishop Design assisted in the preparation of this portion of the report.

Although the federal government has standard guidelines for the preparation of *CLRs* and *EAs*, there are no guidelines for preparing a combined report. The National Park Service has recognized that combining the two can increase the value of the overall document by integrating the information generated through the *CLR* with the in-depth evaluation process inherent to the *EA*. Merging the documents improves and validates the recommended treatment while also reducing the costs associated with the preparation and printing. This report has been organized as indicated below:

Chapter I: Introduction (Purpose and Need)*

Chapter II: Landscape History

Chapter III: Existing Conditions / Affected Environment*

Chapter IV: Landscape Analysis

Chapter V: Management Philosophy and Management Issues

Chapter VI: Treatment Alternatives*

Chapter VII: Impacts from Treatment Alternatives (Environmental Consequences)*

Chapter VIII: Recommended Treatment: Project Phasing and Design Vocabulary

Chapter IX: Consultation and Coordination*

Bibliography

Appendix A: NPS Cultural Landscapes Inventory for Gulpha Gorge Campground Hot Springs National Park*

Appendix B: Consultation and Coordination Documents*

Appendix C: Finding of No Significant Impact (FONSI)*

Due to the length of this document, in order to reduce paper use and printing costs, selected portions for the chapters with an * after their title are included in this hard copy, and electronic copies of the complete chapters may be found on the enclosed disk. The appendices are included only in digital format, on the disk.

Purpose and Need

Need

The combined *CLR / EA* for Hot Springs National Park is needed to guide treatment and use of the above-ground resources associated with the significant historic landscapes at Hot Springs National Park (also referred to as “the park,” or “Hot Springs”).

Bathhouse Row, one of the most prominent park historic landscapes, is a National Historic Landmark. The NPS prepared a *Landscape Management Plan for Bathhouse Row* in 1989, and received a Determination of Eligibility for the landscape in 2000. *The Cultural Landscape Report* is necessary to update the *Landscape Management Plan* based on a more thorough

understanding of the eligible landscape features associated with Bathhouse Row.¹ In addition to Bathhouse Row, Hot Springs National Park contains several other potentially eligible historic landscapes. The *CLR* is needed to provide a comprehensive understanding of the historic development of these landscapes and to evaluate their significance and provide treatment recommendations that respond appropriately to their historic characteristics while accommodating current and future visitor and park needs.

Purpose

The purpose of the combined *CLR/EA* is to document and record the history and current conditions of the historic landscapes at Hot Springs National Park, and to guide future treatment and use of these landscapes to ensure the preservation of significant cultural and natural resources while providing opportunities and facilities for visitor education and use.

Project Objectives

The objectives for the report include:

- Document the development of the historic landscapes at Hot Springs National Park.
- Document the existing conditions of the historic landscapes at Hot Springs National Park.
- Evaluate the significance and integrity of the historic landscapes at Hot Springs National Park.
- Provide guidelines and a range of treatment recommendations for managing the complex and extensive historic landscape resources within the park.
- Provide management recommendations and schematic treatment plans for specific historic landscapes within the park that accommodate current and future needs while preserving the historic character and significant features present.
- Streamline planning and compliance processes for the historic landscapes at Hot Springs National Park.
- Enhance visitor experience and interpretive programs through an understanding of the history of the development of the park.
- Provide recommendations for efficiently managing the historic landscapes within the park while taking into consideration budget constraints.

¹ The *CLR* will reflect the Secretary of the Interior's Standards and Guidelines for Historic Landscapes that have been published since the completion of the Landscape Management Plan.

Park Purpose/Significance

The hot springs of Arkansas were believed to have curative powers by 18th century European visitors to the area. In 1820 the Arkansas Territorial Assembly petitioned the U. S. Congress to place the hot springs and their surroundings under territorial control. A Congressional Act of April 20, 1832 reserved the area for the future disposal of the federal government. The government took no further action until Congress passed legislation in 1877, authorizing the appointment of a Hot Springs Commission which laid out the reservation and selected a superintendent to oversee it. This marked the beginning of federal government control over the reservation landscape. Successive acts of Congress supported the idea of a national spa that would make the therapeutic waters available to all without regard to race or income. The government undertook architectural development using private funds, and invested in the physical improvements to the landscape. In 1916 Hot Springs Reservation was grandfathered into the newly organized National Park Service, and in 1921, through an act of Congress it was designated as a national park and renamed Hot Springs National Park.² As a national park, Hot Springs has continued to provide a range of experiences for visitors seeking the health benefits from the waters, exercise on the trails, entertainment, social interactions, and education regarding the history of this intriguing landscape.

The historic resources associated with Bathhouse Row were initially listed as a National Register Historic District in 1974. The district was recognized as a National Historic Landmark in 1987 for containing the “*largest collection of twentieth century bathhouses remaining in the United States,*” and for representing the “*high point of that industry when it reached its peak from the 1920s through the 1940s.*”³ In 1998 a *Cultural Landscapes Inventory* identified the importance of the landscape of the Bathhouse Row and Grand Promenade as contributing to the significance of the district. This evaluation was incorporated into a Determination of Eligibility; the Arkansas State Historic Preservation Office concurred in 2000. In 2006, a *Cultural Landscapes Inventory* was prepared for the historic landscape of the Gulpha Gorge Campground; it identified the site as a significant representative of the design and development of campgrounds within national parks.

This CLR/EA was undertaken to evaluate the historic landscapes within the park and determine if other significant sites exist. *Chapter IV: Landscape Analysis* provides a complete analysis of the historic landscapes at the park.

Description of the Study Area

Hot Springs National Park includes 5,549.46 acres of land located in the southwestern portion of the state of Arkansas. The mountains surrounding the park contain a south-central United States pine-oak-hickory forest ecosystem. The majority of the park’s vegetation, thermal waters, cold water springs, bathhouses and associated cultural features, foot trails, prehistoric

² Previously established parks included (in order): Yellowstone, Sequoia, General Grant, Yosemite, Mount Ranier, Crater Lake, Wind Cave, Sullys Hill, Platt, Mesa Verde, Glacier, Rocky Mountain, Hawaii, Lassen Volcanic, Mount McKinley, Grand Canyon, Lafayette, and Zion.

³ Harrison, *Bathhouse Row, Hot Springs National Park National Register Nomination*, Item 8, 1. A discussion of the nomination is provided in Chapter IV: Landscape Analysis of this report.

and historic novaculite quarries, and general physiography are preserved and interpreted by the National Park Service (4876.77 acres). The remaining 672.69 acres are within the park boundary but are privately owned. The city of Hot Springs, Arkansas is adjacent to the park and bears a considerable influence on management of the park.⁴

The water of the hot springs is the primary natural resource of the park. In order to conserve the uncontaminated hot water for public use, the hot springs have been altered from their original state as natural surface phenomena. Therefore, the hot water has been preserved, while the landscape and springs from which it once flowed naturally has been altered significantly. The hot water is captured and piped to reservoirs and the only representation of the springs on the landscape is a collection of green boxes that dot the surface where the springs once emerged. The mountain lands within the park are also managed to preserve the hydrological system that feeds the springs.

Cultural resources within the park are extensive and consist of several significant historic landscapes including the Reservation Front (made up of Bathhouse Row, Foreground Park, Formal Entrance, South Park, Tufa Park, Arlington Lawn, and Wooded Park), Hot Springs and West Mountains, Whittington Park, and Gulpha Gorge. In addition, the park contains an extensive system of prehistoric and historic novaculite quarries that run through and beyond the park boundaries. The project study area includes the portions of the Hot Springs National Park landscape that contain the significant landscape resources listed above (see Figures 1- 1 and 1-2). Other portions of the park do not include above ground cultural landscape resources, and therefore have been excluded from the project area. These include the west end of West Mountain, Music Mountain, Sugarloaf Mountain, Bull Bayou, and several square miles of terrain north of Highway 7 in the northeast section of the park.

⁴ United States Department of the Interior, National Park Service, *Resource Management Plan, Hot Springs National Park*, 3.

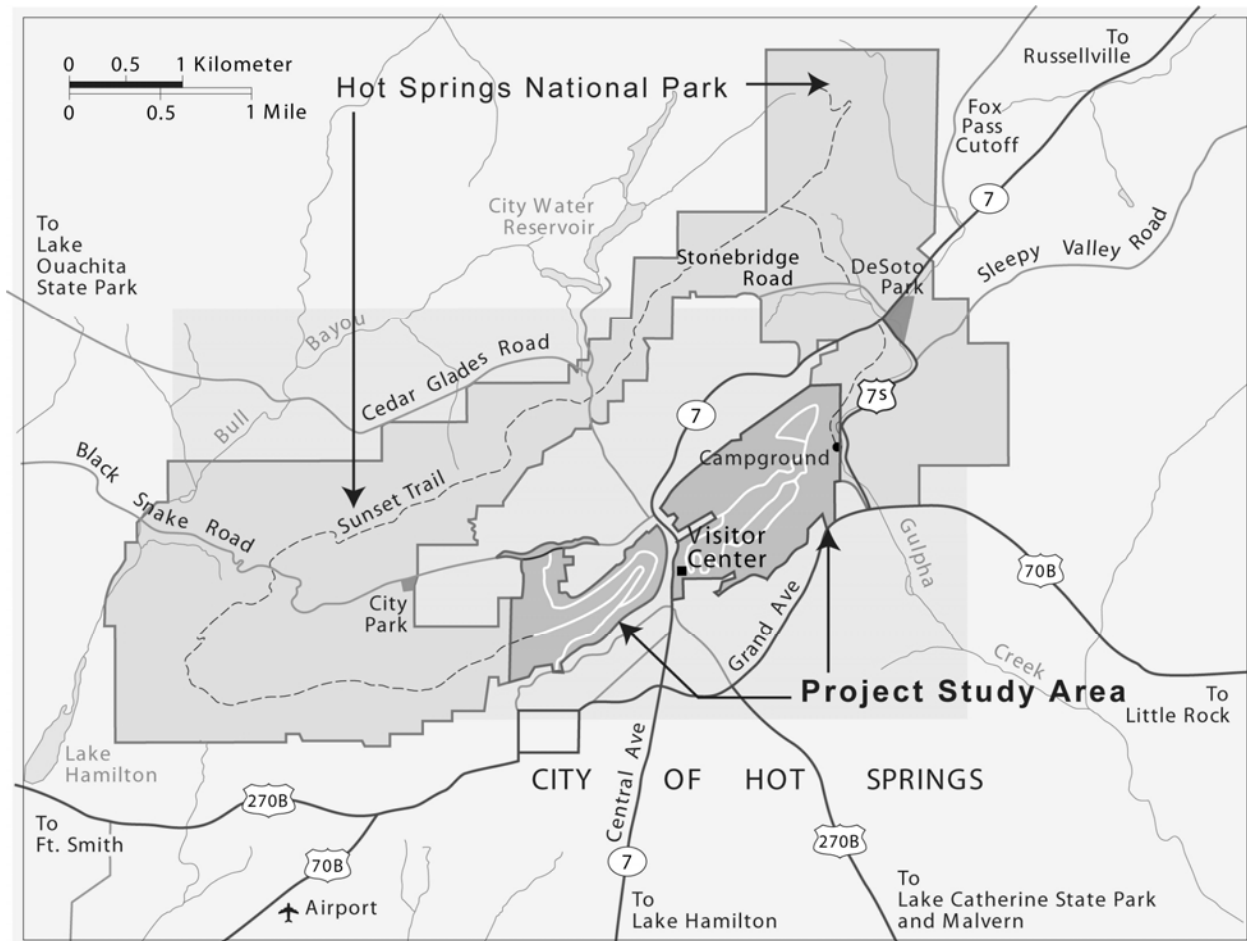


Figure 1-1: Hot Springs National Park Boundary, Project Study Area, and Vicinity (source: modified from NPS web site vicinity map)

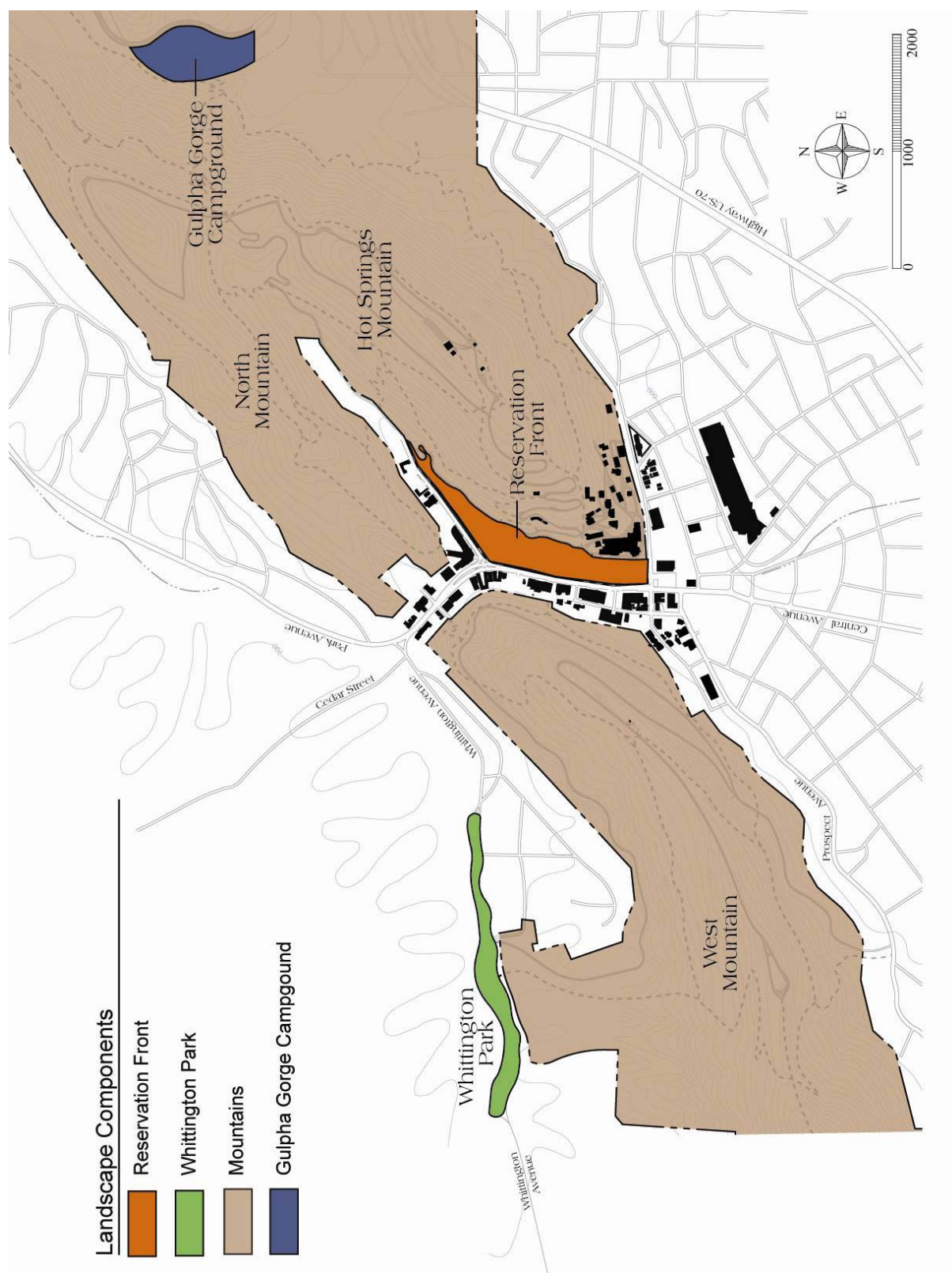


Figure 1- 2: Study Area and Landscape Components

The Reservation Front includes the most intensive collection of historic designed landscape resources within the park. The term “Reservation Front” is used herein to indicate the portion of the park bounded by Reserve Street, Central Avenue, Fountain Street and the initial portion of Hot Springs Mountain Drive as well as the retaining wall at the southern property edge of the Rehabilitation Center (see Figure 1-3). The idea of the “Reservation Front” was initially presented by Lieutenant Robert Stevens in his annual report of June 1893. He discussed the park improvements being undertaken, noting that the Reservation Front area was of primary importance due to its landscape features, mainly the springs. Throughout his subsequent reports he continued to refer to the Reservation Front as a whole entity that served as a defining component of the overall Reservation.⁵

The Reservation Front includes six landscape character areas. Landscape character areas are sites that are defined by their physical qualities and types of cultural resources present.⁶ The landscape character areas in the Reservation Front are Bathhouse Row, the South Park, the Foreground Park, the Tufa Park, the Wooded Park, and Arlington Lawn. The South Park, Foreground Park, Tufa Park and Wooded Park all are parts of the Mountain Sidegrounds, through which the Grand Promenade runs. The Foreground Park includes the Formal Entrance/Stevens Balustrade, the Display Spring, and the Maurice Spring. The locations of the landscape character areas in the Reservation Front are illustrated in Figure 1-3. Definitions for each landscape character area follow:

- Bathhouse Row: The Bathhouse Row landscape character area serves as the front door for Hot Springs National Park and is the primary location of the park’s architectural resources. Bathhouse Row was historically designed as an "architectural park" where buildings and landscape would unite into one cohesive space. The character area is located along Central Avenue in the downtown core of the City of Hot Springs. It is defined on the south by Reserve Street and on the west by Central Avenue. It extends north to the northern side of the Superior Bathhouse and is bounded on the east by stone retaining walls and steep slopes behind the bathhouses.
- South Park: The South Park consists of the southern-most portion of the Mountain Sidegrounds, located south of the intersection of the service drive and the Grand Promenade. It lies to the east of the Ozark, Buckstaff, and Lamar Bathhouses, and the Park Administration building (see Figure 1-3). It is bounded on the east by the retaining wall at the Rehabilitation Center, and on the south by Reserve Street. The most prominent feature of the South Park is the pavement of the Grand Promenade.
- Foreground Park: The Foreground Park is the central portion of the Mountain Sidegrounds. It is the transitional space that connects the South Park with the Tufa Park, and the Formal Entrance with Bathhouse Row. It is bounded on the west by Central Avenue, on the east by the old carriage road to the Army/Navy grounds, and on the north by the northern edge of the formal entrance. The bend in the Grand

⁵ A complete discussion of the rationale for utilizing the Reservation Front, Mountain Sidegrounds, South Park, Foreground Park, Tufa Park and Wooded Park, as terms to organize the landscape, is provided in Chapter IV: Landscape Analysis.

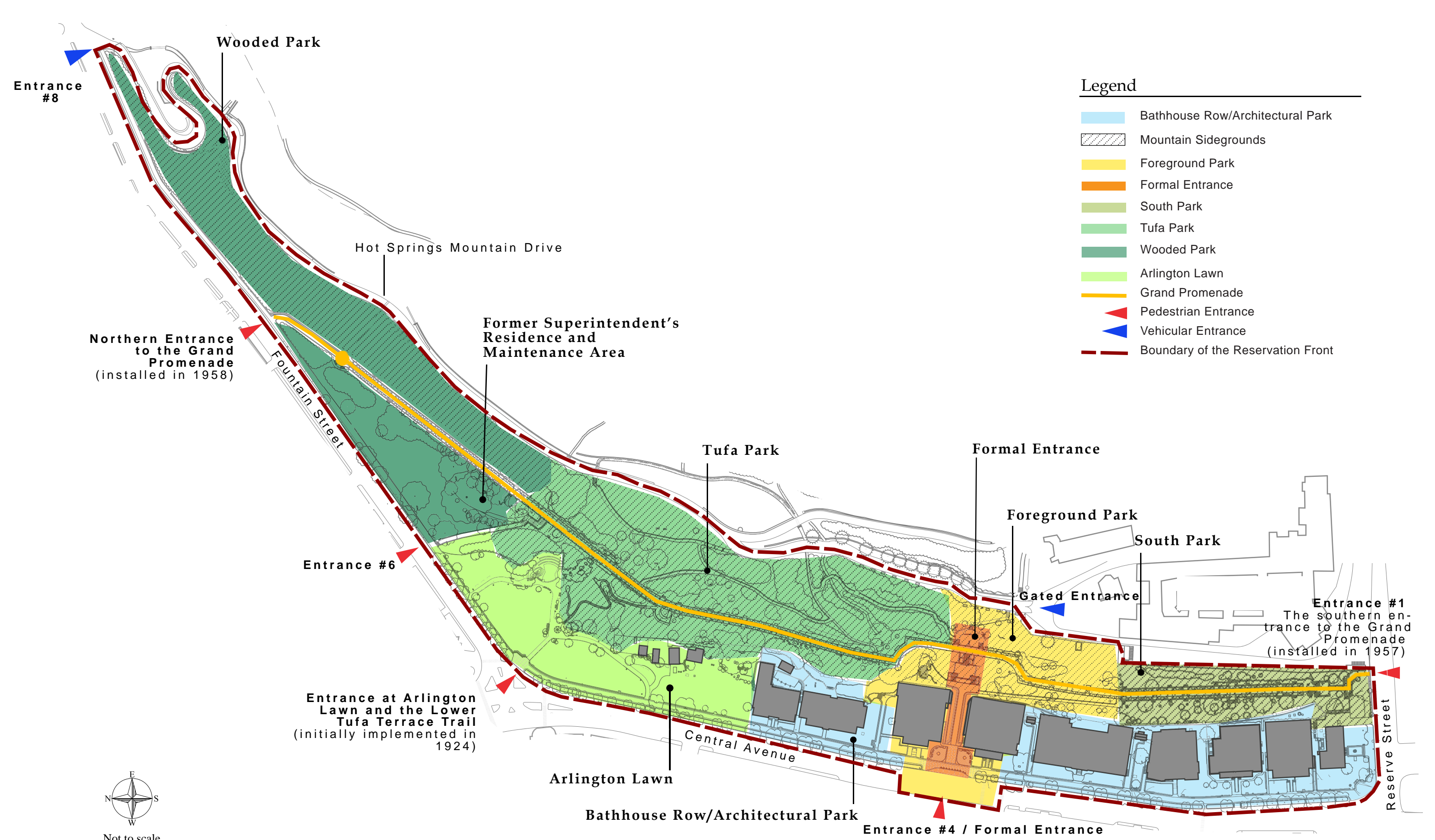
⁶ Page, Gilbert and Dolan, *A Guide to Cultural Landscape Reports*, 127.

Promenade where the width narrows is the southern boundary (see Figure 1-3). The most prominent feature of the Foreground Park is the Formal Entrance/Stevens Balustrade.

- Tufa Park: The Tufa Park consists of the portion of the Mountain Sidegrounds that lies to the north of the Formal Entrance, east of the Superior and Hale Bathhouses and Arlington Lawn, south of the intersection of the Grand Promenade and entrance six, and west of the Hot Springs Mountain Road and the Old Carriage Road (see Figure 1-3). Currently, the most prominent feature of the Tufa Park is the Grand Promenade.
- Wooded Park: The Wooded Park consists of the portion of the Mountain Sidegrounds that lies to the north of the Tufa Park and Arlington Lawn, east of Fountain Street and south and west of Hot Springs Mountain Road (see Figure 1-3). Currently the most prominent feature of the Wooded Park is the Grand Promenade.
- Arlington Lawn: Arlington Lawn is defined on the south by the north side of the Superior Bathhouse, on the west by Central Avenue and Fountain Street, on the north by entrance six at the Wooded Park, and on the east by the base of the slope adjacent to the Tufa Park (see Figure 1-3). The most prominent features of Arlington Lawn are the lawn, magnolia promenade, and the hot water cascade.

Following Page

Figure 1- 3: Reservation Front Landscape Character Areas



Reservation Front: Landscape Character Areas

Relation to Other Planning Projects

The *General Management Plan/Development Concept Plan* (1986), *Fire Management Plan* (2005), and *Resource Management Plan* (1998) for Hot Springs National Park provided background and management information on natural and cultural resource management, park operations, and visitor experience. These documents, along with research conducted as part of this *CLR / EA*, guide the formation of treatment alternatives and analysis of potential impacts to park resources.

Relation to Current Construction Projects

The NPS is currently stabilizing and rehabilitating the Superior, Hale, Maurice, Quapaw, Ozark, and Lamar bathhouses. Insulated roofs and modern heat and air systems were installed as well as exterior accessibility ramps and improved drainage systems to control spring water seepage into basements. In addition, improvements were made as necessary to the structural, electrical, and plumbing systems.

Environmental Assessment Impact Topics

Park resources were considered in accordance with *NPS Management Policies 2006*. The NPS manages park resources to maintain them in an unimpaired condition for future generations in accordance with the NPS-specific statutes, including the Organic Act of 1916 and the National Parks Omnibus Management Act of 1998; general environmental laws such as the Clean Air Act, the Clean Water Act, the Endangered Species Act of 1973, NEPA, and the Wilderness Act; Executive Orders; and applicable regulations.

NEPA is the basic national charter for protection of the environment. It requires Federal agencies to use all practicable means to restore and enhance the quality of the human environment and to avoid or minimize any possible adverse effects of their actions upon the environment.

Specific impact topics are identified for analysis and to allow comparison of the environmental consequences of each alternative. Impact topics that are analyzed for this project are: cultural resources (cultural landscape features and archeological resources), special status species, floodplains, water quality, visitor experience, and park operations. Impact topics that were dismissed from analysis for this project are: geology and soils, prime and unique farmlands, wetlands, air quality, environmental justice, socioeconomics, soundscape management, lightscape management, Indian trust lands, ethnographic resources, museum collections, wildlife, solid wastes, and utilities.

These impact topics were identified based on federal laws, regulations, and Executive Orders; *NPS Management Policies 2006*; and NPS knowledge of limited or easily impacted resources. A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissing specific topics from further consideration.

Impact Topics Selected for Analysis

Cultural Resources

The environmental analysis will include all landscape characteristics (natural systems and features, vegetation, topography, spatial organization, land use, circulation and viewshed). Potential archaeological resources located within Hot Springs National Park to an American Indian presence from at least 3,000 years ago. Although there is potential for archaeological resources, currently there are no documented archaeological resources within the study area. Bathhouse Row and its environs are listed in the National Register of Historic Places and designated as a National Historic Landmark. Implementation of any treatment alternatives could potentially affect cultural resources at the park and will require analysis in this document.

Special Status Species

There are no federally-listed threatened or endangered species known to occur at Hot Springs National Park; however one threatened species and one endangered species are known to occur within Garland County. State-listed rare species occur within the park; therefore this topic will be addressed in this document.

Water Quality

Hot Springs National Park exists because of water resources, all of which could be affected by implementation of alternatives. These resources include cold springs, hot springs, and surface waters of Gulpha and Hot Springs creeks. Therefore this topic will be addressed in this document.

Floodplains

Bathhouse Row is within the 100-year floodplain of Hot Springs Creek and Gulpha Gorge Campground is partially within the 100-year floodplain of Gulpha Gorge Creek. The potential impact of treatment alternatives to flood waters will be addressed in this document.

Visitor Experience

Hot Springs National Park was reserved for therapeutic use by the public and developed to provide a world-class spa and resort visitor experience. The adjunct activities of exercise, relaxation, and entertainment were all considered part of “the cure.” Although West, Sugar Loaf, North, and Hot Springs mountains were only minimally developed, they were made accessible to visitors through trails, drives, overlooks, and picnic grounds, thus enhancing the mountain resort experience. Implementation of any treatment alternatives could impact the visitor experience and will be addressed in this document.

Park Operations

Implementation of potential treatment alternatives would affect staffing levels, logistics and costs for maintenance and interpretation at the park, therefore this topic will be addressed in this document.

Impact Topics Considered But Eliminated from Further Analysis

Geology

Hot Springs National Park is situated on the southeastern edge of the Ouachita Mountains. During the late Paleozoic period, geological forces created inland seabed sediments, and subsequently erosional forces formed the present ridge and valley landscape. The Arkansas Novaculite formation caps the narrow steep ridges of the mountains while Stanley Shale (with Hot Springs sandstone) lies beneath and on lower slopes and elevations, primarily southeast of the park's mountains. To the northwest of the mountains, Polk Creek Shale and Bigfork Chert occur at lower elevations as the surficial bedrock.⁷ According to the Geologic Map of Arkansas,⁸ the Arkansas Novaculite formation includes strata from the lower Mississippian and upper Devonian periods, Stanley Shale includes strata from the Mississippian period, and Polk Creek Shale and Bigfork Chert include strata from the upper Ordovician period.

Because proposed cultural landscape treatment alternatives would not disturb bedrock, and action alternatives that would result in exposing of surficial deposits such as Tufa, would be limited in scope, there would be a negligible short-term impact to geologic resources. Therefore, further analysis of geology will be dismissed.

Soils

Soils within the immediate vicinity of Bathhouse Row and adjacent slopes include 10 soil types according to the USDA-NRCS.⁹ The dominant soil type along Bathhouse Row is Spadra loam, occasionally flooded, on slopes of 0 to 2 percent. This soil is considered well drained, occurs on stream terraces, and bedrock is typically greater than 6.5 feet below the surface. All the other soils in the vicinity are also well drained to somewhat excessively well drained, and slopes vary from 3 to 8 percent on the base slopes of hills and mountains to as much as 40 to 60 percent slopes on the upper third of mountain slopes. Depth to bedrock for the soils on base slopes varies from 10 inches to more than 6.5 feet below the surface, while it varies from 20 to 60 inches for the steeper upper slopes. Lastly, although Spadra loam is generally considered a "prime farmland" soil, it is wholly mapped within the urban/developed

⁷ Arkansas Geological Survey, <http://www.state.ar.us/agc/argeom.htm>, accessed website on June 18, 2007.

⁸ Arkansas Geological Commission and United States Geological Survey, "Geologic Map of Arkansas," 1993.

⁹ United States Department of Agriculture-Natural Resources Conservation Service, "Web Soil Survey 2.0," <http://websoilsurvey.nrcs.usda.gov/app/> (accessed on 18 June 2007).

Bathhouse Row, and consequently does not meet the criteria of “prime farmland” as defined in the Farmland Protection Policy Act.

Because proposed cultural landscape treatment alternatives would result in a minimal amount of disturbance to soils, further analysis of soils will be dismissed from this document. Nevertheless, all soil disturbing activities are subject to applicable regulations, including the *National Pollutant Discharge Elimination System* (NPDES) and *Stormwater Pollution Prevention Plan* (SPPP) requirements, such as implementation of *NPS Best Management Practices* (BMPs).

Prime and Unique Farmlands

In August 1980, the Council on Environmental Quality (CEQ) directed that Federal agencies assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture’s (USDA) Natural Resources Conservation Service (NRCS) as prime or unique. Prime or unique farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts.

Even though considerable acreage in the park has been under federal control since 1832, most of the lands acquired since 1972 have been farmed in the past, mined for gravel, logged for pulpwood, or cleared for home sites.¹⁰ Currently, however, the few areas of active farmland (*i.e.*, row crops) and pasture lands within the park do not occur near the area of potential impacts by the proposed cultural landscape treatment alternatives and consequently this subject will not be further analyzed.

The proposed cultural landscape treatment alternatives are exempt from the requirements of the Farmland Protection Policy Act because there are no prime farmlands associated with the cultural landscape project area, and there are no potential impacts that would directly affect wetland areas associated with agriculture. Therefore, this topic was dismissed from further consideration in this document.

Air Quality

The 1963 Clean Air Act, as amended (42 U.S.C. 7401 et seq.), requires federal land managers to protect park air quality, while the 2006 NPS *Management Policies* address the need to analyze air quality during park planning. The 1963 Clean Air Act provides that the federal land manager (the Assistant Secretary for Fish and Wildlife and Parks and the Park Superintendent) has an affirmative responsibility to protect the park's air quality related values (including visibility, plants, animals, soils, water quality, cultural and historic resources and objects, and visitor health) from adverse air pollution impacts. Section 118 of the 1963 Clean Air Act requires the park to meet all federal, state, and local air pollution standards. Section 176(c) of the 1963 Clean Air Act requires all federal activities and projects to conform to state air quality implementation plans to attain and maintain national ambient air quality standards.

¹⁰ United States Department of the Interior, National Park Service, *Fire Management Plan Environmental Assessment*, 2005, D-36.

Hot Springs National Park does not conduct air quality monitoring. The effects of air pollution on the park's natural resources and historic structures are unknown.¹¹ A *Fire Management Plan* addresses air quality and various means to mitigate smoke impacts from prescribed fires. If fires are prescribed as part of any treatment alternatives, the prescribed burns will be conducted within the guidelines of the *Fire Management Plan*.¹²

According to the US Environmental Protection Agency (USEPA), Arkansas has no non-attainment areas for carbon monoxide, nitrogen dioxide, one-hour ozone, sulfur dioxide, particulates (< 2.5 micrometers and <10 micrometers), and lead. As of December 2006, Crittenden County is the only county in the state in non-attainment for the eight-hour ozone standard. Consequently, Garland County and the park do not have any areas of non-attainment for criteria air pollutants and therefore this subject will not be further analyzed.¹³

Local air quality would be temporarily affected by dust and vehicle emissions during the period of construction for any cultural landscape treatment alternative. Operating equipment during this period would result in increased vehicle exhaust and emissions. Hydrocarbons, nitrous oxide, and sulfur dioxide emissions would be rapidly dissipated by air drainage since air stagnation is rare in the project vicinity. To reduce equipment emissions, the park would apply appropriate mitigating measures limiting idling of motorized vehicles.

Fugitive dust plumes from equipment would intermittently increase airborne particulates in the area near the construction sites, but loading rates are not expected to be significant. To partially mitigate these effects, such activity could be coupled with water sprinkling to reduce dust.

Overall, there would be a negligible, short term, adverse impacts to local air quality due to dust generated from motorized equipment. These effects would last only as long as the life of the project so local and regional air quality is unlikely to be affected by any of the treatment alternatives. Therefore, air quality was dismissed as an impact topic in this document.

Wetlands

Executive Order 11990 requires federal agencies to avoid impacts on wetlands where possible. The NPS *Management Policies* provides guidelines on developments proposed in wetlands.¹⁴ Although wetlands have been identified by park natural resource staff within the study area (see Floodplain and Wetlands figure at the end of Chapter III), and no wetlands would be affected by project implementation. Implementation of the proposed alternative would not contribute long- or short-term impacts to any wetlands. Therefore wetlands were dismissed as an impact topic in this document.

¹¹ United States Department of the Interior, National Park Service, *Resource Management Plan, Hot Springs National Park*, no date.

¹² U.S. Department of the Interior, National Park Service, "Fire Management Plan: Environmental Assessment, Hot Springs National Park, Hot Springs, Arkansas," 2005.

¹³ United States Environmental Protection Agency website, <http://www.epa.gov/air/data/geosel.html>, accessed 2007.

¹⁴ United States Department of the Interior, National Park Service, "Wetlands and DO-77-1 (Wetland Protection), section 4.6.5, *NPS Management Policies*, 2006.

Socioeconomics

The socioeconomic environment consists of local and regional businesses and residents, the local and regional economy, and land use. The local economy of Hot Springs and Garland County is based on tourism/outdoor recreation, professional services, light industry and agricultural services. Hot Springs National Park is important for the region's tourism and outdoor recreation economy. The proximity of Bathhouse Row to downtown Hot Springs and the Central Avenue Business District establishes a strong synergy between the park visitors and local retail businesses.

Implementation of any action alternative would result in short-term, negligible economic benefits from construction related expenditures and possible employment. If permanent NPS staff were hired any economic gains to local businesses and economy would be beneficial, yet negligible to minor and long-term. Improvements to the cultural landscape of Hot Springs National Park would, evaluated within the greater context of the park, including leasing of bathhouses for spa operations, and its socioeconomic synergies with the city of Hot Springs would result in negligible long-term benefits. Therefore, this topic was dismissed from further analysis in this document.

Environmental Justice

Under a policy established by the Secretary of the Interior, to comply with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, departmental agencies should identify and evaluate, during the scoping and/or planning processes any anticipated effects, direct or indirect, from the proposed project or action on minority and low-income populations and communities, including the equity of the distribution of the benefits and risks. The proposed action would involve no direct or indirect impacts on minority or low-income populations. Therefore, environmental justice will not be included as an impact topic.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaskan Native tribes.

There are no Indian trust resources at the park. The lands comprising the park are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, Indian trust resources are dismissed as an impact topic in this integrated CLR/EA.

Ethnographic Resources

Impacts associated with ethnographic resources typically deal with questions about contemporary groups or peoples, their identity, and their heritage. As defined by the NPS, an ethnographic resource is a site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence or other significance in the cultural system of a group.¹⁵ Previous contact between the park and interested tribes has not resulted in identification of any ethnographic resources at Hot Springs National Park. The presence of ethnographic resources was not identified during the public scoping process for this CLR/EA.

Although there are no known ethnographic resources at the park, copies of this CLR/EA will be sent to interested tribes for their review and comment. If the tribes subsequently identify the presence of ethnographic resources, appropriate mitigation measures would be undertaken in consultation with the tribes. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 would be followed.¹⁶ Therefore, this topic will not be discussed further as an impact topic in this document.

Museum Collections

Hot Springs National Park has an extensive museum collection. There are over 600,000 items in the collection and these items are stored in multiple locations. Climate-controlled facilities are located in the Fordyce Bathhouse and in three other buildings. Two buildings which are not climate-controlled are utilized for storage of items that do not require climate control. The current facilities housing the museum collection has limited space for new items; however the collection continues to grow with items from the bathhouses and donations. It is not anticipated that implementation of any cultural landscape treatment alternative would result in new items that would require storage and curation in the park's museum collection, therefore this topic has been dismissed from further analysis in this document.

Lightscape

In accordance with *NPS Management Policies*, the NPS strives to preserve natural ambient landscapes, which are natural resources and values that exist in the absence of human-caused light. Hot Springs National Park is located within an urban area and the lighting associated streets, businesses, and residential areas.¹⁷ There are no sources of light associated with treatment alternative; therefore, lightscape management was dismissed as an impact topic in this document.

¹⁵ National Park Service, 2006 *Management Policies*, chapter 10: "Management of Ethnographic Resources," 2006.

¹⁶Public Law 101-601, 101st Cong., 16 November 1990, "*Native American Graves Protection and Repatriation Act of 1990*, 25 USC 3001.

¹⁷National Park Service, 2001 *Management Policies*, 2001.

Soundscape

In accordance with NPS *Management Policies* (2001) and Director's Order #47, *Sound Preservation and Noise Management*, an important part of the NPS mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and duration of human-caused sound considered acceptable varies among NPS units, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas.

The proximity of Hot Springs National Park and the cultural landscapes evaluated in this *CLR/EA* to the city of Hot Springs results in visitors being exposed to human-caused sounds from vehicle traffic and general "white noise" emanating from the urban area. Because of this proximity it is unlikely that visitors would have any expectations of a natural soundscape that they would be exposed to in a wilderness setting. Construction associated with any treatment alternative would be consistent with the normal background of urban noise and would only occur during length of construction. Therefore, soundscape management was dismissed as an impact topic in this document.

Wildlife

NEPA requires federal agencies to use all practicable means to restore and enhance the quality of the human environment and to avoid or minimize all possible adverse effects of their actions upon the environment. NPS policy is to protect the components and processes of naturally occurring biotic communities, including the natural abundance, diversity, and ecological integrity of plants and animals.¹⁸

Loss of wildlife would be proportional to the amount of habitat lost, which would be minimal. The project area has been previously affected through years of urban development and timber management. These landscapes would tend to feature species typical of forested and urbanized settings. There have been very few detailed inventories of flora and fauna prepared for Hot Springs National Park. Currently the park's natural resource database has limited information. However the database will grow as fauna and flora inventories are conducted and the data is incorporated into the database. Wildlife adapted to urbanized and partially disturbed habitats that are likely to occur in this region of the park include eastern chipmunk, house mouse, gray squirrel, raccoon, white-tailed deer, eastern cottontail, mourning dove, Carolina chickadee, house sparrow, European starling, indigo bunting, and eastern wood-Pewee.

Wildlife in the area have become habituated to human activity and noise, or departed entirely. Larger wildlife would probably avoid the project area to a certain extent during construction activities. During construction some small animals, such as rodents, may be killed

¹⁸ National Park Service, *Management Policies* 2006.

or forced to relocate to areas outside the project area. Overall, populations of affected species might be slightly and temporarily lowered during construction, but no permanent negative effects on wildlife would be anticipated.

Any cultural landscape treatment alternative may have short-term, negligible, localized, adverse impacts on wildlife therefore; this topic will not be addressed further in this document.

Solid Wastes

Solid waste collection occurs daily from all locations in the park, overlooks, campground, Bathhouse Row, etc. The trash is hauled a distance of about 10 miles to the Garland County Landfill. Construction debris also enters the waste stream. From April 2006 to April 2007, approximately fifty tons of trash was hauled to the landfill from Hot Springs National Park. The amount of trash hauled to the landfill varies from year to year. Construction debris from Bathhouse Row was likely only a small portion of the 2006-2007 volume because rehabilitation efforts were being conducted during that time. Very little of that construction debris was from demolition.

Trash disposal always varies from year to year. The waste stream from Hot Springs is a mix from several sources. The waste is typically composed of trash gathered from the public at the campground, overlooks, Bathhouse Row and other areas of the park, as well as trash generated in park maintenance operations and office operations. Construction projects also contribute to the stream.

The Maintenance area, on the other hand, utilizes a large dumpster which is collected by the city of Hot Springs on a weekly basis. There would likely be a short-term, negligible impact to the solid waste stream during landscape improvements in any proposed cultural landscape treatment alternative; however the impact to the solid waste stream would only last through the duration of the landscape improvement. This topic will not be addressed in this document.

Utilities

There are no cultural landscape treatment alternatives that would require a significant investment and construction of utilities and no cultural landscape treatment alternative would require extension of any utilities or impact any utility lines. Any utility improvements that would be required would be within an urbanized environment where utility upgrades or new construction is common. This would result in a negligible impact to utility services; therefore, this topic will not be discussed as an impact topic in this document.

Chapter II: Landscape History

Chapter II: Landscape History

Introduction

The landscape at Hot Springs National Park is composed of designed spaces in the heart of the rugged naturalistic landscape of the Zigzag Mountains, a sub-range of the Ouachita Mountains. Here the unusual natural features of the land drew visitors well before the first “official” American exploration party arrived in 1804. The hot springs that emerged from the base of the mountain inspired stories of their healing powers and enticed visitors seeking relief from ailments. For most the journey was grueling. The remote location and limited transportation options resulted in long, difficult excursions. Upon arriving at the hot springs, these brave souls encountered a startling natural landscape where scorching water emerged from the ground and mists of hot vapors presented an almost magical scene. When the travel-weary visitors looked for comfort, they found almost no basic facilities. Food and shelter were barely adequate. Yet the reputation of the healing qualities of the waters continued to grow. Interest reached the federal level and early scientific expeditions (Hunter–Dunbar 1804, Long 1818, Nutall 1819, Fetherstonhaugh 1834, and Engelmann 1835) verified the existence of the hot springs. Fascination with their remarkable characteristics spread throughout the nation.

The earliest settlers in the area sought to provide accommodations for visitors, establishing a precedent that continues today. By 1820 the Arkansas Territorial Legislature determined that the unique natural resources of the area should, by some means, be preserved for public use. Their foresight and advocacy led to the establishment of Hot Springs Reservation in 1832, the first public land reserve in the country. It would be forty years before the establishment of Yellowstone as the first National Park in the world, and eighty-four years before the organization of the National Park Service in 1916. The early accomplishment of setting aside Hot Springs as a reservation has been acknowledged by scholars including Dwight Rettie when he stated:

... [Hot Springs] is contemporary testimony to the foresight of people in the mid-nineteenth century in preserving lands from the once vast public domain for a public purpose. In the context of the nation's westward expansion and land giveaways of the nineteenth century, the Hot Springs Reservation was a monumental achievement and a fitting precursor to creation of the first National Park in 1872. ... two generations before Yellowstone!... ..Perhaps absent the Hot Springs precedent, Yellowstone would have been less likely.¹

The establishment of the reservation did not immediately affect the physical landscape at the hot springs. Private development continued, for the most part unchecked, with the unorganized addition of buildings and features that did not relate to one another. From the start the hot springs and Hot Springs Creek were major features of the landscape. In the narrow valley, the creek limited and shaped development sites near the hot springs, while providing a

¹ Rettie, *Our National Park System*, 81.

means for the disposal of waste. Infrastructure improvements were lacking. The town was grimy and often foul smelling due to dust from the unpaved roads and the use of the creek as an open sewage system. With time, the development of the town became more orderly. When the creek arch was installed, the valley was transformed into a level landscape suitable for the development of sidewalks, lawns, and other amenities.

Throughout the early history the form of the town and Reservation was changed repeatedly due to devastating fires. The fires destroyed most of the buildings and other landscape features in the 1860s, during the American Civil War (1862-1865), and again in 1878, 1905, and 1913. After each of these events, the community was rebuilt with new plans for the future. In the 1890s, buildings were condemned and demolished, in efforts to improve the sanitation and safety of the town.

Although the landscape of the area eventually came to somewhat resemble other spa resort towns across the country, the remote location, rugged characteristics, and public ownership of the Arkansas hot springs influenced development in ways unique to this location. Today the landscape at Hot Springs National Park is a palimpsest with traces of features from many different historic periods. To truly understand the history of this landscape, and be able to correlate existing elements with historic features, it is necessary to systematically visualize the layers of change that have occurred. Historic descriptions, photographs, maps, and other primary and secondary sources have been utilized to identify a series of graphic representations of *periods of landscape change* for Hot Springs. The periods correlate to phases when major physical changes occurred to the landscape:

Pre 1803: Prehistoric Activities

- *Native American presence in the area.*
- 1803-1857: Baths Built by Nature
- *Natural hot springs draw visitors seeking cures.*
- *Landscape is undeveloped and natural.*
- *Hot Springs Creek runs through the valley unencumbered.*

1858-1878: Uncontrolled Growth at Hot Springs Creek

- *Overall town of Hot Springs:*
 - *The American Civil War impacts Hot Springs – most structures are destroyed.*
 - *The town is rebuilt after the war with more emphasis on amenities, but still lacking a structure for orderly development.*
- *Mountain Sidegrounds:*
 - *Pipes and wood channels capture and transport spring water.*
 - *Visitors continue to bathe in open springs.*

- *In the Valley (eventually Bathhouse Row):*
 - *Buildings are larger and provide more amenities.*
 - *Structures are located over and along the creek.*
 - *Bridges are used to cross the creek.*
 - *The creek alignment is irregular and determines the locations where development can occur.*
 - *The road through town is dirt.*
 - *Tracks for a horse-drawn trolley are present.*
 - *A fire at the end of the period eliminates most of the structures.*

1879-1883: Expansion alongside the Creek

- *Overall Hot Springs Reservation:*
 - *A Superintendent is appointed and enforces rules regarding development.*
- *Mountain Sidegrounds:*
 - *The ramshackle structures at the base of the mountain are removed.*
- *In the Valley (eventually Bathhouse Row):*
 - *New development (after the fire) is based on an orderly system devised by the Hot Springs Commission.*
 - *Buildings are constructed with more uniform setbacks on the east side of the creek and the west side of the street.*
 - *Bridges provide access over the creek from the buildings to the street.*
 - *The alignment of the creek is more regular due to construction of stabilization and retaining walls in some areas.*
 - *In some places the creek banks have not been altered.*

1884-1891: The Creek Goes Underground

- *Bathhouse Row:*
 - *In 1883/1884 the creek arch is constructed dramatically changing the landscape of Hot Springs.*
 - *Central Avenue is improved.*
 - *Sidewalks are added along the row of bathhouses.*
 - *Lawns, shrubs, and trees are added along the row of bathhouses.*
 - *The buildings are upgraded.*

1892-1911: A Landscape Design for Hot Springs National Reserve

- *Lieutenant Robert F. Stevens prepares designs for the reservation landscape.*
- *Landscape designs are implemented throughout the reservation.*
- *In 1897 Whittington Park is created*

1912-1930: Architectural Transformation and NPS Landscape Design

- *Mann and Stern prepare a design for Bathhouse Row and a portion of the Mountain Sidegrounds.*
- *The buildings present on Bathhouse Row today are constructed.*
- *NPS landscape design philosophy applied to the naturalistic areas within the Reservation.*
- *The Arlington Hotel moves and the Arlington Lawn is established as a park.*
- *Roads and trails are developed on Hot Springs Mountain.*

1931-1941: Depression-era Landscape Projects

- *The National Park Service prepares designs for the Grand Promenade.*
- *The National Park prepares detailed master plans in 1935, 1936 and 1939*
- *The southern portion of the Grand Promenade is implemented.*
- *The Gulpha Gorge Campground is developed.*
- *Roads, trails and shelters are constructed on Hot Springs and West Mountains.*
- *Whittington Park is completed.*
- *The park maintenance complex on Whittington Avenue is developed.*

1941-1972: NPS Master Planning and Mission 66 at Hot Springs National Park

- *The landscape is extensively used for outdoor events while Hot Springs hosts soldiers returning from WWII.*
- *The National Park Service prepares a master plan for the park.*
- *The portions of the Grand Promenade north of the Formal Entrance are implemented.*
- *The Bandstand is removed*

1973-2006: Redefining Visitor Use

- *The Hot Water Cascade and Lower Tufa Terrace Trail are developed.*
- *Alterations are made to the Formal Entrance.*
- *Fluted concrete walls are added along Bathhouse Row and Arlington Lawn.*

Since the establishment of the Reservation in 1832, the boundary for the park has been changed several times. Figure 2-1 illustrates the boundary of the Reservation when originally established in 1832, the 1880 “permanent” Reservation boundary, and the current National Park boundary. Figure 2-2 identifies the area within the current park boundary that contains the historic landscapes that are addressed in this CLR.

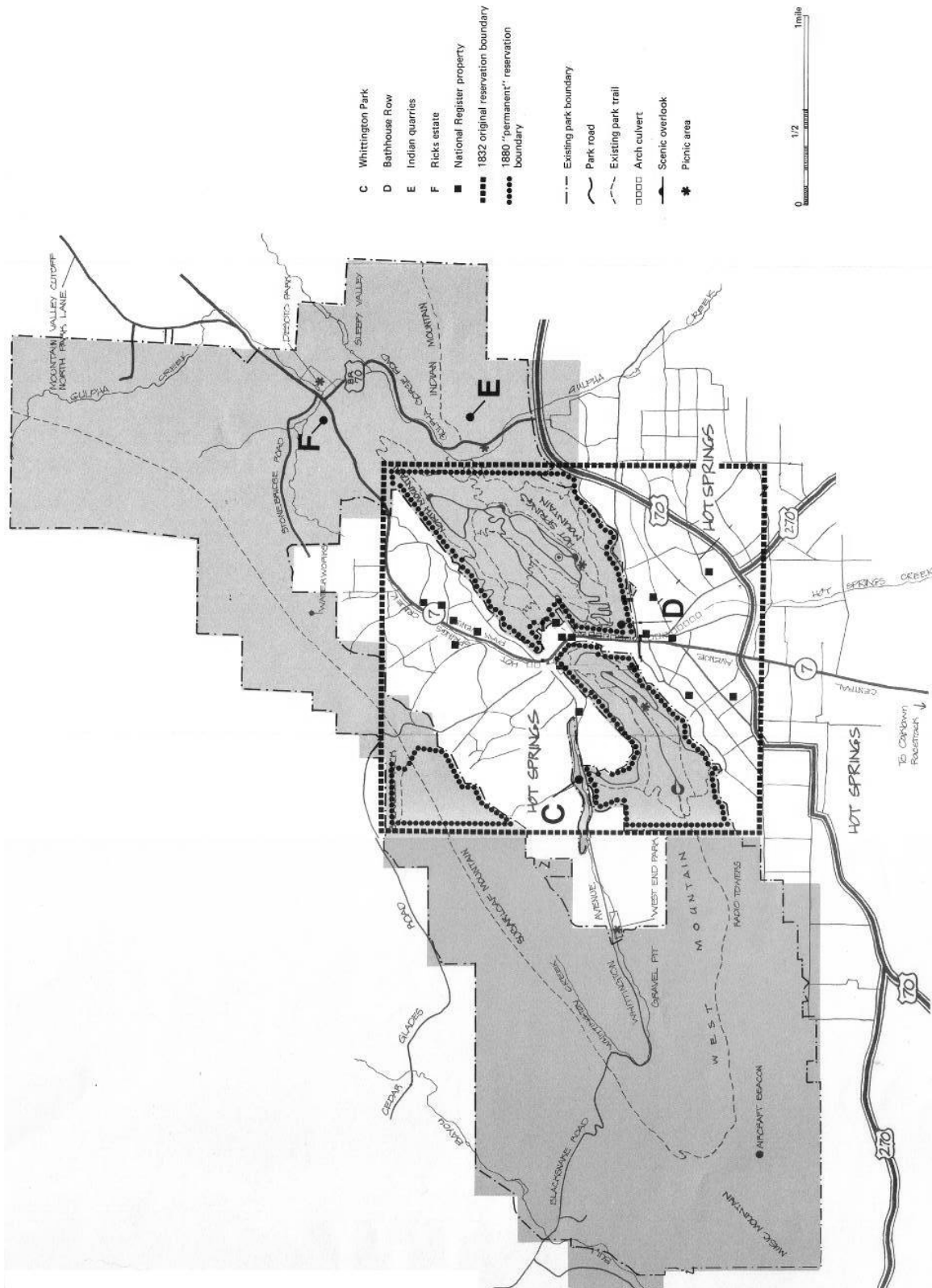


Figure 2-1: Hot Springs Reservation and National Park, Existing and Historic Boundaries
(source: General Mangement Plan, Hot Springs National Park, 1986, 71)

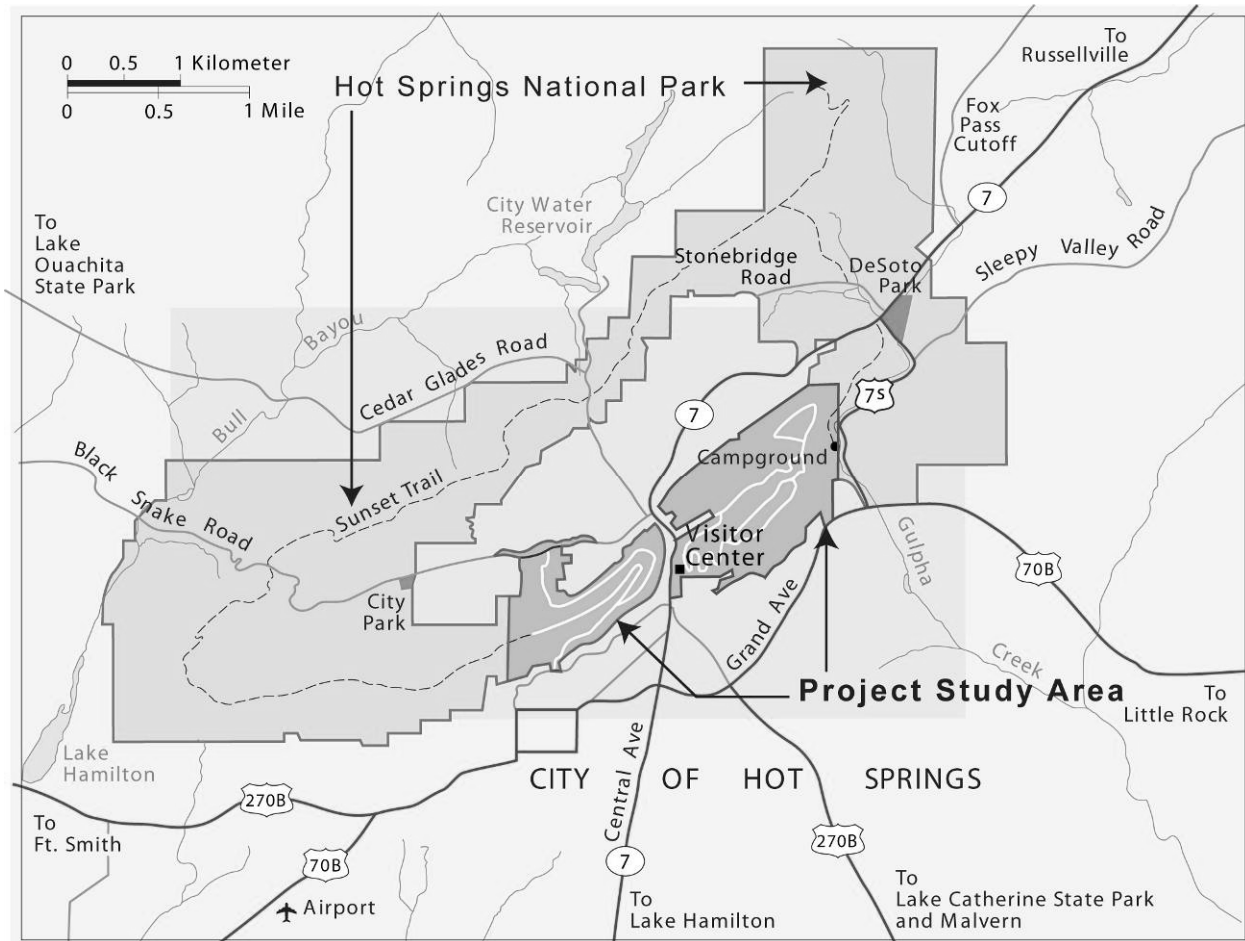


Figure 2-2: Project Study Area within the current Hot Springs National Park Boundary

Prehistoric Native American Activities in the Area (before 1803)

Although prehistoric Native American sites exist in the Hot Springs area, no archaeological evidence has been located indicating that the hot springs were used by people thousands of years ago. No prehistoric archaeological sites are known to exist in the immediate vicinity of the hot springs, or the study area. Ample stories of Native American use of the springs persist, however no scholarly information exists regarding the types of artifacts that would be related to prehistoric spring-use; and the numerous accounts are difficult to authenticate. A recent attempt to separate the myths from the facts indicates that it is likely that Native Americans spent time in the area, but the specific nature of their activities associated with the springs is unclear. Many of the stories are highly dubious.²

² Blaeuer, "Didn't All the Indians Come Here?" *Separating Fact from Fiction at Hot Springs National Park*, 1-3 and 32-39.

Despite the difficulty of verifying information regarding prehistoric activities at Hot Springs, some authentic information does exist to provide a general understanding of possible early human use of the landscape. The first Native Americans arrived in Arkansas by 9500 B.C. The small bands of 20 or 30 members were made up of descendants of people who crossed to this continent from Asia on land currently submerged by the Bering Sea. It is likely that they hunted large game and collected plants to supplement their diet. As their population grew over the next ten thousand years they dispersed into smaller territories. In addition to hunting and gathering, some groups mined novaculite for use in creating tools. Novaculite was extracted from sites in the Hot Springs area with the peak of this activity occurring around 3000 years ago.³

Caddo groups were present in the Hot Springs region by 800 A.D. The Caddo were made up of many tribes. In Arkansas, Oklahoma, Louisiana, and Texas, they included several “confederacies.” The name of one of the confederations, the Cadohadacho, was shortened to the word “Caddo.” Although not identical, Caddo cultures and dialects were similar. The local tribe was historically the Cahinnio or Cahainihoua.⁴ Members of Caddo cultures typically farmed in bottomland, built mounds, and traded commodities.⁵ Some evidence exists to indicate at least one mound may have been built near Hot Springs Creek. An account dated 1827 described a “...little mound 20 inches high and 30 feet diameter” near the creek.⁶ A photograph taken in 1867 by T. W. Bankes shows a feature that may be a mound in the current vicinity of Arlington Lawn.⁷ Construction activities related to the Arlington Hotel and other structures, as well as the implementation of the creek arch and later Arlington Lawn, have removed any trace of this feature.

Although legends indicate that Hernando de Soto’s expedition “discovered” the hot springs of Arkansas, his group did not visit the hot springs area. In 1541-1543, de Soto’s expedition encountered Caddo groups in southwest Arkansas. By the 1800s stories indicated that the party had visited hot springs, but scholarly critiques have rejected this concept.⁸ More reliable accounts by early settlers and explorers who were in Hot Springs in the first part of the 19th century indicate that members of Quapaw and Choctaw groups were familiar with the area by then. Two recently transcribed oral history accounts indicate that Quapaw used the springs for medicinal purposes. The main tribes associated in some way with the hot springs area were the Caddo, Quapaw, and to a lesser extent the Choctaw. The longest and most intensive use is related to the Caddo.⁹

³ Ibid., 1-2. Since Europeans typically utilized mine sites initiated by Native Americans, evidence of the Native American use was often removed by these activities.

⁴ Blaeuer, 5.

⁵ Ibid., 2.

⁶ A. N. Sabin, *Minerals and Hot Springs in Arkansas*, Arkansas Gazette, and Blaeuer, 75% review comments. This may have been a naturally occurring feature called a pimple mound. On the other hand, if it was a human-built mound, it is possible that a portion of the mound could remain, buried under the fill added to this area.

⁷ Blaeuer, 3.

⁸ Ibid., 5 and 13.

⁹ Ibid., 15-17 and 25.

Baths Built by Nature (1803-1857)

This period of landscape change begins in 1803 with the first written descriptions of visits to the hot springs. Early accounts portray a mystical landscape with natural steaming hot springs rising in the midst of a rugged wilderness. The landscape--not yet manipulated by human alterations--was dominated by natural features including a valley surrounded by forest-covered mountains, steep rocky slopes and outcrops at the base of the mountains, numerous meandering hot and cold springs, and an untamed creek which carved an irregular path through the wooded valley. The width of the creek was variable and the banks shifted frequently due to levels of precipitation. Development in the valley included a roughly defined route for circulation and a few cabins (see Figures 2- 3 and 2- 4). These were mostly located to the west of the creek floodplain. The end of the period is 1857, the year before David Dale Owen visited Hot Springs.¹⁰ His accounts provide the first documentation of significant development in the valley.

Early Exploration 1804-1807

The first written descriptions in English of the Washita River (also called the Ouachita River or the Washitaw River) region in Arkansas were recorded in the journals of William Dunbar and Dr. George Hunter during their expedition into the area, which was commissioned by Thomas Jefferson. Theirs was one of four parties assigned to the task of exploring the newly acquired Louisiana Purchase land for the United States. For the purpose of exploration the territory was divided into four portions and assigned as follows: Lewis and Clark were sent to the northern regions; Zebulon Pike was to explore the Rocky Mountains and southwestern areas; Thomas Freeman and Peter Custis focused on the Red River; and Dunbar and Hunter were sent to the Washita River and the hot springs of Arkansas and Louisiana.

The Dunbar and Hunter expedition was significant for several reasons. They presented the first scientific study of the landscape, plant, and animal life in Arkansas and northern Louisiana. In addition, theirs was the first report delivered to Jefferson regarding the new territory. Their detailed notes provided an accurate depiction of the areas diverse resources and information regarding the already active human population present.¹¹

The explorers described an extremely active and vibrant interaction between the European and the Native American population. Hunter and Dunbar also reported many encounters with European trappers, hunters, planters, and settlers as well as fellow river travelers plying the waters of the Red, Black and Ouachita rivers. Their copious notes also portray a region in which these

¹⁰ David Dale Owen briefly visited Hot Springs in 1858. He returned for a more in-depth study in the fall of 1859.

¹¹ <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=2205> (accessed 2006).

European and Indian inhabitants harvested the abundant natural resources along the rivers and in the lands beyond.¹²

The Hunter-Dunbar expedition left Natchez for the hot springs of Arkansas on 16 October 1804. The party rowed up the Mississippi to the Red River and then to the Black River and finally the Ouachita (Washitaw or Washita) River. On 7 December 1804 the expedition arrived at the hot springs. The party found an “open log-cabin and a few huts of split boards, all calculated for summer encampment,” that were built by people who came to the springs for treatment of various illnesses. Dunbar and his party remained at the springs for several weeks and conducted a scientific investigation and survey of the springs.¹³ The Hunter and Dunbar reports both indicate that the hot springs were already drawing visitors seeking relief from ailments. They met travelers who were either on their way to the springs or returning home after bathing in the waters.¹⁴

On 1 January 1818 Major S. H. Long of the U.S. Corps of Engineers visited the hot springs area. He prepared a written description of the topology as well as a sketch indicating locations of the springs, creek, road, buildings, and mountains (see Figure 2-4). In his account he relates a description of the springs:

These remarkable springs are situated in N. lat. 34° 14' 7", upon a small creek of the Washitaw, bearing their name, and uniting with that river at the distance of 12 or 14 miles from the springs. The country in which they are situated is extremely hilly and broken, and the highlands being divided into numerous ridges and knobs by creeks, runs, &c. The rocky formations, in this neighborhood, are both various and interesting, exhibiting various orders of concretion, from the softest slate to the hardest flint.¹⁵

He continues to describe the slate and stone formations and qualities in detail ending with:

The rocks and stones generally upon the hills, are extremely ragged and favillous, vast bodies of them, in many instances, having the appearance of being composed entirely of the calcarious matter once held in solution by the hot water of the springs.¹⁶

In discussing the vegetation, creek, and topography, he states:

...In regard to the natural growth, I observed nothing peculiar to the hill whence the springs flow, that was not common also to the other neighboring heights. The high lands

¹² Berry, Beasley, and Clements, *The Forgotten Expedition, 1804-1805, The Louisiana Purchase Journals of Dunbar and Hunter*, xi-xv.

¹³ *Ibid.*, xi-xv and Paige and Harrison, 29.

¹⁴ The Encyclopedia of Arkansas History and Culture, “Hunter Dunbar Exhibition,” <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=2205> (accessed 2006).

¹⁵ The American Monthly Magazine and Critical Review, “A Description of the Hot Springs, near the river Washitaw, and of the Physical Geography of the adjacent country,” in a Communication from Major S. H. Long, of the U. S. corps of Engineers, to the hon. Samuel L. Mitchell, dated St. Louis, Missouri, 23 February 1818 (No. II, Vol. III, June 1818), 86.

¹⁶ *Ibid.*

generally, in this quarter, are covered with forests of yellow or pitch pine, and support an exuberant growth of vines, furze, bramble, &c. ...

...The course of the creek in passing the springs, is nearly south. The quantity of water running in it, is, at this time, (Jan. 1,) about one thousand gallons per minute. Hot Spring hill, or mountain, (as it is more frequently called,) is situated on the east side of the creek, and is about 550 feet high. The extent of its base along the creek is about six hundred yards. The hill is of a conical form, and has a base not exceeding 1-2 miles in diameter. It is completely insulated from the other hills by which it is environed, by creeks, brooks, and ravines. Directly north of it, on the same side of the creek, is another hill somewhat higher, separated from the former by a small brook. On the west side of the creek, directly opposite to Spring hill, is a third, considerably higher than either of the last mentioned, and situated a little distance from the creek, leaving an area of considerable extent between its base and the creek, upon which cabins are built for the accommodation of those who visit the springs.

...In the hottest of the springs, I observed bushes growing, as also an abundance of beautiful moss of a deep green colour, and of a vegetating appearance; --and what is still more wonderful, a kind of water insect, something longer than the wood louse, but resembling it in shape, lives and sports in the heated element....¹⁷

Long describes the numerous springs of hot water occupying about four hundred yards along the east side of the creek and one on the west side. Regarding structures, he indicates:

There have been 14 or 15 rude cabins constructed along the creek, by persons who resort hither, occasionally for the benefit of the springs. They are situated mostly on the west side, and are calculated merely for a summer residence, very few of them having chimneys. At present none of them are occupied, except one, in which a family took a temporary residence a few days since.¹⁸

Indicating that the nearest settlements were about eight miles from the springs, Long praises their occupants' fairness in supplying provisions to visitors in need:

From these settlements, residents at the springs obtain provisions by paying a high price; but to the credit and generosity of the settlers, it may be said, that they are equally as ready to supply the poor, as the rich, although they run the risk of never receiving payment for their produce. There have been instances where they have refused to take double their selling price for their corn, but have chosen rather to divide it between the poor and rich, not according to their ability to pay, but in proportion to the necessities of the purchasers, and the quantity of provisions absolutely required for their subsistence.¹⁹

Long provides a detailed account of the temperature and discharge rate of twenty-two of the springs and indicates there are many more.

¹⁷ Ibid., 86-87.

¹⁸ Ibid.

¹⁹ Ibid., 86.

Later during the same year as Long's visit, on 24 August, the Quapaw Indians ceded their land around the hot springs to the United States.²⁰ The following year, 1819, the Arkansas Territory was organized and Thomas Nuttall, a naturalist, provided a detailed account of the physical environment in his journal.²¹ Nuttall's account provides a description of the area:

At the springs, a ridge of between five and six hundred feet, from whence smoke had been seen to issue, appears, by the massive rocks that fill this stream, to have been broken through, or undermined by its torrents. Many thermal springs, besides those employed by visitors, are seen boiling out of the side of the hill, and mingling with the cool water of the brook. The principal fountain, issuing from amidst huge masses of black rocks, apparently bituminous and calcareous slate in thick laminae, has a stream of near a foot in diameter at its orifice, and hot enough to boil eggs or fish; a stream arises from it as from water in a state of ebullition, attended with a considerable discharge of bubbles. It is only after mixing with the cool water of the brook, at some distance from this spring, that it becomes of a temperature in which it is possible to bathe. There is, however, a kind of rude inclosure made around the spring, as a steam bath, which often probably debilitates, and injures the health of ignorant and emaciated patients.

He also states that the water, ... charged with an excess of carbonic acid, holding lime in solution, deposits a calcareous tufa, which incrusts leaves, moss, or any other substance which it meets in its course, to the great surprise of the ignorant, who commonly pronounce them petrifications.²²

²⁰ Despite ceding the land to the United States, the Quapaw continued to visit the area and now consider it a culturally significant area.

²¹ Nuttall, *A Journal of Travels into the Arkansas Territory During the Year 1819*, 240-242. Nuttall's account of the hot springs area is different in style from his account of other areas, where he uses a first person narrative. It appears that he sent an exploring party to the hot springs, and recorded their description in his account.

²² Nuttall, 240.

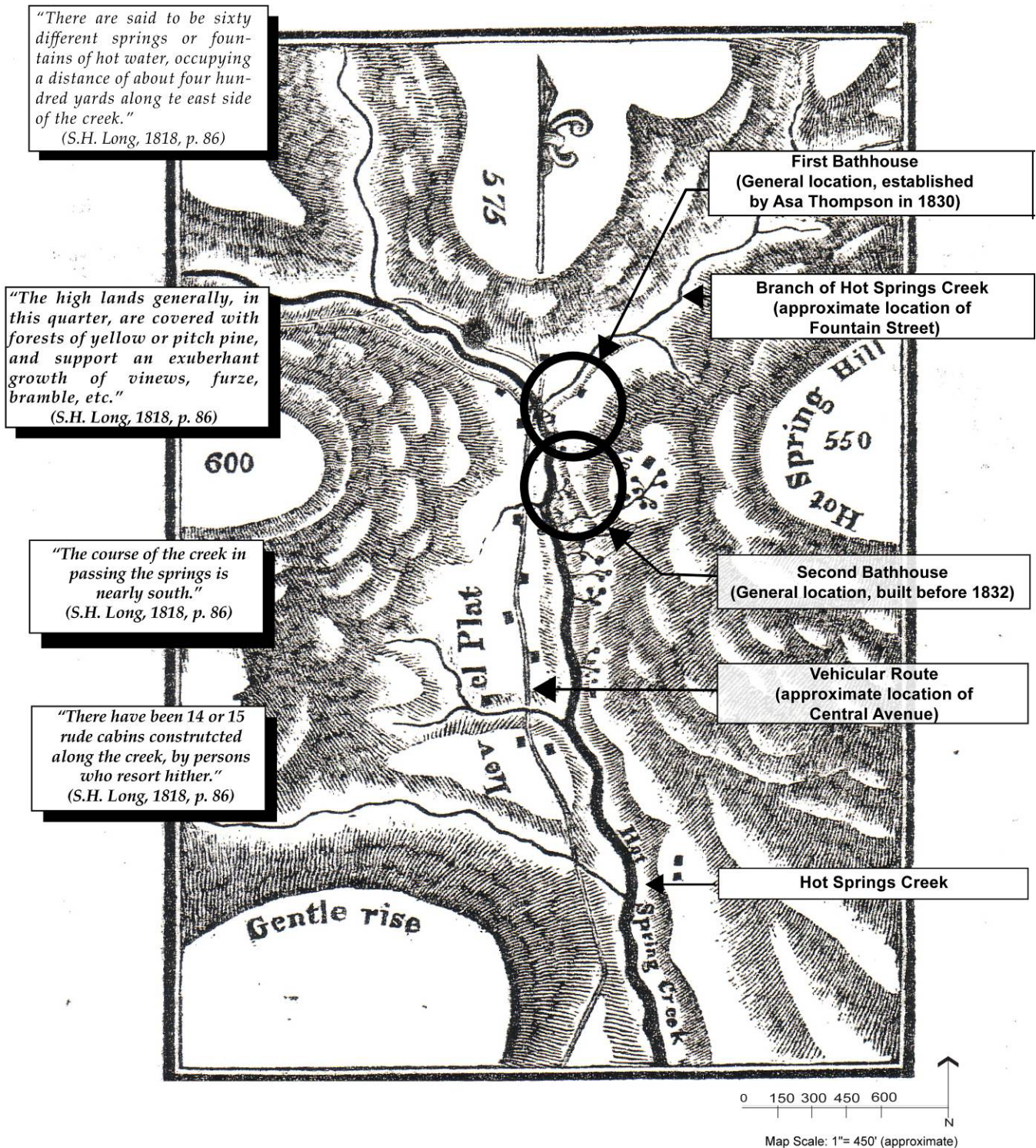


Figure 2-3: Hot Springs of the Washitaw, 1803-1832 Period of Change

This "Rude Sketch" of hot springs and the adjacent country by Major S. H. Long, U.S. Corps of Engineers, is based on observations made 1 January 1818. Long's written description clarifies that the rectangles are "14 or 15 rude cabins," and the small circles are springs. The numbers 550, 575, and 600 represent the probable height of the hills.

Early Settlement

The earliest non-native settlers recorded in the hot springs area established occupation beginning in 1807. In that year Manuel Prudhomme built a cabin at the springs. Soon after, John Perciful and Isaac Cates settled at the springs.

Perciful was a hunter who established himself as the “*general entertainer of all visitors*” to hot springs. He believed that his early presence in the area “*gave him a preemption claim of right as proprietor of the waters.*” Upon realizing that he could profit by supplying provisions to the invalids who visited the springs, he “*set up a monopoly as general provider to all strangers who had any money in their pockets.*”²³ When George Featherstonhaugh visited the area in 1834 he was horrified by the food served to him by Perciful. He described it as “*...a quantity of little pieces of pork swimming in hog’s grease, some very badly made bread, and much worse coffee...*” “*... nothing could be less tempting and more rude than the fare we got...*”

Throughout the period, the hot springs area was difficult to reach and sparsely populated. The journey to reach the area was challenging and uncomfortable – taking almost two full days to reach the hot springs from Little Rock. Upon arrival, visitors seeking health benefits took advantage of the spring water with none of the accoutrements associated with modern health resorts. They slept in the shelter of temporary cabins assembled for fair-weather lodging. They utilized the “*natural bath,*” in areas where water had carved pools into the rock, or where logs were extended over the springs. Small improvements sought to make the most of the opportunities provided by nature. In 1829 a visitor complained about the “*entirely deficient*” accommodations stating, “*The sweat house is rudely constructed with boards which but partially exclude the air; and the mouth of it is stopped by a blanket. The patient has to come into the open air to dry himself, hurry on his clothes and go home.*”²⁴

In other parts of the world, including the eastern United States, resorts were serving patrons who sought therapeutic relief from ailments at natural hot springs. These resorts typically provided luxurious accommodations and were mainly attended by wealthy patrons. In contrast, at the Arkansas hot springs, accounts made by early explorers described the natural features including the amazing hot springs and the related flora and rough terrain as well as the lack of development, transportation options, services and supplies in the area.

According to sworn testimony taken in later years, Ludovicus Belding leased the hot springs for a five-year term from John Perciful in 1828. Leased structures probably included a boarding house in operation since 1820. Belding refurbished the facilities and subsequently advertised a hotel offering “*good meals, clean linen, and silverware...*” No physical description of the hotel has been located. Asa Thompson leased the nascent resort from Belding in 1830 and may have built the first bathhouse.²⁵ The bathhouse was a simple log structure that included

²³ Featherstonhaugh, *Excursion Through the Slave States: From Washington on the Potomac to the Frontier of Mexico with Sketches of Popular Manners and Geological Notices*, Vol. 2, 109.

²⁴ Paige and Harrison, *Out of the Vapors: A Social and Architectural History of Bathhouse Row*, 30-31.

²⁵ *Report of the Secretary of the Interior, “Answer to a resolution of the Senate relative to Hot Springs, Arkansas, 1850.*

one wooden tub and a sweat bath near the present-day Arlington Lawn site.²⁶ A second log bathhouse was built before 1832 near the present-day Hale Bathhouse. Another improvement was the establishment of a weekly postal delivery service to Hot Springs in 1833.²⁷

Over the next few years the proprietorship of the spa shifted between Belding and Perciful. Belding established a land claim under the pre-emption act of 29 May 1830. Since the act did not apply until July 1832 and the reservation was set aside in April 1832, the claim was not valid.²⁸ When English geologist George Featherstonhaugh visited the area in 1834, the Percifuls were again in residence. Featherstonhaugh noted that the accommodations were not satisfactory.²⁹ After John Perciful's death in 1835, his wife Sarah sold a half interest in the spa to James Conway and his brother-in-law Samuel Rayburn. In that same year they published fulsome advertisements in Southern newspapers stating that "the *Bathing houses* have been well fitted up and some new ones erected..." In 1836 Hiram Whittington probably took over the hotel after Conway and Rayburn sold out their interest in the spa. The hotel, in some form, may even have been in existence throughout much of the Civil War.³⁰

Land Ownership

Land titles and ownership were particularly complicated in the hot springs area. In 1803 the Treaty of Paris transferred ownership of the Louisiana Territory from France to the United States. A portion of the territory was designated for the Quapaw Indians--this included the area now within the boundary of Hot Springs National Park. A number of early claims were made for land in that is in the current park boundary. From 1805 through 1850 several federal treaties and Congressional acts were in force involving American Indian tribes, rights of former territorial inhabitants such as the French and Spanish, preemption rights for "squatters," and a resettlement act for victims of the New Madrid earthquake of 1814.

Several claimants were vying for ownership based on the above treaties and acts. Henry M. Rector based his claim on a patent issued by Francis Langlois according to the New Madrid Act and purchased from his layer by Sammuel Hammond and Rector's father Elias Rector. On 17 February 1815 an Act of Congress gave land owners affected by the 1811-1812 New Madrid earthquake in Missouri the right to claim compensatory public lands elsewhere in the Missouri Territory. The law stipulated that the sale of any such land claimed had to be authorized by law. In August of 1818 the Quapaw Indians ceded land including the hot springs to the United States. In November of 1818 Francis Langlois was awarded certificate 467 entitling him to land around the hot springs in Arkansas as compensation for land he lost in the New Madrid earthquake. On 16 July 1820 Langlois' land was surveyed but the survey was not recorded and the tract was not deeded to Langlois. Certificate 467 was sold in 1821 to Samuel Hammond and Elias Rector.

²⁶ Paige and Harrison, 31.

²⁷ Ibid., 32.

²⁸ Ibid., 31.

²⁹ *Report of the Secretary of the Interior*, 1850.

³⁰ Ibid.

Sarah Perciful and her son David or Daniel claimed the land by virtue of the 1814 land title act, because her husband John resided at the springs from 1811 or thereabouts until his death in 1835. Lydia Belding claimed the land on the basis of the preemption act of 1830 because she and her husband had leased Perciful's residence and hotel from 1828-1831. Mary Davis settled at the south end of hot springs valley on a property that contained thermal springs in 1813. She and her family established a house, garden and fence at the southwest quarter of section 33 township 2 S range 19 W. Around 1844 the alleged son of a Spanish commander named Filhiol even tried to make a claim on the basis of the 1805-07 act establishing rights for former territorial inhabitants. Eventually the 20 April 1832 act reserving the springs for future disposition by the federal government took precedent over the rest.³¹

Establishment of Hot Springs Reservation, 1832

The Arkansas Territorial Legislature recognized the hot springs as a "unique national resource" and, in 1820, requested that the federal government provide a means to preserve the land for the use of the public. Twelve years later, on 20 April 1832, the legislation to set aside four sections of land to protect the springs and surrounding area was signed by President Andrew Jackson. Yellowstone National Park (the nation's first national park) was not created for another forty years, the Hot Springs Reservation was one of the earliest of the present-day National Parks to be federally protected. However, the legislation did not include directives regarding the administration of the Reservation. With no oversight or regulations, settlers continued to establish buildings and businesses near and over the springs.³² As accounts of the Arkansas hot springs were published, interest in the area grew.

³¹ Ibid.

³² The purpose of the reservation should not be confused with others created during the same time period, established as Indian reservations. In addition, resource reservations were in existence prior to Hot Springs Reservation. These included salt spring reservations, lead mines, and forest land. The resources were set aside to ensure that they would be available for extraction and use by the government.

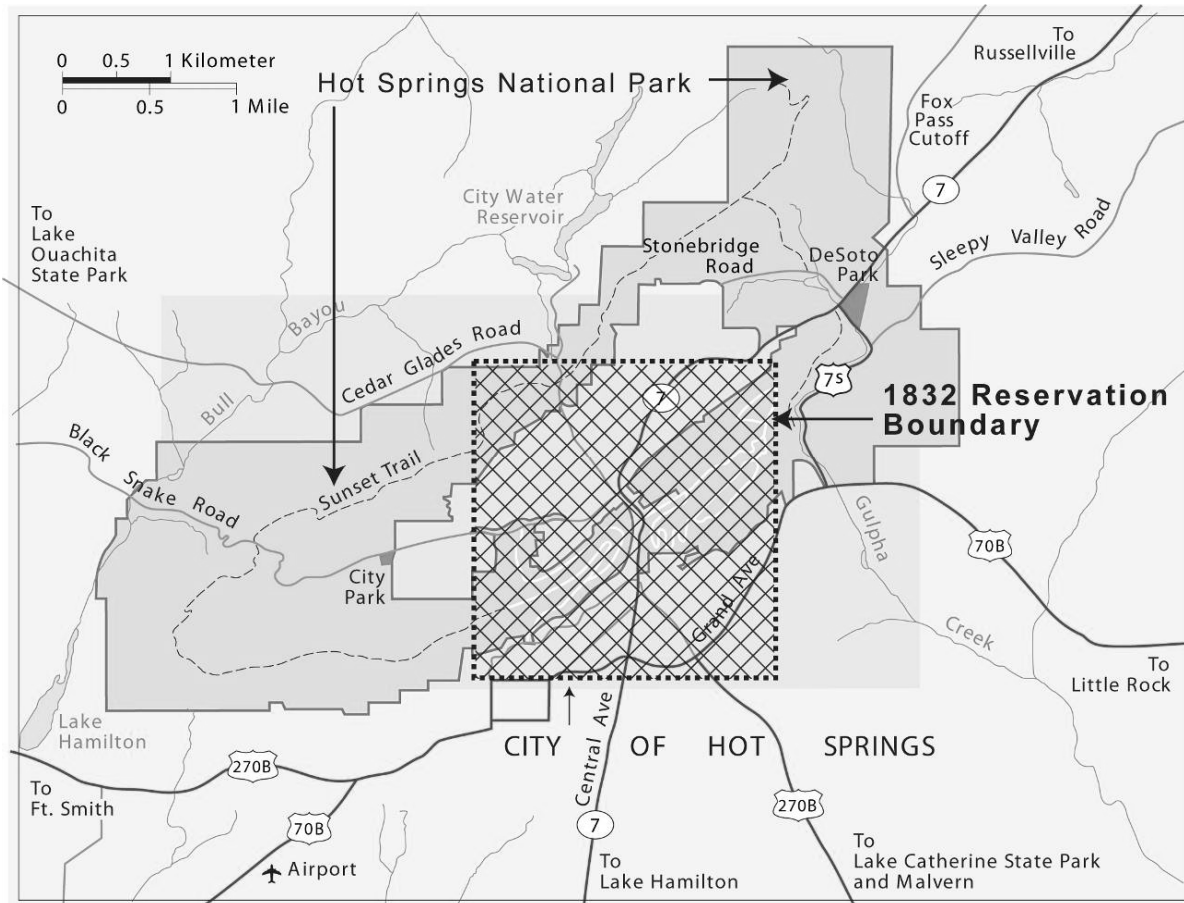


Figure 2-4: 1832 Hot Springs Reservation Boundary compared to current Hot Springs National Park Boundary

Descriptions of the Area in the 1830s

When George William Featherstonhaugh visited the Hot Springs in December 1834 he observed conditions similar to those illustrated in Long's map and description of 1818. Featherstonhaugh made a geological inspection of part of the western portion of the United States for the war department. He recorded notes concerning all of the country he passed through in his journeys, for use in preparing a geological map.³³ His notes regarding Hot Springs are informative. Upon arriving at Hot Springs on 29 December 1834, Featherstonhaugh viewed:

Four wretched-looking log cabins, in one of which was a small store, contained all the accommodations that these springs offered to travelers. We had never seen anything worse or more unpromising than they were, but driving up to the store, a Mr. Whittington,... ...was obliging enough to say we might take possession of one of the log cabins.³⁴

³³ Featherstonhaugh, 106. Featherstonhaugh describes the hot springs area in Volume II of his book.

³⁴ Ibid., 106.

The cabin he and his son occupied:

...had a roof to it as well as a little portico, as a defense against the rays of the sun, but this was literally all that it had, for not an article of furniture was there either in the shape of table or chair. The floor was formed of boards roughly and unevenly hewn, and, unfortunately, some of them were wanting. Being reckoned, however, the best lodgings in the place, we made the best of it, and through our new friend got skins, blankets, and other appliances to serve as bedding. We next laid in some firewood and constructed a kind of table, so that when we had succeeded in borrowing two old chairs, we looked with some satisfaction upon our new attempt at housekeeping. We were sure at any rate of being alone, and of being out of the reach of filth of every kind; in fact it was almost as desirable as being in the woods, and had the advantage of shelter.³⁵

Featherstonhaugh elaborates on their discomfort in the cabin during a night-time storm when the rain and wind came in to soak them and hogs took shelter in the space under the floor. He wondered how invalids could make themselves comfortable in such a place and notes that he was told that ten to twelve people often occupied the same cabin that he shared with his son. He suggests that visitors to the springs in the autumn would be more comfortable if they brought their own tents and provisions.³⁶

He describes the overall developed area as a *narrow vale* fifty yards wide by eight hundred yards long (north to south). He indicates the area is surrounded by ridges of sandstone on the east and west, with another ridge closing in the view to the north. The creek is described as a “pretty little murmuring stream” into which “immense sheets of travertine descend.” The creek is located at the base of the ridge to the east in a bed of clay-slate, with the springs’ waters flowing from the hills to the northeast (the description continues with more details about the qualities of the waters). The vapors created by the hot water in the springs creates a picturesque effect as it is viewed rising from the ground.³⁷

³⁵ Ibid., 106-107.

³⁶ Ibid., 106-107.

³⁷ Ibid., 107-109. Featherstonhaugh’s “narrow vale” description was probably accurate, as the bases of the Mountains had not yet been altered to create an expanded site for development.



Figure 2-5: Lithograph of “The Hot Springs of the Washita” by Day and Haghe, Lithographers to the Queen, (source: printed by J. Murray, Abermarle Street, London, 1844) It appears that the image was prepared for the publication based on descriptions by Featherstonhaugh.

In the fall of 1835 Dr. George Engelmann, a German botanist and physician, visited Hot Springs and prepared a narrative describing the geology, vegetation, natural history, structures, and lifestyle of the area. Engelmann was born (1809) and educated in Germany. He traveled to the United States in 1832 after receiving his medical degree. Engelmann practiced medicine in St. Louis and studied the local flora. He co-founded a German-language paper, *Das Westland*, and studied plants and plant groups that other botanists had neglected. In 1835 Engelmann spent six months traveling southwest of St. Louis, primarily in Arkansas, including a visit to Hot Springs. He published an account of his journey in *Das Westland* in German in 1837.³⁸ Of Engelmann’s report one scholar indicates:

“The Hot Spring of Arkansas,” reveals an unusual traveler, one who brought to the Arkansas landscape a romantic vision coupled with a scientist’s trained eye. Engelmann’s background and education gave him the skill to describe what he saw with eloquence, good humor, and accuracy. Although he is derisive of

³⁸ Jansma and Jansma, “George Engelmann in Arkansas Territory,” *The Arkansas Historical Quarterly*. Vol. L, 3:225-230. Engelmann’s article and notes were written in German. The Jansma’s article includes a translation of the article and other information provided from Engleman’s notes from his 1835 visit to Hot Springs. This is an excerpt that was translated.

errors perpetuated by earlier visitors to the springs, such as the notion that there had been volcanic activity in the area, his observations of people and their creations are full of warmth and human sympathy.³⁹

As Englemann approached the “valley of the hot springs” he passed through an area that was desolate and included an abandoned homestead where a spring contained red-tinted water high in iron. Closer to the hot springs, he encountered a farmstead which he associated with the greater quantity of water and vegetation. Then, “after a sudden turn to the south the valley of the hot springs lies before us.”

Should I describe for you this oasis in a mountainous desert, should I portray for you the wonder with which nature out of her pregnant depths brings forth these mighty streams, or would you rather hear of the unusual constructions of this spa of the pioneers of the West, which are so different from anything we imagine when we talk about spas? Every view of this remarkable place will arouse your interest, and I will seek to picture it in a true-to life manner.⁴⁰

Of the area he declared:

Springs gush out everywhere, from the streamside, out of small caves in the rock, and from heights splatter down into the boiling streambed, the bank of which disappears; and the most luxuriant growth surrounds and enlivens everything. Magnolias and cherry laurel, the holly and the sweet-gum, myrtle and cypress, mixed with many another strange form of plant life, vivify the scene with many shades of green, gray, yellow, of rose, carmine, brown, and almost black. The so-called Muscat grape grows all around, with its plum-sized fruits, and here and there hanging in purple garlands from treetop to treetop grows the wild grape, while poison ivy with its frightening strength climbs up the tree trunks. And how powerfully, from between the cracks in the rock, plants spring forth with bloom; and wonderful forms of ferns cover the rather barren rock faces with their enchanting growth, wherever springs provide warmth and nourishment. And the glorious colors! These beautiful blue lobelia here on the edge of the stream; and right nearby the scarlet cardinal lobelia; there, high up on the rocks above, the rosy cleome and the cerulean blue commelina, and from the rock cliffs hang cedars and climbing roses. How wonderfully the warmth affects things!⁴¹

He goes on to explain that the valley measures about 800 paces and widens and turns to the east at the southern end. The springs are described as being in the upper portion of the valley in an area “about 600 paces in length along the streambed,” erupting over rocks on the eastern bank. The highest springs are about one hundred feet above the stream, coursing through a “small meadow surrounded by woods.” He explains that on the west side of the stream (Hot Springs Creek) there is vegetation growing along the bank beyond which there is a path running through the valley.

³⁹ Jansma and Jansma, 230.

⁴⁰ Ibid. Excerpt from Englemann, George, “The Hot Springs in Arkansas,” *Das Westland*, 1837.

⁴¹ Ibid. Note: While he Englemann was justly derisive of the volcano legend, he repeats inaccurate information related to the “valley of the peace” stories.

Along the path are ten to fifteen buildings, three to four of which are on the stream. He describes the buildings:

Most are "stone houses of the typical sort; a few have half timbers covered with boards on the outside with a framed roof. Easily half of them are guest houses, which, in a typically American way, are divided up into eight to ten spaces (actual rooms we could hardly call them) and can accommodate probably a hundred persons. Among the rest, the most important is a shop which is at the same time the post office and the only building that I have seen that has glass for windows."⁴²

Engelmann indicates his appreciation of the advantages provided by nature, and the potential for development of this unusual site:

Small and pitiful are the achievements here, and still it is cheering to observe that the settlement has every possible advantage offered by nature, and has been built with the least possible effort. The baths have been built by nature. Many of the springs have carved out small bathtubs in the rock, or better said, they have formed little basins, by scouring into the rock; for, as in Karlsbad, the rocks are the signal of the springs. Several natural bathtubs have been chosen whose waters are not too hot, and small cabins with benches have been built right on top of them; and thus the bath is finished and is available for anyone to use. The simplest bathers can just bathe in the stream, where one can find a temperature to his liking. There are only two wooden bathtubs, one in a small house near the landlord's house, in which one directs water, and the other in the steam bath, into which the water runs freely out of the rock."⁴³

In comparing Featherstonhaugh's account to Engelmann's, it is clear that their personal preferences prejudiced their descriptions. It also appears that some expansion occurred within the year between their visits. Engelmann provides the first account of structures that are built over Hot Springs Creek. Also, he indicates that there are lodging accommodations with multiple rooms. These descriptions indicate an increase in the size of buildings, and the quantity of visitors.

In addition, Engelmann provides a description of constructed steam baths — two for men and one for women. The men's are near each other "...under a rock overhang over the hottest part of the springs..." in a sunken area. A board with a door was placed over the opening. Boards were also situated on the ground over the place where the spring emerged — to protect feet from burning. The hot vapors rose through the cracks between the boards to "envelope anyone sitting on the benches." The women's steambath is described as being "somewhat more elegant," and "situated a little higher in the rocks."

⁴² Ibid., 234.

⁴³ Ibid., 234.

The account provides a first description of pedestrian routes, including footpaths and stairways, in the area of the springs.

Narrow footpaths lead around between the bushes and the rocks and over small stairways among the various bathing facilities, and present for the pedestrian colorful and attractive perspectives and surprising views without great effort; nature has done so much here that a gardener might do only with the greatest effort and care.⁴⁴

He indicates that opportunities for walks, which were part of the “*regimen for cures*,” were severely constrained, there being only one path through the valley affording about a fifteen minute walk. He warns that venturing to further paths, those created by animals, would result in misery due to the dense tick population. Hunting parties on horseback were popular, but he does not indicate that trails existed for pleasure riding. He notes that entertainment was very limited, consisting of gambling, or an infrequent dance, hunt trip or excursion to Little Rock.⁴⁵

Uncontrolled Growth at Hot Springs Creek (1858-1878)

This period of landscape change begins in 1858, the year that geologist David Dale Owen initially visited Hot Springs. After a second visit to the area in 1859, Owen’s 1860 report and the accompanying survey map by William Glasgow, documented the existence of increased developments including large buildings on both sides of Hot Springs Creek, several bridges over the creek, and a rudimentary system for transporting hot spring water to the buildings (see Figure 2-6, 2-7, 2-8, and 2-10). In addition, the precursor of Central Avenue, then called Valley Street, was evident in the form of a corridor between two rows of parallel buildings running north/south on the western side of the creek (see Figure 2-10). By the end of the period, the corridor would include a trolley track providing a transportation route from the train depot through the downtown area. The period ends in 1878 when the landscape is changed dramatically by a fire that destroys most of the buildings and structures in the area.

The period is characterized by entrepreneurial development of the area around the hot springs. The earliest indications of Central Avenue and Bathhouse Row emerged as the first hotels and bathhouses were developed along and over Hot Springs Creek. These buildings were larger and contained more comforts for visitors than earlier shelters but still lacked basic amenities. The buildings were simple board-and-batten structures, clustered around and over the creek. The creek became clogged with debris, as it was utilized for waste disposal. Sometime before 1859 a system of sluices and holding troughs was constructed to transport hot spring water to the bathhouses (see Figure 2-8). These created a web of linear elements between the base of the mountain and the buildings.

⁴⁴ Ibid., 234.

⁴⁵ Ibid., 244-245.

Along with developments associated with Bathhouse Row, the town included hotels, other businesses, churches, a cemetery, railroad depot, and residences. Four pivotal events occurred toward the end of this period that greatly influenced the future development of the landscape of Hot Springs: the 1870 Congressional act that passed a law allowing claims to land at the Hot Springs Reservation to be settled by a Court of Claims; the 1875 arrival of a railroad line in Hot Springs; the Government intervention in the form of the Hot Springs Commission and establishment of a Reservation Superintendent in 1877; and a fire in 1878 that destroyed a large portion of the structures in the area.

Descriptions by David Dale Owen

David Dale Owen was a leading nineteenth-century American geologist who lived in New Harmony, Indiana. He conducted two federal geological surveys and the first official state geological surveys for Indiana, Kentucky, and (as the newly appointed State Geologist) Arkansas.⁴⁶ Owen's reports of his visit to Hot Springs provide detailed descriptions and analysis of the qualities of the waters of the hot springs, including considerations for the use of the waters for medicinal purposes. The reports also discuss geological formations in the area in detail. His diagrams indicate that there were several buildings of significant size present in the valley at the time of his visit.

Owen describes Hot Springs Mountain as a ridge two-hundred and fifty feet above the valley made up of "*the most beautiful variety of Novaculite,*" equal in "whiteness, closeness of texture, and subdued waxy luster, to the most compact forms and white varieties of Carrara marble." He mentions the opportunity for extensive quarry opportunities for novaculite.⁴⁷

Owen includes a sketch titled: "*View from the Most Elevated of the Northern Group of Hot Spring Creek, Looking Northwest*" (see Figure 2-7). The sketch indicates a small cluster of buildings – apparently a homestead – on the slope of the hill. Nearby are mixed deciduous and evergreen trees, and in the foreground what appears to be a spring edged by stones placed in a regular pattern. It is also possible that this is the artist's interpretation of a natural stream bed. The background of the sketch indicates rock outcrops and forest-covered hills.⁴⁸

⁴⁶ Kimberling, *David Dale Owen, Geologist, Artist*, <http://faculty.evansville.edu/ck6/bstud/report1.html> and <http://faculty.evansville.edu/ck6/bstud/report2.html>.

⁴⁷ Owen, *First Report of a Geological Reconnaissance [sic] of the Northern Counties of Arkansas*, 23 and 31.

⁴⁸ Owen, 101. On page 24, Owen indicates that Col. Whittington's house is near the northern edge of the Hot Spring Ridge, at the turn of the road.

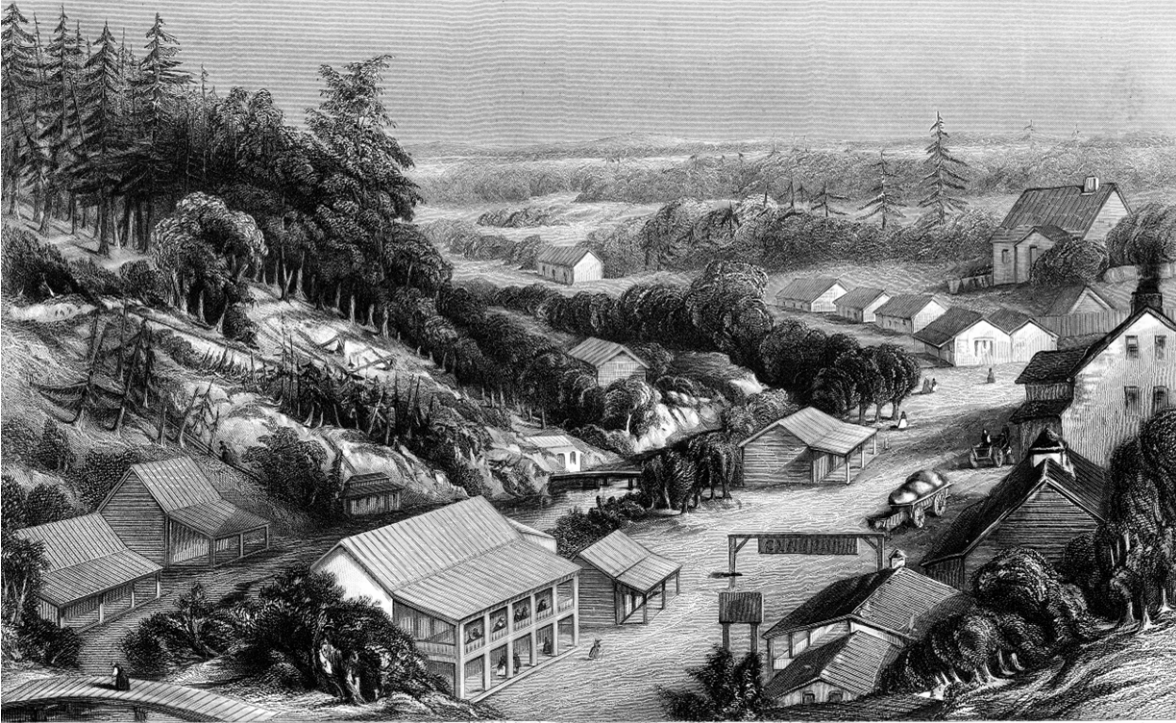


Figure 2-6: View of the Hot Springs of Arkansas, looking south, 1858, drawn by D.D. Owen.
Note: The creek is located at the base of the slope, running from the lower left corner of the image diagonally toward the center; it then curves to the left. Two bridges span the creek. The two-story building in the mid foreground is the Hale House, with the small bathhouse behind its south end. The buildings just north of this group are probably Rector's bath and boarding houses, although they would have been somewhat further away than indicated here.



Figure 2-7: "View from the most elevated of the Northern Group of Hot Springs Creek, Looking Northwest," (Sketch from Owen Report, 1859, 101)

Owen prepared a chart to represent the “*relative position of the principal springs*” and provided their relative elevation above Hot Spring creek and temperature, as well as the system of pipes and troughs used to transport the hot water to the baths and public kitchen. He also indicated the general topographical features of the novaculite ridge, indicating the surface was “*completely coated with calcareous tufa*.” The chart demonstrates that the level of many of the springs is sufficiently high for the water to be conducted to the tops of the very highest building, “*so that the most convenient arrangements for distribution therein, for the purpose of baths, might be adopted, instead of the very imperfect and rude methods now in use.*”⁴⁹

Regarding the vegetation, Owen indicates that the constant modification of the surface of the tufa deposits...“*either by erosion of the water running down its steep declivity or by addition of new matter,*” created a landscape “*nearly barren and naked in some places.*” He goes on to note that some plants are growing in the peculiar ground including two species of evergreen Youpon or Cassena, and Juniper. The only other woody plants present in the area of the hot springs are “*...two or three stunted specimen of the Quercitron, of the Ironwood, and a single tree of the Red Maple.*” The surface is covered by small plants, “*...especially mosses, which are the first plants attacking a naked rock to decompose it and change it into humus.*” Species present include Reboullia hemispherica (a species of the Liverwort family), and mosses including Bartramia radicalis, Bryum argenteum, Barbula unguiculata and Fissidens taxifolius. Ferns include Maidenhair and Phaenogamous. Herbaceous plants include Wild Senna, Three-leaved Stonecrop, Lyre-leaved Sage, great Lobelia, and Herpestis nigrescens. He remarks on the ability of these plants to grow in the extreme temperature of the springs, noting that their roots are immersed in the hot water. Finally, he notes other species that are present growing on the tufa, including French Mulberry, Ironweed, Wild Bergamot, and Greenbrier.⁵⁰

The large size of the buildings, their close proximity to the creek, and the presence of bridges over the creek all indicate that efforts were being made to manipulate the terrain along the creek banks. It is likely that before Owen’s visit soil was moved and vegetation removed to create building sites and reinforce the banks of the creek. These alterations somewhat diminished the wilderness character and features of the area, and set a precedent for future changes that would ultimately result in the transformation of the natural landscape at the hot springs into a significant cultural landscape.

Following Page

Figure 2-8: David Dale Owen, ca. 1860

⁴⁹ Owen, 101-102.

⁵⁰ Owen, 341.

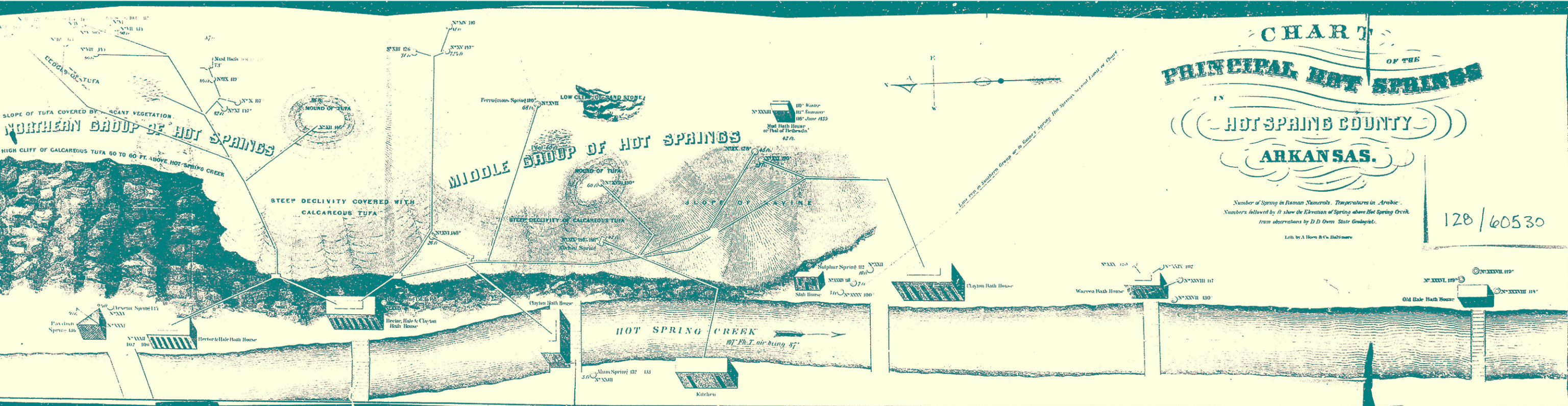


Figure 2-8: Map of Hot Springs by David Dale Owen, ca. 1860 (Source: National Park Service, 128-60530)

The American Civil War

The American Civil War impacted the economy and landscape of Hot Springs. Arkansas seceded from the Union and joined the Confederate States of America on 6 May 1861. The bathing community dwindled during the war. Fears of Union attacks on Little Rock led many Hot Springs residents to flee the state. During the summer of 1862 Hot Springs served briefly as the Arkansas State Capital when Governor Rector moved his staff and the state records to Hot Springs from Little Rock due to rumors that Federal troops planned to occupy the capital city. Although the Union troops did not attack Little Rock in 1862, the city was occupied and controlled by Union forces beginning on 10 September 1863. The communities around Little Rock, including Hot Springs, became targets of groups associated with either Union or Confederate forces who ransacked properties to eliminate their worth to the enemy.⁵¹ By the conclusion of the Civil War in 1865 many of the structures in Hot Springs had been destroyed (see Figure 2-9).



Figure 2-9: Hot Springs Valley, looking south, 1867 or earlier (source: HOSP 3149)

Note: The chimneys of burned-out buildings on the west side of the valley are apparent; these are probably ruins of buildings burned during the Civil War. The large bathhouse in the center of the picture may be Dr. Lawrence's house/office or an early version of the Rector House. It is not the Rector Bathhouse; the Rector bathhouse buildings are northeast of the house.⁵²

⁵¹ Paige and Harrison, 71. They cite Francis J. Scully, *Hot Springs Arkansas and Hot Springs National Park* and Dee Brown, *The American Spa*. Sworn testimony of G.W. Lawrence during the 1884 Congressional Hearing into the Creek Arch and the personal correspondence of Lydia Belding, who remained in the hot springs area during the war years, both note the city was burned by "Mountain Feds" in November 1864.

⁵² Assistance in identifying elements in historic images was provided by Sharon Shugart, Hot Springs National Park.

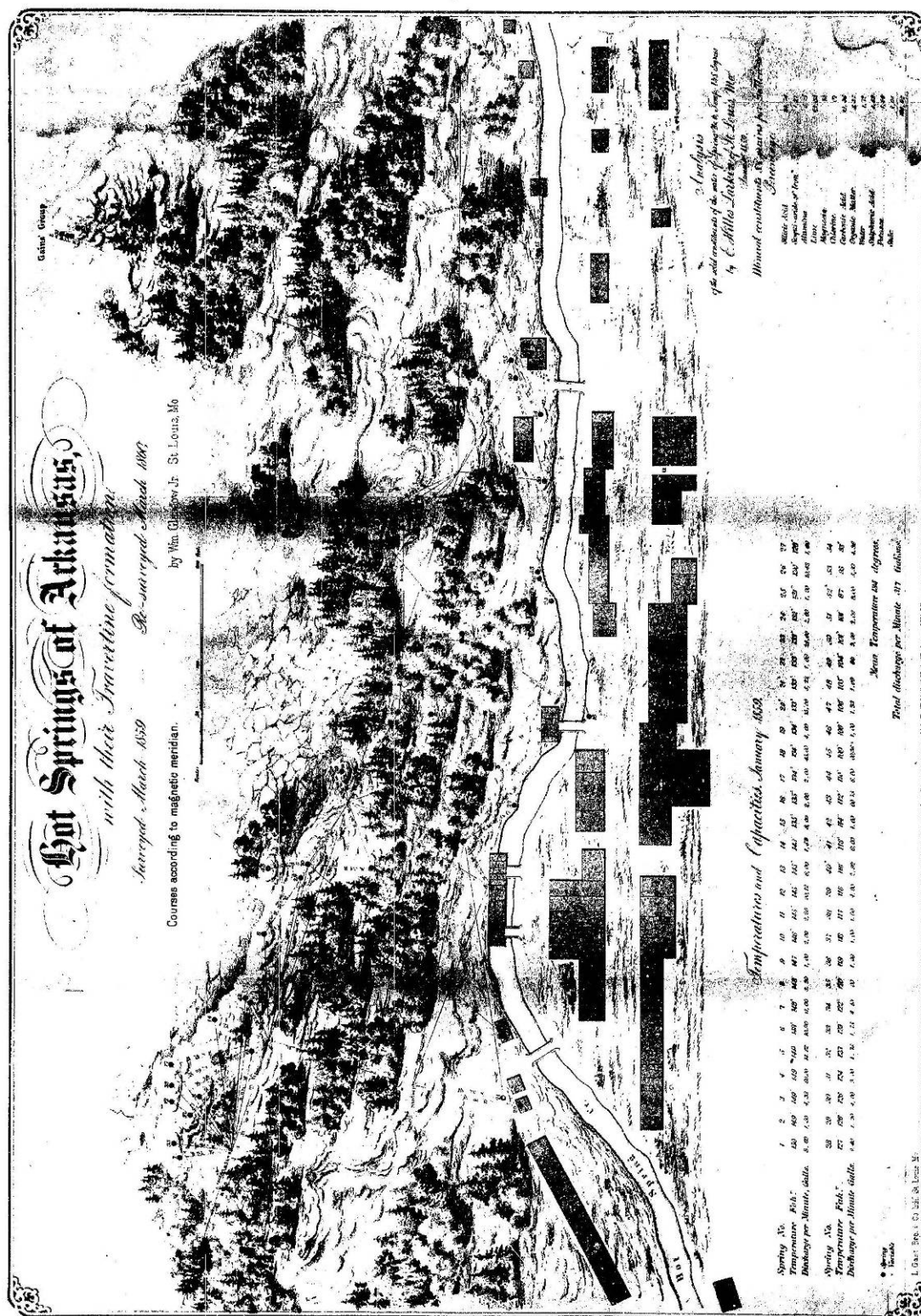


Figure 2-10: Map of Hot Springs, 1860 by William Glasgow from David Dale Owen report.
(source: DSC 128-60534-58839)

Arrival of the Railroad

Toward the end of this period, access to Hot Springs was greatly enhanced with the development of a regional railroad line to the city. The Diamond Jo line reached Hot Springs in 1875 and would influence the visitation and development of the town for several decades. Initially the Diamond Joe line was a narrow gauge railroad that ran from Malvern to Hot Springs, allowing visitors to avoid the long overland coach drive from Benton to Hot Springs, but still requiring a transfer from one train to the other. Over time the railroad provided a faster and more reliable route to Hot Springs, enhancing its appeal to visitors from afar.⁵³ Rail access to Little Rock opened an avenue to St. Louis from which Kansas City, Omaha, Minneapolis, Chicago, Pittsburg, Detroit, and Toronto could all be reached via railroad.

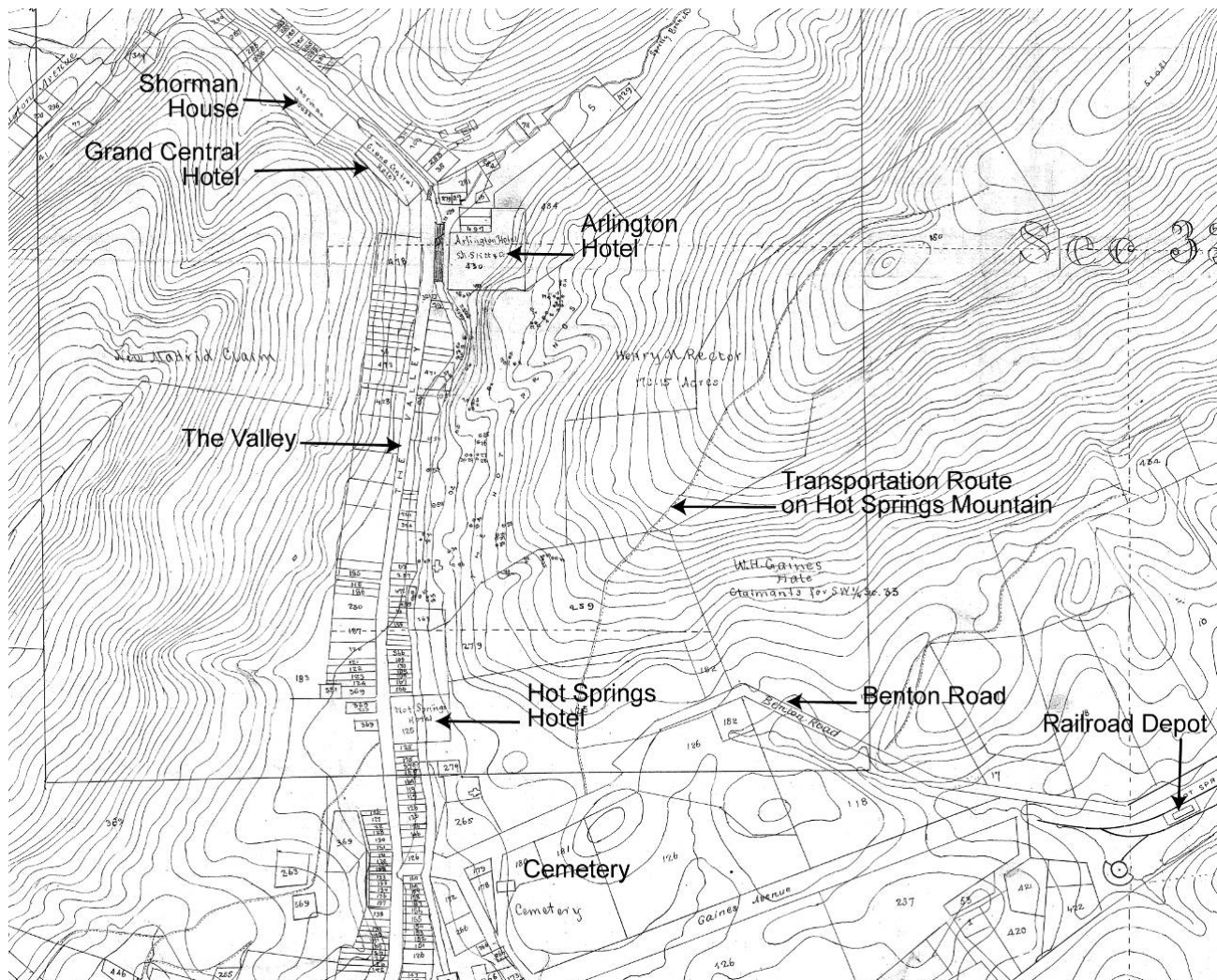


Figure 2-11: excerpt from French 1875 topographical survey (source: Hot Springs National Park) Note the route to the top of Hot Springs Mountain. Although the lot lines imply an orderly arrangement of streets and properties, the development was not yet in place.

⁵³ The Diamond Joe line was converted to a standard gauge railroad in 1890. This eliminated the need for a train transfer thus providing direct rail access to Hot Springs at that time.

Ownership/Government Intervention/Hot Springs Commission

In 1870 Congress passed a bill allowing claims to land at the Hot Springs Reservation to be settled by a Court of Claims.⁵⁴ In 1875, a topographical survey of the area was prepared by George M. French. Although the resulting map was never published, it contains useful information regarding land divisions, topography, and circulation routes (see Figure 2-11). The map indicates that a transportation route of some sort (possibly a trail) was present on Hot Springs Mountain. It led from Benton Road to the high point of Hot Springs Mountain—near the location of the present Hot Springs Mountain Tower. It is possible that the route was established earlier by American Indians, hunters, trappers, or animals. Other similar trails appear on the map but are hard to see. One on West Mountain would provide good views of the Hot Springs Hotel and the south and east portions of the town.

Also in 1875 a number of legal suits were brought to the court of claims regarding ownership of land within the Reservation. The suits were consolidated and tried together. On 24 April 1876, the United States Supreme Court ruled that the land title of Hot Springs belonged to the United States Government. This ruling was quickly followed by the passage of a Congressional Act signed into law on 3 March 1877 that in part established the Hot Springs Commission, consisting of three members, Aaron H. Cragin, John Coburn, and Marcellus L. Stearns, to address issues related to the organization of the development of the city and adjudicate all land claims related to the reservation. John W. Anderson was appointed as clerk of the commission and Frederick A. Clark was designated the chief engineer and surveyor.

The appointment of Clark may have been influenced by a recommendation by Frederick Law Olmsted, Sr. Upon his appointment, Clark attempted to secure Olmsted's services to design the landscape of the park. Correspondence indicates that Olmsted declined the offer due to the lack of funds allocated for construction.⁵⁵

The legislation authorizing the commission was signed into law on 3 March 1877. The commission resurveyed and appraised lots in Hot Springs and settled the remaining land claims, setting aside 264.93 acres as a permanent reservation. 1,270 acres were designated for the town of Hot Springs and 700 acres were awarded to claimants. The town of Hot Springs consisted of 196 blocks and 50 miles of streets and alleys. The remainder of the original four sections of government land consisted of unoccupied wooded hills and mountains. The commission recommended that these areas be reserved for public parks. In June 1880 Congress acted to add those lands to the permanent reservation."⁵⁶

⁵⁴ Paige and Harrison, 72.

⁵⁵ Fred A. Clark to Fredrick Law Olmsted, Hot Springs National Park, Correspondence File. Four letters from Clark to Olmsted spanning the time between June 1877 and January 1878.

⁵⁶ Paige and Harrison, 74.

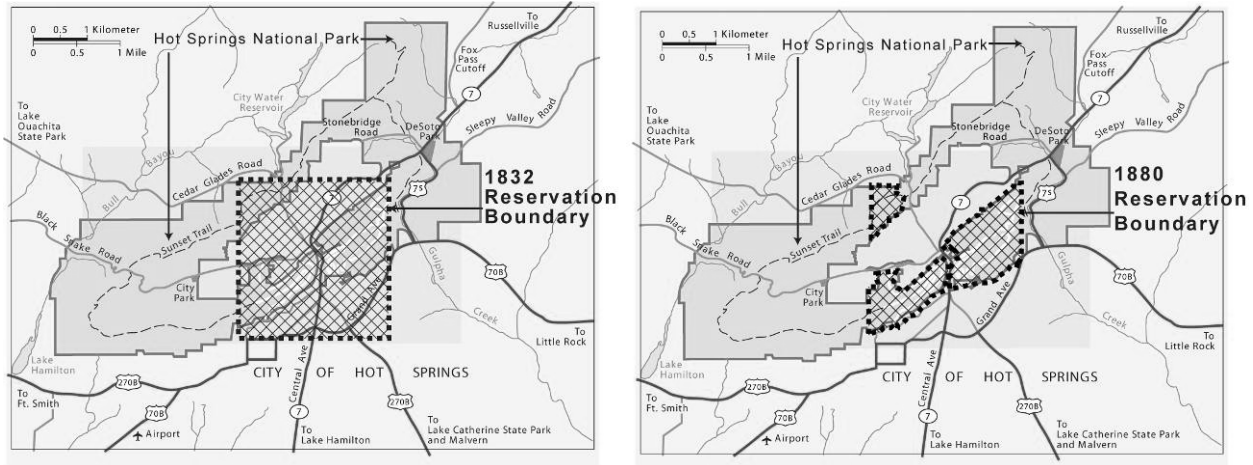


Figure 2-12: 1832 Original Reservation Boundary compared to the 1880 Reservation Boundary

Other tasks addressed by the commission included: the improvement of existing streets and the laying out of new streets, avenues, alleys, and sidewalks in the city of Hot Springs; the division and appraisal of land not claimed; the condemnation of buildings within the reservation and in the line of streets; the appraisal of condemned land; the utilization of surveyors' notebooks to create a series of hand-drawn maps that reflected these changes; and the production of a final printed plat map to show which lots were sold and which remained unsold.⁵⁷

Also in 1877 the first superintendent of the Reservation, General Benjamin Franklin Kelley, was appointed. Superintendent Kelley established the first regulations for bathing at the springs. He also set about removing the structures at the Ral Hole, Mud Hole, Corn Hole, and Ral City, which made up a ramshackle community including squatters and shanties. Located among the higher group of springs on Hot Springs Mountain, Ral Hole was principally used by non-resident indigents. Mud Hole and Corn Hole, further south and at a lower elevation, were utilized by local residents as well as visitors who could not afford the more upscale bathhouses. By 1878 a tent community, Ral City, with several hundred residents had formed in the area surrounding these dugout pools. When Kelley was ordered to rout the squatters and obliterate the dugout pools in September 1878, the indigent group rioted. A company of Army bluecoats was soon called in to reestablish order. The Army stationed a company here for approximately the next two years.⁵⁸

Although throughout this period, the reservation boundary remained the same as that established in 1832, the appointment of the Hot Springs Commission in 1877 and the work the group performed provided a framework for future development.

⁵⁷ Paige and Harrison, 72-73; and Cragin, Coburn, and Sterns, *Report of the Commission Appointed under the Provisions Act of Congress of March 3, 1877, Regarding the Hot Springs Reservation in the State of Arkansas*, 5.

⁵⁸ Kelley, *Hot Springs National Park Superintendent's Annual Report, 1878*, 1; and Cron, *The Hot Springs of Ouachita*, 169-170.

Bathhouse Row

Following the American Civil War, a new surge of building, including larger and more elaborate structures, occurred at Hot Springs. Within the Reservation, Bathhouse Row was the main focus of development and activities during this period. Bathhouses were built over or near the creek, and near the springs, for direct use of the water, and disposal of sewage. Former resident John Hale returned and rebuilt his bathhouse on Central Avenue, and Hiram Whittington rented out rooms. In ca. 1870, William H. Gaines erected the Hot Springs Hotel at the southern edge of Bathhouse Row, and in 1871 the Grand Central Hotel was constructed on Central Avenue, northwest of the bathhouses (see Figure 2-25).

By 1870 the year-round population included 1,200 inhabitants. Bathhouses began to offer amenities including oilcloth floormats in the bathrooms, rugs and mirrors in the dressing rooms, and iron pipes that carried hot water from the springs to the bathhouses. By 1871 there were five bathhouses present along Hot Springs Creek. A boom during the next two years resulted in a total of twenty-four hotels and boardinghouses and six bathhouses in the area near the springs by 1873.⁵⁹ The first Arlington Hotel was opened in 1875; it was the first luxury hotel at Hot Springs. On the site of the former Rector Bathhouse, the Arlington either replaced, or was added to, the earlier building.

Prior to 1877, the lack of oversight and regulations led to haphazard development on Bathhouse Row. Structures were built according to individual whims, with little or no consideration for architectural style or quality. Their random orientation and placement added to the disorderly appearance of the town (see figure 2-16, 2-17, and 2-19). The route that would become Central Avenue was a dirt expanse that varied in width and was devoid of organizational and aesthetic features. Historic photographs indicate no vegetation in the developed area—with the exception of a few spindly trees that were apparently left uncut when buildings were constructed. The buildings were loosely arranged along the creek, which was used as a sewer creating unsanitary conditions. The majority of the substantial buildings were located on the western side of the creek. Some of the structures were built directly over the creek, and several had pedestrian bridges spanning the creek to the base of the mountain. Until 1878 the eastern side of the creek and base of the mountain slope continued to serve as the home for shacks and other ephemeral structures pieced together for the use of indigent people who came to bathe in the springs.

The route that would become Central Avenue was located to the west of the main row of structures, with a second, informally arranged row of buildings on the western side of the route. Dusty when dry and muddy when wet, the town did not provide the pleasant aesthetic of a resort spa town (see figure 2-17).

Throughout the period, improvements were made upgrade the buildings and transportation options. Tracks for a horse-drawn trolley/street railway were present by 1871, providing a fairly reliable means for traversing the route through the heart of town. The tracks led to the railway depot in anticipation of the implementation of a regional railroad connection,

⁵⁹ Paige and Harrison, 72.

which finally occurred in 1875. The surface of the dirt was compacted and made more uniform, reducing the mud puddles. In some locations the creek banks were reinforced with stone retaining walls, improving their stability and adjacent conditions. In 1877 the Big Iron Bathhouse and the Rockafellow Bathhouse were both constructed. The same year, a flood damaged walls along Bathhouse Row. In 1878 the first superintendent's office was built on Fountain Street near the Arlington Hotel. Superintendent Kelley and the commissioners lived at the Arlington Hotel and worked at the office during the day. The building was a two-story frame structure with four rooms, and by 1890 it was described as dilapidated and scarcely habitable.⁶⁰

On 5 March 1878, a fire destroyed many of the buildings in Hot Springs including the Hot Springs Hotel, American Hotel, Baptist Church, Weir and George Bathhouse, Huffman and Hamilton Bathhouse, the city jail, Greenlief's bathhouse and bagnio where the fire reportedly started, and the French Restaurant. A bathhouse on the present Fordyce site, probably the Central Bathhouse, was also burned. The Arlington, Sumpter, Grand Central, Avenue, Rockafellow, Big Iron, and Hale bathhouses safely escaped the fire.



Figure 2-13: Drinking hot spring water at Magnesia Springs, 1867 (source: HOSP 03154) Note the steep topography, low vegetation of mosses and ferns, and the channel in the foreground that may be carrying spring water to another location.

⁶⁰ Scully, *Hot Springs, Arkansas and Hot Springs National Park*, 20, 56, 60; and U.S. House of Representatives, *Testimony Taken before the Committee on Expenditures in the Interior Department Relative to Certain Things connected with the Government property at Hot Springs, Ark.* (House Ex. Doc. No. 89), 17 June 1884, 49-50, 59-66, 115; and Shugart, CLR comments June 2007.



Figure 2-14: Cattle at ford on Hot Springs Creek, 1867 (source: HOSP 3150, Bankes' #2) Note: Looking north; a man on a litter is being carried by two other men across the wooden bridge, in the present site of Arlington Lawn. Center left is the Rector Boarding House; on the right obscured by trees is one of the Rector Bathhouses. Note the irregular characteristics of the creek, and the humble construction of the bridge and buildings present.



Figure 2-15: Corn Hole, Late 1860s (Hot Springs National Park) Note the lack of vegetation and the extremely modest structure for bathing.



Figure 2-16: Hot Springs Valley looking northwest from Hot Springs Mountain, ca. 1871. (source: Stereograph Collection, Clary's #2, HOSP 15097) Note: This area is now occupied by Arlington Lawn. The two long buildings with gable roofs remained until after the first Arlington Hotel was constructed in 1875. The northernmost building (nearly in center) is the Grand Central Hotel on the present site of the Medical Arts Building.



Figure 2-17: Central Avenue looking south, ca. 1871-1875. (source: Stereograph Collection, HOSP 15100) Note: Central Avenue is muddy and no sidewalks, vegetation, or other amenities are present. Tracks for the horse-drawn trolley provided public transportation through town. The Hale House is on the left (it is a long two-story wooden frame building with a balcony running the length of the front). The American Hotel is the building on the right with the cupola on top.



Figure 2-18: Central Avenue facing north, 1874 (source: Hot Springs National Park, Clary 1874) Note the dirt road, trolley tracks, and lack of vegetation or other landscape amenities. The sign on the first building on the right is for the Hot Springs Hotel Electro-vapor Bath.



Figure 2-19: Bathhouse Row Facing South, ca. 1875-1878. (source: HOSP 15075, J. F. Kennedy Stereograph) Note the Arlington Hotel and old wooden bathhouses are on the left, the Grand Central Hotel is at the lower right corner of the image.

Formal Entrance and Arlington Lawn

Neither the Formal Entrance nor the Arlington Lawn was present during this period (Figure 2-16 shows the future site of the Arlington Lawn). During the period the first Arlington Hotel was newly built in the location at the southeast corner of Central Avenue and Fountain Street. The site that now is home to the Formal Entrance was not yet defined.

Mountain Sidegrounds and Grand Promenade, 1858-1878

During this period the upper and middle groups of springs on Hot Springs Mountain were home to a ragtag population of itinerants and Civil War Veterans. Named Ral City, this sprawling encampment of tents and shanties had sprung up around three excavated pools (Ral Hole, Mud Hole, and Corn Hole) with wooden planks over them for bathing or foot soaking, some with canvas or wood screens for privacy. The more powerful lower springs at the base of the mountain had been monopolized by the wooden pay bathhouse built on the eastern side of Hot Springs Creek, while the creek's western bank was packed with doctors' offices, restaurants, and a wide variety of storefronts. The Department of the Interior was beginning to lease out the spring sites and had already required the owners of the Rector and the Big Iron bathhouses to build new structures. Superintendent Kelley removed the pool enclosures in September 1878, but a public uproar convinced the Department of the Interior to maintain a bathhouse at the Mud Hole for indigent bathers. The 1878 fire save the government the trouble of condemning the remaining buildings at the base of Hot Springs Mountain. When the issuing of leases resumed, the Secretary of the Interior included strict architectural and structural requirements for new bathhouses, and all other private businesses (with the exception of the Arlington Hotel) were relocated to the western side of Valley Street.



Figure 2-20: Soup House, City of Siloam (Ral City), on Hot Springs Mountain, ca. 1875 (source: Clary's #46, HOSP 379) Note the rough ground, sparse vegetation, and temporary shelter. The famous restaurateur Delmonico bathed at Hot Springs Reservation in the 1870s and upon his departure endowed a soup kitchen to help feed hungry indigents.



Figure 2-21: Ral City on Hot Springs Mountain, winter scene, ca. 1875. (source: Clary's #44, HOSP 380) Note the simple construction of the small structure. A sign on the horizontal board beneath the roof states: "CALF. HOUSE \$1.[?] PER [DAY?]."

Hot Springs Mountain, North Mountain, and West Mountain, 1858-1878

In 1877 local newspaper publisher Enoch Woolman erected a wooden observation tower on the high point of Hot Springs Mountain. The tower, referred to as the Hot Springs Mountain Observatory, contained a telescope for the use of visitors. The eighty-foot high tower provided far-reaching views to visitors who climbed the wooden steps to reach the platform at the top.⁶¹

Whittington Park and Gulpha Gorge, 1858-1878

These two component landscapes were not yet developed during this period. The road that was eventually developed into Whittington Park appears to be present on the 1878 diagram in the Harpers Weekly article--it is titled Gum Springs Drive.

⁶¹ Shugart, "Hot Springs Mountain Tower Summary," unpublished report, 2006.



Figure 2-22: View of Whittington Avenue, taken from the side of West Mountain, ca. 1875 (source: HOSP 8680, Balch stereograph) Note the rolling hills and presence of more vegetation in this area (compared to the lower western slope of Hot Springs Mountain).



Figure 2-23: Whittington Avenue, ca. 1875. (source: HOSP 8683, J. F. Kennedy photograph) Note the more substantial houses with lawns and ornamental trees. The Avenue Hotel can be seen in the distant background.

Happy Hollow, 1858-1878

Businesses present on Fountain Street in 1875 included a law office, fruit stand, saloon, confectionary, at least two boarding houses, two stores, and residences. The stores carried groceries, dry goods, and liquor. In 1877 Fountain Street businesses included a saloon and club room, a law office, a confectionery and notions store, and several establishments that may have been offices, boarding houses, or residences. Several property and business owners were African-American. The locations and owners names of the businesses are provided in Figures 2-26 and 2-27.

A Harpers Weekly article published in January 1878 includes a map and image referring to the Fountain Street area as “Happy Hollow.” This is the first documented use of the name. The image of this community provided is laden with stereotypical statements regarding the residents who worked at the bathhouses. Three months after the Harpers Weekly article was published, on 5 March 1878, a disastrous fire occurred that destroyed many of the buildings in Hot Springs.



Figure 2-24: Hot springs Creek Near the Arlington House (from Harpers Weekly January 1878) Although the article and image are highly stylized, the retaining wall, bridge and drying racks are similar to those seen in Figure 2-38.

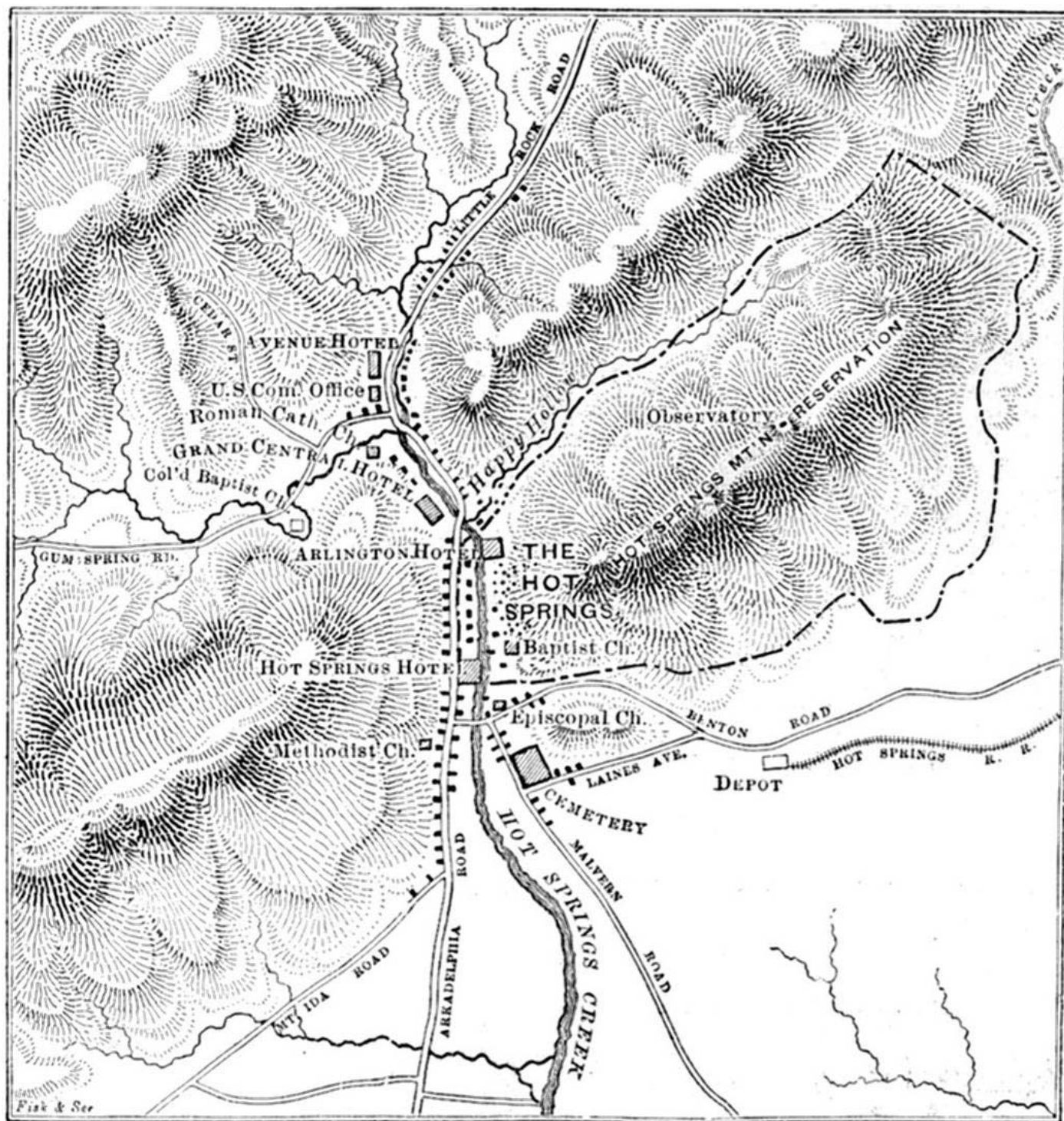


Figure 2-25: Plan of Hot Springs from *Harpers Weekly* 1878 January

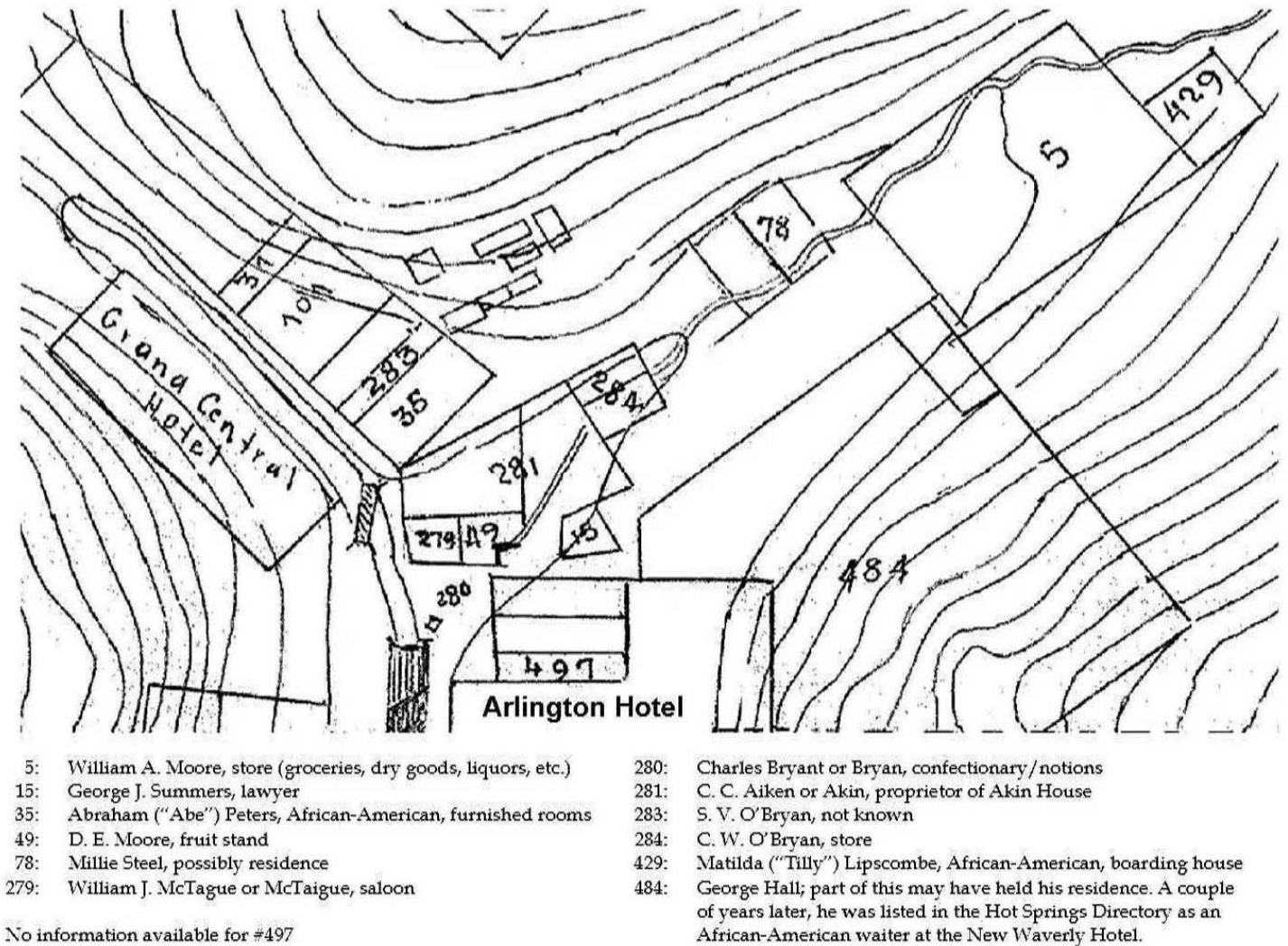


Figure 2-26: Fountain Street Businesses present in 1875 (source: prepared by Sharon Shugart, Hot Springs National Park, 2006)

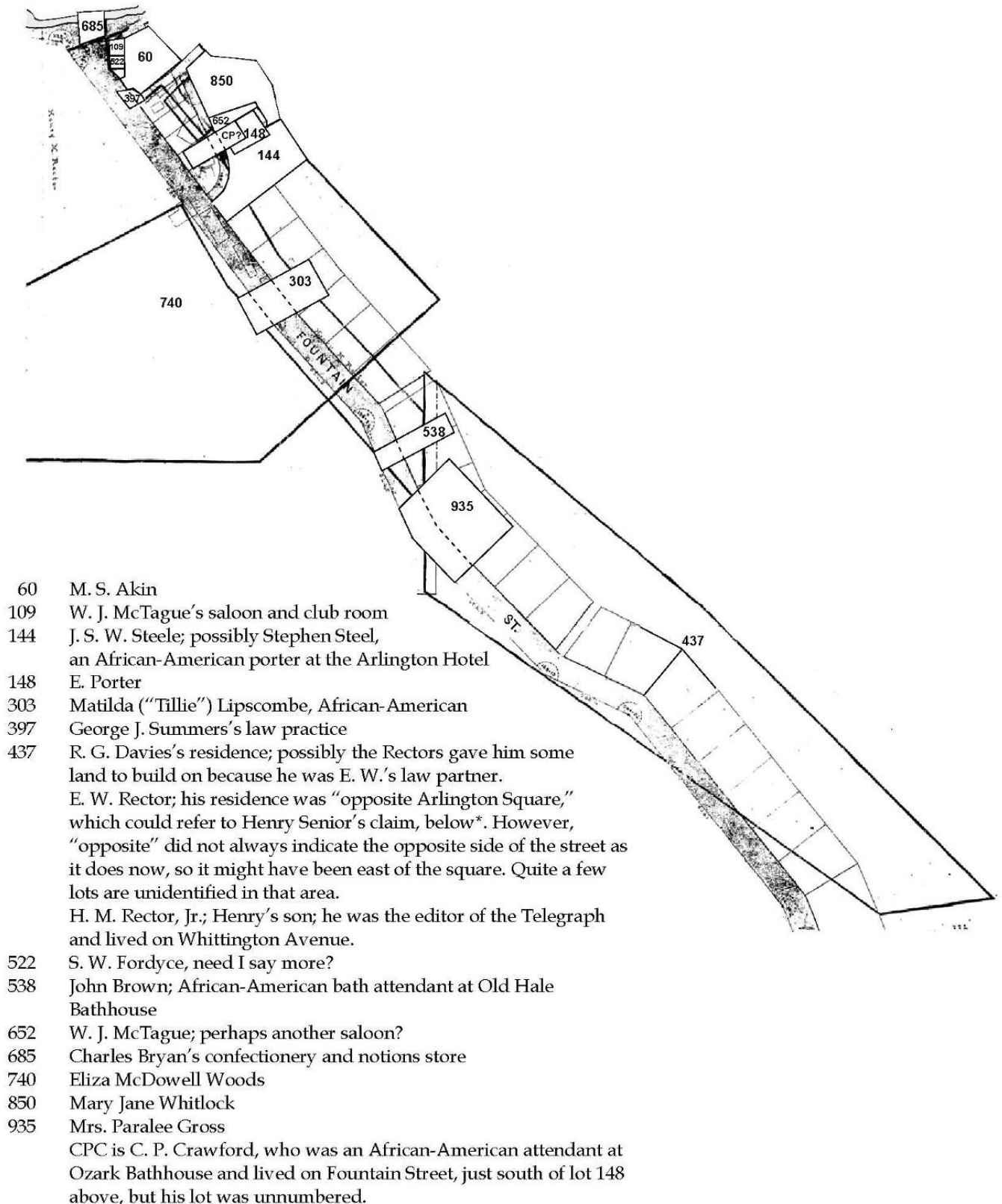


Figure 2-27: Fountain Street Businesses present in 1877. Note: The Fordyce property was probably an office. (source: prepared by Sharon Shugart, Hot Springs National Park, 2006)



Figure 2-28: Hale House, ca. 1877 (source: Hot Springs National Park)

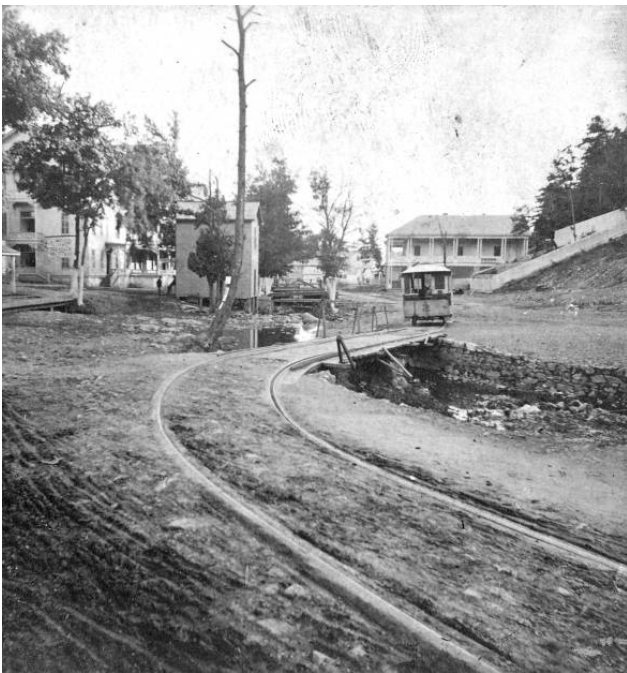


Figure 2-29: Trolley track crossing creek near Arlington and Western Hotels (date between 1875-1883). The creek banks have been reinforced with stone retaining walls. The bridge crossing the creek is of minimal design. (source: Hot Springs National Park)

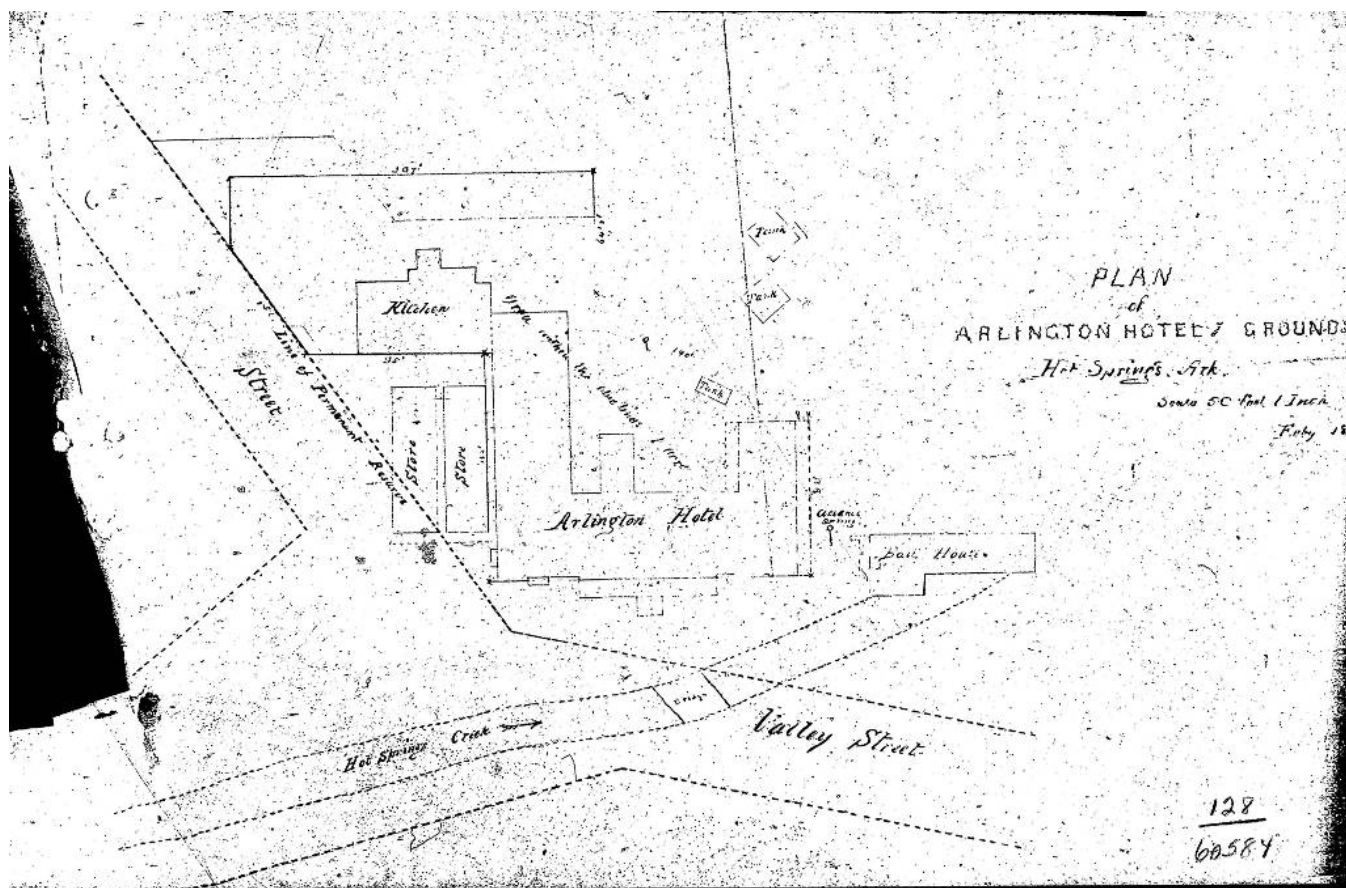


Figure 2-30: 1878 Plan of Arlington Hotel Grounds (source: DSC 128-60584)
Notice the location of the creek, bridge, and vague definition of the streets.



Figure 2-31: Downtown Hot Springs after the 1878 fire (source: Hot Springs National Park)



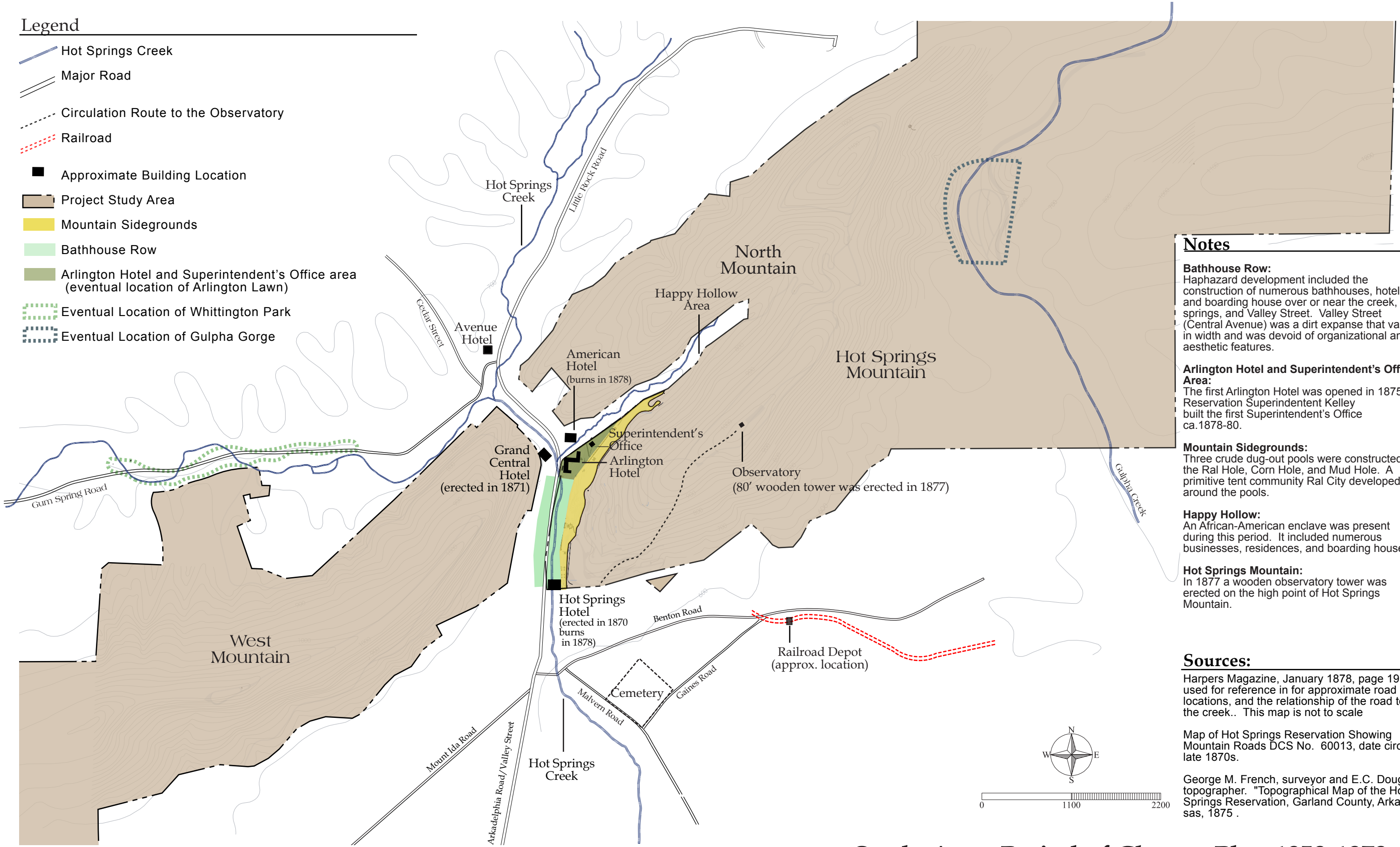
Figure 2-32: Grand Central Hotel, 1875-1883 (source: HOSP 08682)

Following Page:

Figure 2-33: Study Area, Period of Change Plan 1858-1878

Legend

- Hot Springs Creek
- Major Road
- Circulation Route to the Observatory
- Railroad
- Approximate Building Location
- Project Study Area
- Mountain Sidegrounds
- Bathhouse Row
- Arlington Hotel and Superintendent's Office area (eventual location of Arlington Lawn)
- Eventual Location of Whittington Park
- Eventual Location of Gulpha Gorge



Notes

Bathhouse Row:
Haphazard development included the construction of numerous bathhouses, hotels and boarding house over or near the creek, springs, and Valley Street. Valley Street (Central Avenue) was a dirt expanse that varied in width and was devoid of organizational and aesthetic features.

Arlington Hotel and Superintendent's Office Area:
The first Arlington Hotel was opened in 1875. Reservation Superintendent Kelley built the first Superintendent's Office ca.1878-80.

Mountain Sidegrounds:
Three crude dug-out pools were constructed: the Ral Hole, Corn Hole, and Mud Hole. A primitive tent community Ral City developed around the pools.

Happy Hollow:
An African-American enclave was present during this period. It included numerous businesses, residences, and boarding houses.

Hot Springs Mountain:
In 1877 a wooden observatory tower was erected on the high point of Hot Springs Mountain.

Sources:

Harpers Magazine, January 1878, page 195: used for reference in for approximate road locations, and the relationship of the road to the creek.. This map is not to scale

Map of Hot Springs Reservation Showing Mountain Roads DCS No. 60013, date circa late 1870s.

George M. French, surveyor and E.C. Douglas, topographer. "Topographical Map of the Hot Springs Reservation, Garland County, Arkansas, 1875 .

Study Area, Period of Change Plan 1858-1878

Organized Expansion alongside the Creek (1879-1883)

In the wake of the fire of 1878 a building boom occurred in Hot Springs. Unlike previous development, this time governmental supervision resulted in a more orderly overall appearance. This phase of development represents the beginning of the transformation of Hot Springs from a rough frontier town to a more polished spa resort. The period comes to a close in 1883, before construction of the creek arch was completed. The implementation of the underground tunnel for the creek dramatically changed the landscape--in particular the topography--along Central Avenue and Whittington Avenue.

Based on the framework of blocks, plats, and firm reservation boundaries provided by the Hot Springs Commission, an adept arrangement evolved from the new development. Numerous substantial bathhouses, hotels, and other buildings were constructed and each new generation of buildings was larger and more elaborate than the previous. Standardized bathhouse design was now regulated by the Department of the Interior and Victorian style buildings gradually filled the eastern side of the creek, creating Bathhouse Row. Bathhouse Row materialized not only from the application of a uniform building style, but from the alignment of the building facades through a uniform set-back and the rhythm created by the similar massing and spacing of the structures—results of the blocks and plats imposed by the Hot Springs Commission. In addition, the width of the corridor between the creek and the western side—of what would become Central Avenue--was sufficient to balance the height and mass of the large buildings. Although the buildings were more neatly aligned, the road that would become Central Avenue was a dirt expanse lacking defined edges. Boardwalks were provided along the store fronts on the western side of the street, and bridges extended over the creek to the bathhouses on the eastern side of the creek, but there was no pedestrian route parallel to the corridor on the east side of the street.

Other changes led to a more high-class clientele, including the fact that the bathhouses were now regulated by the superintendent of the Reservation, ensuring a common standard for conditions and services. The landscape of Bathhouse Row included fences, sidewalks/boardwalks, utility poles and overhead lines, bridges spanning the creek to the bathhouses, and dirt roads.

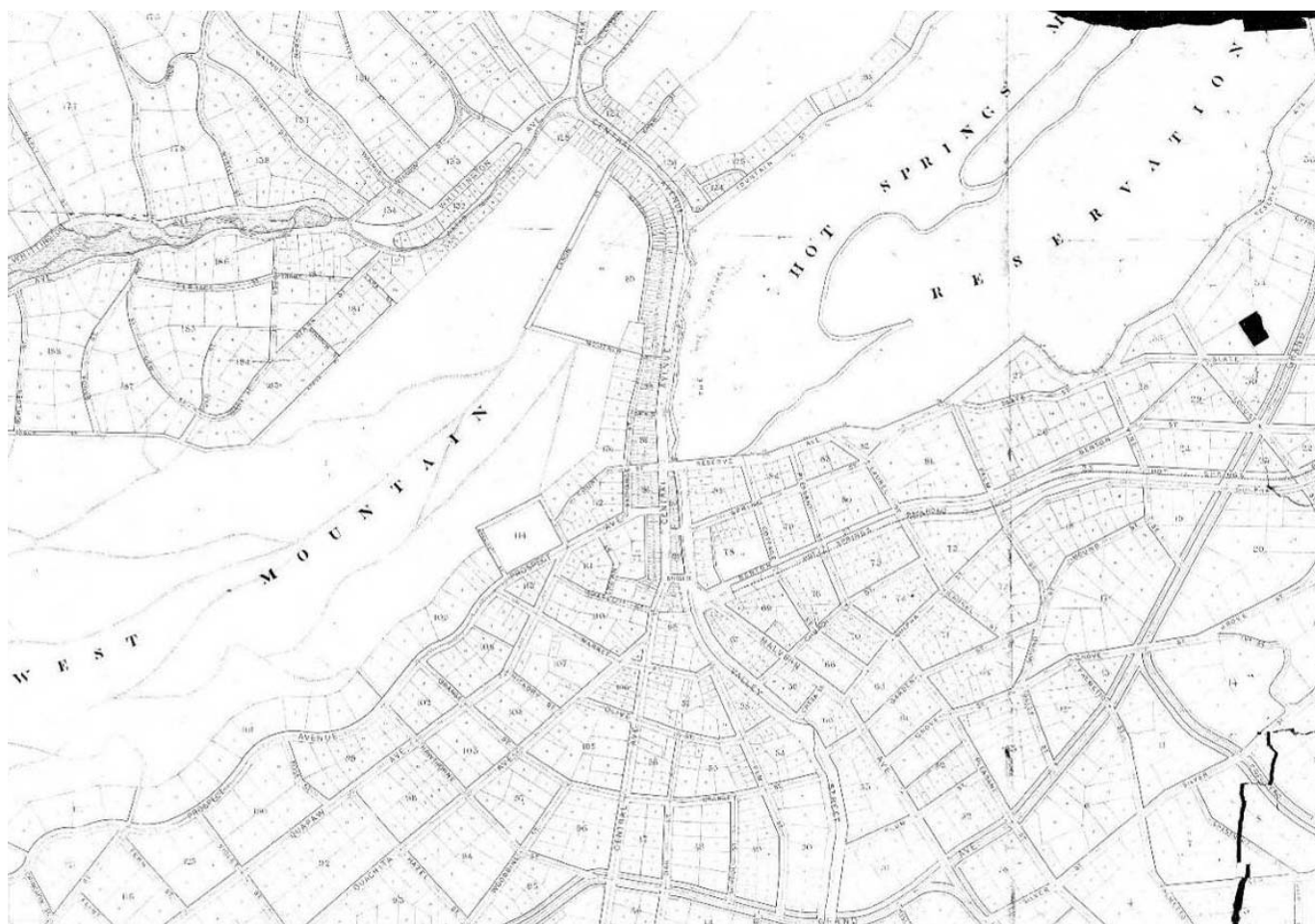


Figure 2-34: Plat of Hot Springs, ca. 1879 (source: DSC 128-60691)



Figure 2-35: Bathhouse Row facing north, ca. 1880 (source: Hot Springs National Park)



Figure 2-36: Bathhouse Row facing northeast, ca. 1880s (source: HOSP 15079, J. F. Kennedy photograph) Note the trolley tracks, bridges providing access to the bathhouses from the street, telegraph poles, and lack of vegetation. Bathhouses are the Ozark, Palace, Independent and Hale.



Figure 2-37: Big Iron Bathhouse, ca. 1879 (source: HOSP 03147) Note the high retaining wall around the base of the building and the bridge providing access over the creek.



Figure 2-38: Rector's Bathhouse and Arsenic Spring, ca. 1879 (source: HOSP 4078) Note the high retaining wall to stabilize the creek bank and the wooden structure along the top of the wall. The structure appears to serve the dual purpose of a drying rack and railing. The boardwalk in the foreground is a bridge over the creek. Rector's Bathhouse is on the right and the pavilion to the left is over the Arsenic Spring.



Figure 2-39: Independent and Palace bathhouses, 1880 (source: HOSP 15080) Note the bridge over the creek and the retaining wall at the Independent Bathhouse foundation. It is unclear if retaining walls were present on the western side of the creek as well.

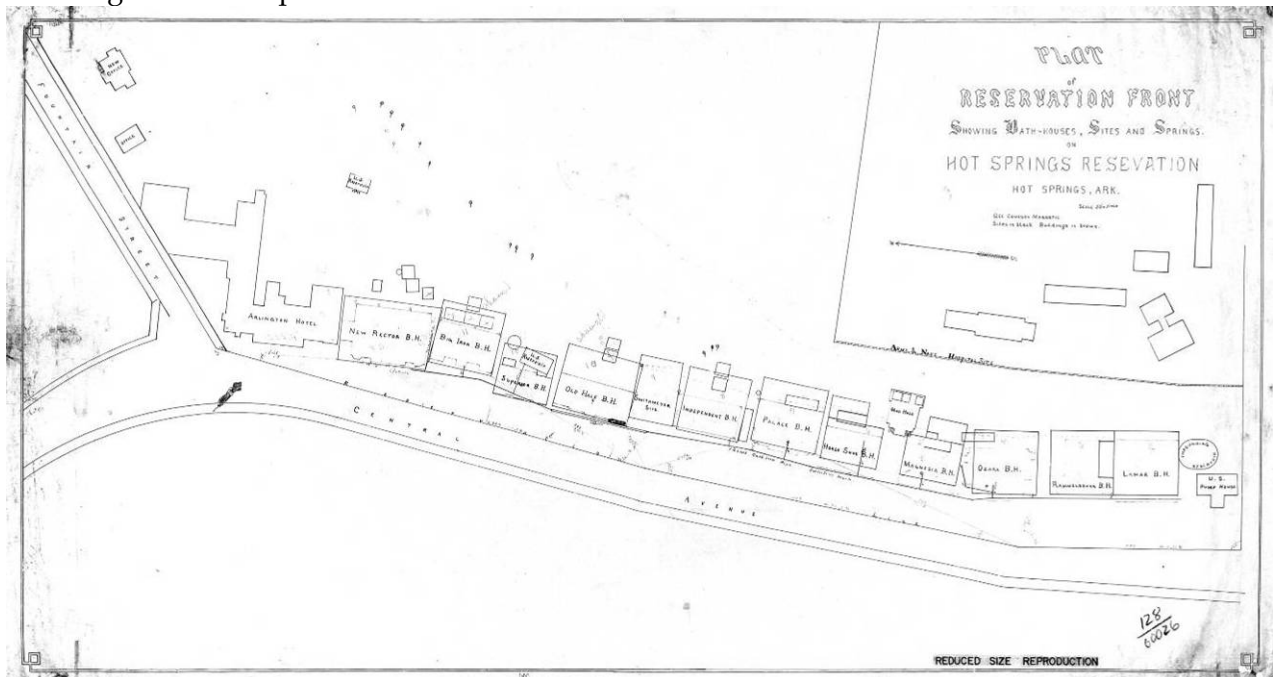


Figure 2-40: Plat of Bathhouse Row, 1892 (source: DSC 128-60026) Note that the plat does not include any landscape elements – the creek, bridges to the bathhouses, and eastern street edge are not shown (the street edge may be, but it is not clear. The line connecting the bathhouses appears to be a water pipe, but photographs are not clear regarding this. The 1878 plan of the Arlington hotel indicates a “line of permanent reserve” that looks much like the one shown here and does not necessarily correspond to the edge of the road.

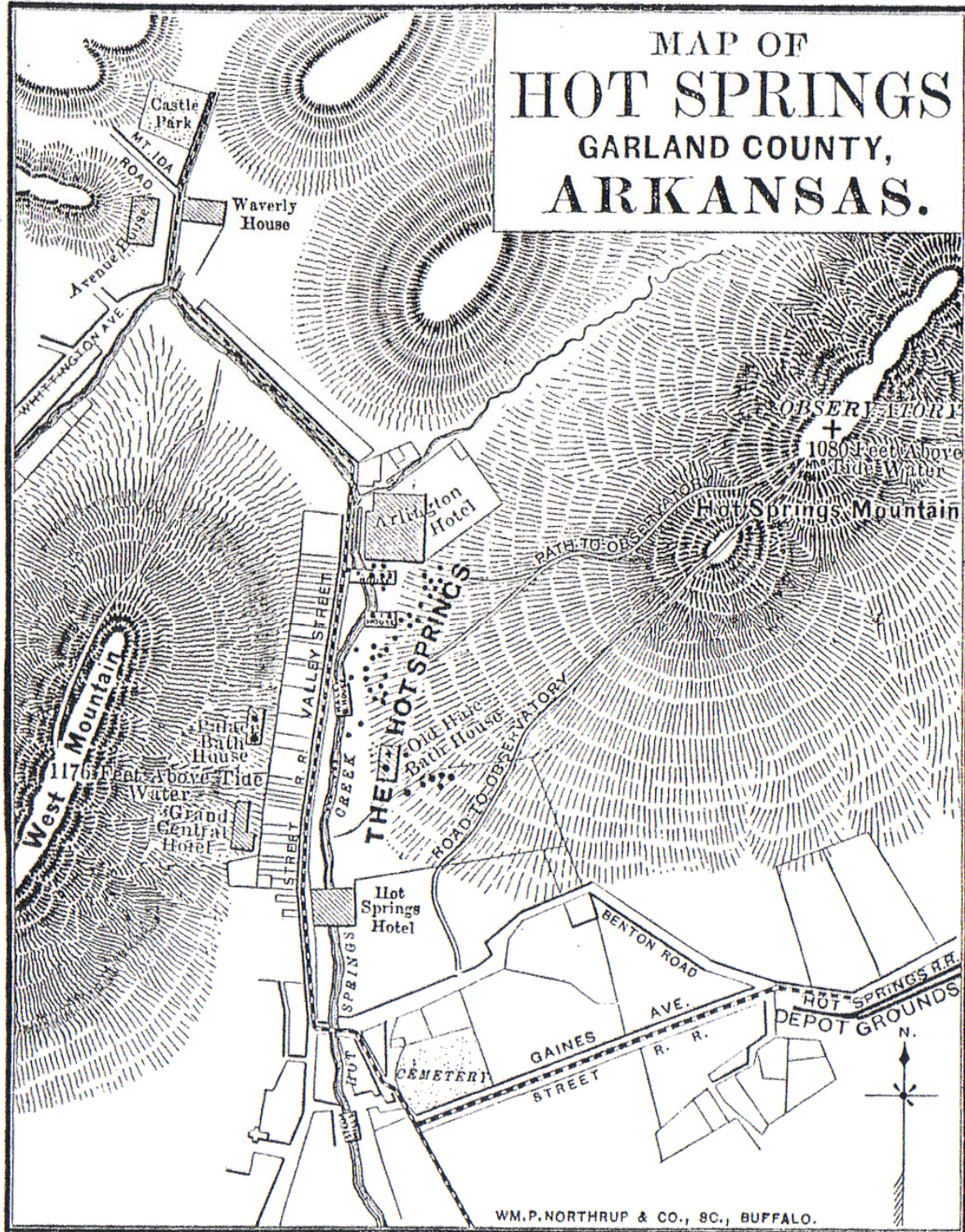
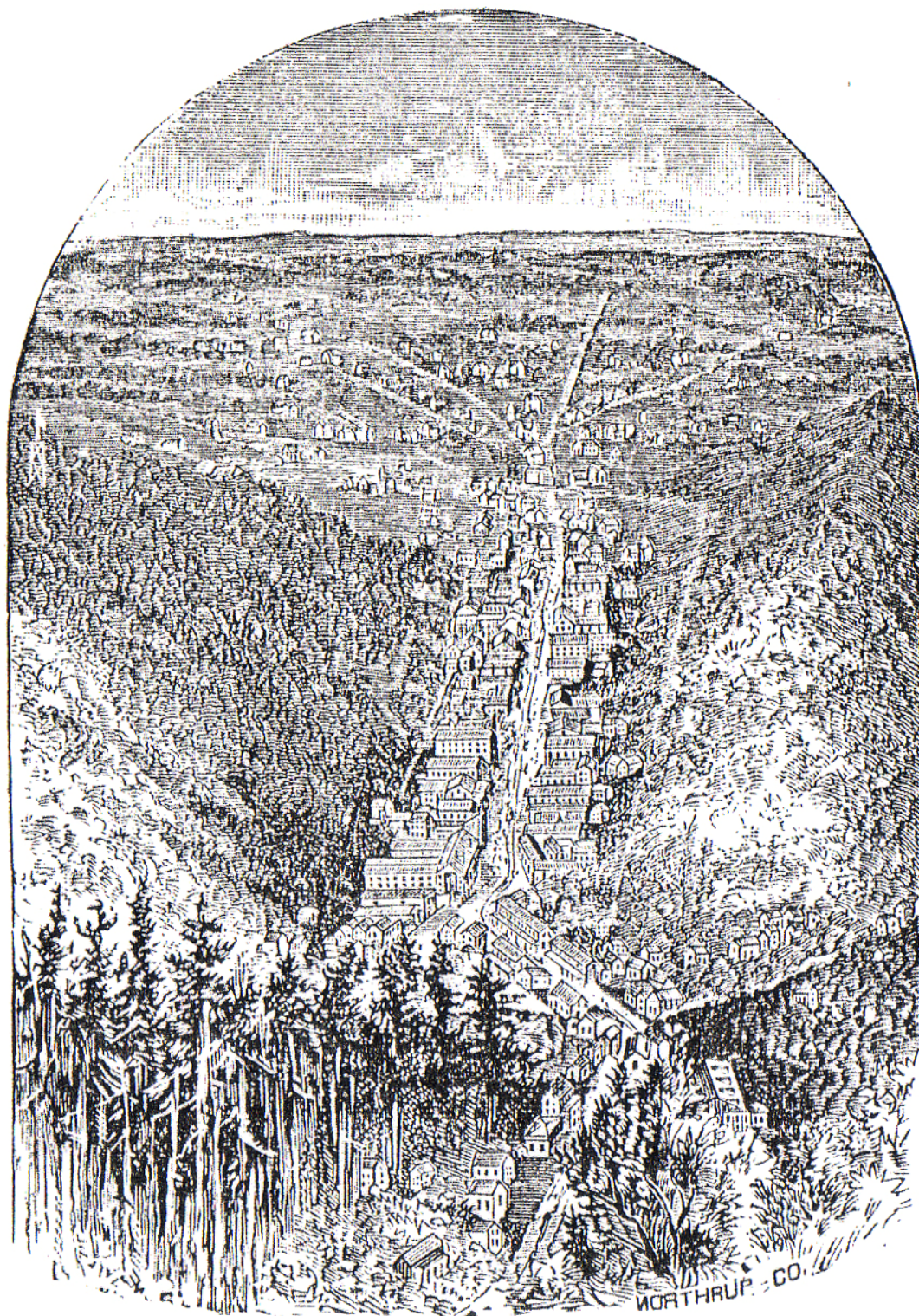


Figure 2-41: Plan of Hot Springs with railroad route, 1880 (source: *"The Hot Springs of the Arkansas, America's Baden-Baden,"* 1880, St. Louis, Iron Mountain & Southern Railway Company, 4)



HOT SPRINGS, ARKANSAS.

Figure 2-42: Artist's Rendering of Birds-eye View of Hot Springs, 1880 (source: *"The Hot Springs of the Arkansas, America's Baden-Baden,"* 1880, St. Louis, Iron Mountain & Southern Railway Company, 8)



Figure 2-43: Bathhouse Row area, ca. 1875-1878 (source: HOSP 15075, J. F. Kennedy stereograph) Note the Arlington Hotel and wooden bathhouses on the left. The Grand Central Hotel is in the lower right corner of the view. There are fences on the right above the Grand Central Hotel. The slopes of both West (right) and Hot Springs Mountains (left) are densely wooded. Compare to HOSP 15076.



Figure 2-44: Bathhouse Row area, ca. early 1880s. (source: HOSP 15076, J. F. Kennedy stereograph) Compare to HOSP 15075. The Arlington Hotel and Victorian bathhouses are on the left. Note the boardwalk on the right. In this area the fences are no longer present, and two small buildings have been constructed. Central Avenue appears to be wider – due to the bridges over the creek, and the development of the majority of the bathhouses on the eastern side of the creek.

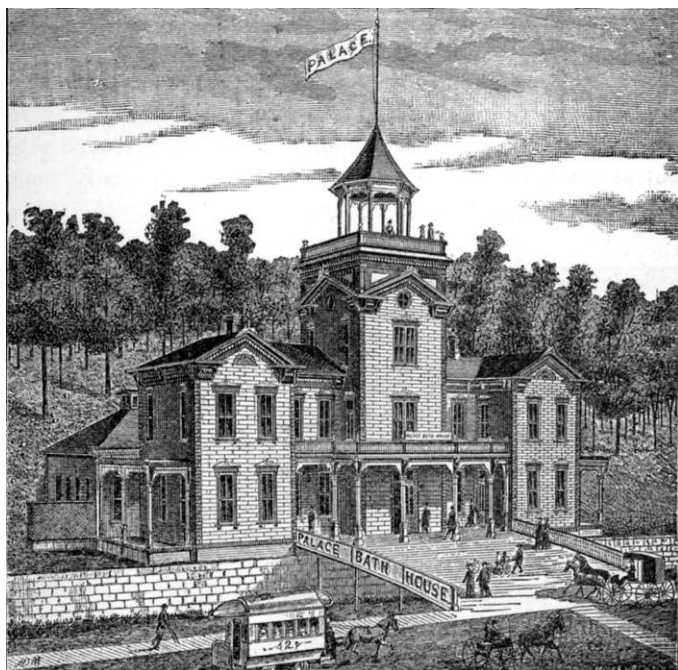


Figure 2-45: Palace Bathhouse before the Creek Arch, 1880-1883 (source: Hot Springs National Park)



Figure 2-46: Palace Bathhouse after the Creek Arch, 1894-1895 (source: Hot Springs National Park)

In 1879 Superintendent Kelley authorized the construction of a road connecting Reserve Street with the observation tower and Fountain Street. The construction of the three and one-half mile Hot Springs/North Mountain Drive was completed in 1884 (see Figure 2- 34 for the alignment of the road).⁶²

In 1880-81 thermal water reservoirs were constructed in strategic locations to store water for distribution to the bathhouses. Many of the sluices that previously created a confusing web between the base of Hot Springs Mountain and the bathhouses were removed and underground pipes were installed to transport hot spring water to the buildings.

An 1882 report by Alonzo Bell, assistant Secretary of the Interior, provides an overview of the development and conditions at Hot Springs. Bell indicated that the work of the Hot Springs Commission was successful, and that the community had improved with the resolution of land ownership issues. He pointed out that property values had risen significantly, “fine” houses had been built, outside capital had been invested and a “*better society is found in the town.*” He noted that the Department of the Interior had made plans to improve the creek, by “*properly walling and covering it.*” Bell also envisioned a time when the mountains would be utilized as parks, with paths and outlooks arranged for visitors to enjoy the scenery of the surrounding area.⁶³

Significantly, Bell indicates that the government has an obligation to “*afford to the greatest number the greatest possible good, and by wise regulations prevent the possibility of extortion. The Springs were to be the property of the States, the common heritage of all the people, free from local management, prejudice, or sectional control. They were to be purely national in their character, within the reach of all, and the law wisely provided that free bathhouses should be maintained for the invalid poor of the United States.*”⁶⁴ He went on to emphasize that the government had an obligation to “*...fully develop the possibilities of the Springs, by exhaustive scientific investigation and by carefully attending to the sanitary requirements of the reservation and its surroundings.*”⁶⁵ Bell essentially reminded the government of its own legislated promises to invest in the development of a national spa at Hot Springs and urged that they be fulfilled.

The remote location of Hot Springs had always been one of the obstacles to creating a national resort. The dedication of government and private capital to development at Hot Springs attracted the attention of the railroad industry. In August 1880 the passenger department of the St. Louis, Iron Mountain & Southern Railway Company published an article about Hot Springs entitled “The Hot Springs of Arkansas, America’s Baden-Baden.” The article announces that the waters of Hot Springs contain magical powers and implies they are imbued with divine grace: “*It is health, the spirit and essence of all real happiness, who has proclaimed her sovereignty and pronounced her magic spell over the blessed waters, and, like Siloam’s Brook, they breathe the eloquence of God’s special providence.*”⁶⁶

⁶² Hamblen, *Hot Springs National Park, Superintendent’s Annual Report, 1884*, 4.

⁶³ Bell, *Report on the Hot Springs of Arkansas*, 26.

⁶⁴ *Ibid.*, 26-27.

⁶⁵ *Ibid.*, 27.

⁶⁶ St. Louis, Iron Mountain & Southern Railway Company, “The Hot Springs of Arkansas, America’s Baden-Baden,” 4.

The text explains that the Iron Mountain Road forms a junction at Malvern with the Hot Springs Railroad which it exclaims to be “...one of the best-equipped narrow-gauge roads ever built in any country,” and assigns ample credit to the arrival of a railroad line at Hot Springs for recent improvements. The article notes that numerous visitors are also drawn to the metropolitan character of the city and the role of the Hot Springs Commission is acknowledged for ridding the town of all “legal sackcloth.”

After the completion of the railroad, the city assumed a metropolitan character and under the impulse of a rush of visitors improvements became noticeable the entire length of the valley.

In the fall of 1879 a commission appointed by the Government made its report, by which the east side of the valley, or Hot Springs Mountain (from which all the heated waters flow), is to remain as reservation of the Government, and the water to be free for all time. In all other parts of the valley the actual settlers, or preemptors, were allowed to become purchasers of the property at certain assessed values fixed by the Commission; thus Hot Springs has divested herself of all legal sackcloth and is now in the prime and vigor of a rapid and permanent improvement.⁶⁷

The first Hot Springs Mountain Observatory, a wooden structure sometimes referred to as the Woolman Tower, was present during this period (see figure 2-41). The tower and a path and road leading to it, are illustrated on the map included with the article, and mentioned as providing opportunities to enjoy the outdoor environment:

The observatory on Hot Springs Mountain (which is reached by an excellent serpentine carriage-way) is a point of great interest, and is visited by many every day; from it can be seen through the telescope and field-glass, which are provided, an expanse of country remarkable to behold – a succession of bold mountains and fertile valleys, lovely forests and the beautiful Ouachita River, eight miles distant. A walk in the pine woods is always delightful, and a thousand curiosities may be gathered from any of the mountains in the vicinity. ... One of the chief diversions of visitors is horse-back riding, an amusement most exhilarating and beneficial over the lovely roads shaded by the forest on both sides...⁶⁸

The observatory on Hot Springs Mountain provided views of the surrounding area, and trails through the gorge were used for exercise and pleasure.

⁶⁷ St. Louis, Iron Mountain & Southern Railway Company, “The Hot Springs of Arkansas, America’s Baden-Baden,” 9.

⁶⁸ Ibid.,” 9.



Figure 2-47: The first Government Free Bathhouse at the Mud Hole, ca. mid-1880s (source: HOSP 8677, H.A. Balch stereograph) Note the small but sturdy, brightly painted building, the fences (one surrounds the pool), and the bare landscape in the middle of the image. The water flume/pipe in the foreground is most likely transporting hot spring water to another bathhouse. At the base of the rocky slope in the foreground is Hot Springs Creek and a sign for Magnesia Springs.

Bathhouse Row

During this period the landscape of Bathhouse Row began to materialize. Although Central Avenue was still a rough, dirt route, the placement of buildings after the 1878 fire was more organized, and the corridor of Bathhouse Row became more defined. Landscape features included fences, bridges spanning the creek to the bathhouses, and boardwalks (on the western side of the street). No ornamental vegetation is apparent within the corridor during this period. Buildings were changed dramatically as a result of the 1878 fire—major construction of buildings is enumerated:

1. Maurice-Palace Bathhouse built in ca. 1878-9 on west side of Hot Springs Creek.
2. 1880, Independent Bathhouse built (Maurice)
3. 1880, Ozark Bathhouse built
4. 1880, Rammelsberg Bathhouse built
5. 1880, Palace Bathhouse built
6. 1884, Creek arch over Hot Springs Creek completed (Whittington to Malvern Avenue)

Formal Entrance

The formal Entrance/Stevens Balustrade was not yet developed during this period.

Arlington Lawn

During this period the site of the Arlington Lawn was occupied by the Arlington Hotel.

Mountain Sidegrounds and Grand Promenade

At the beginning of this period, the area to the east of the bathhouses included the rough structures and activities of Ral City. This was moved away from the springs to the south side of Hot Springs Mountain and renamed Kelletown. The above-ground sluices were removed during this period when underground pipes were installed, changing the appearance of the landscape. After these were removed part of the area was used for the bathhouse supply road. By the end of the period the Mountain Sidegrounds area included open woods, an area reserved for the future development of a bathhouse, and an area referred to as a natural park in the woods. Extensive blasting at the base of Hot Springs Mountain occurred to accommodate the foundations of the 1880s bathhouses. Some of the upper springs, including Ral Spring, dried up following the disturbance caused by the construction.

Hot Springs, North, and West Mountains

At Hot Springs Mountain, a carriage road was constructed from Reserve Street to the Observatory in 1879. The 1882 Cutter Guide Map indicates that the road to the Observatory included a loop at the top of the hill. The tower was a popular tourist attraction until it burned down between 1885 and 1895. Also a road to Royal Gorge was present (this appears to be modern-day Fountain Street).⁶⁹ West Mountain contained a minor road and trails.

Happy Hollow

The area included small, simply-constructed dwellings and businesses in close proximity to each other.

Whittington Park

This site was not developed yet during this period.

⁶⁹ Shugart, *Summary of the Hot Springs Observatory*.

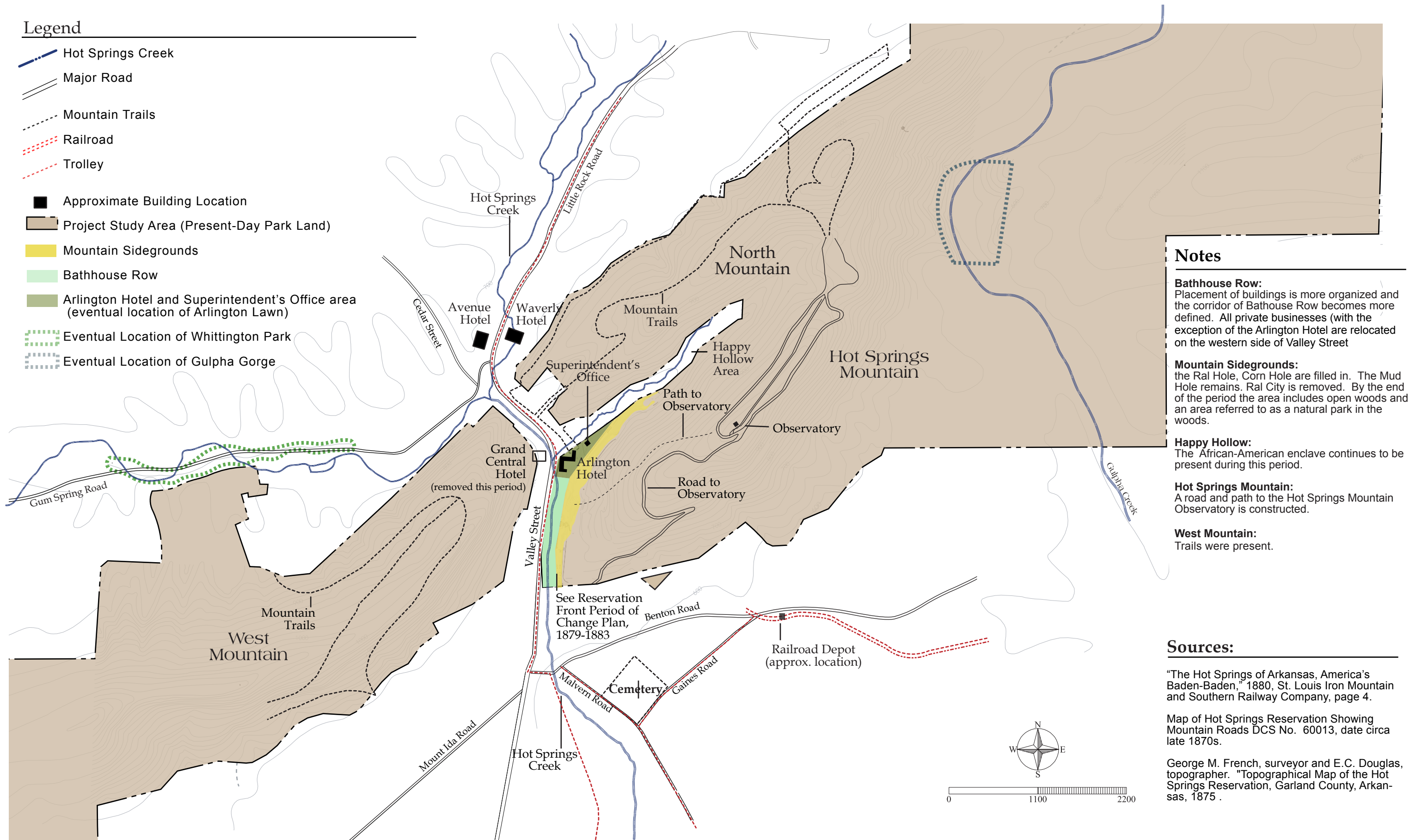
The next two pages include

Figure 2-48: Study Area, Period of Change Plan 1879-1883 and

Figure 2-49: Reservation Front, Period of Change Plan, 1879-1883

Legend

- Hot Springs Creek
- Major Road
- Mountain Trails
- Railroad
- Trolley
- Approximate Building Location
- Project Study Area (Present-Day Park Land)
- Mountain Sidegrounds
- Bathhouse Row
- Arlington Hotel and Superintendent's Office area (eventual location of Arlington Lawn)
- Eventual Location of Whittington Park
- Eventual Location of Gulpha Gorge



Notes

Bathhouse Row:
Placement of buildings is more organized and the corridor of Bathhouse Row becomes more defined. All private businesses (with the exception of the Arlington Hotel) are relocated on the western side of Valley Street

Mountain Sidegrounds:
the Ral Hole, Corn Hole are filled in. The Mud Hole remains. Ral City is removed. By the end of the period the area includes open woods and an area referred to as a natural park in the woods.

Happy Hollow:
The African-American enclave continues to be present during this period.

Hot Springs Mountain:
A road and path to the Hot Springs Mountain Observatory is constructed.

West Mountain:
Trails were present.

Sources:

"The Hot Springs of Arkansas, America's Baden-Baden," 1880, St. Louis Iron Mountain and Southern Railway Company, page 4.

Map of Hot Springs Reservation Showing Mountain Roads DCS No. 60013, date circa late 1870s.

George M. French, surveyor and E.C. Douglas, topographer. "Topographical Map of the Hot Springs Reservation, Garland County, Arkansas, 1875 .

Buildings

- A. Superintendent's Office (Built ca. 1878)
- B. Arlington Hotel (Built 1875)
- C. Old Rector Bathhouse
- D. Big Iron Bathhouse (1877)
- F. Old Hale Bathhouse (1880)
- G. Smithmeyer Site
- H. Independent Bathhouse (Built 1880)
- K. Palace Bathhouse (Built 1880)
- O. Ozark Bathhouse (Built 1880)
- P. Rammelsberg Bathhouse (Built 1880)

Landscape Features

- F1. Ral Hole (removed in this period)
- F2. Lamar Spring
- F3. Corn Hole (probably dries up by 1882)
- F4. Mud Hole
- F5. Arsenic Spring
- F6. Alum Spring

Legend

- Hot Springs Creek
- Spring Locations
- Reservation Buildings (present during this period)
- Buildings not on Reservation
- Bridge
- Trolley
- Cooling Tank
- Proposed Roads
- Tufa Outcroppings

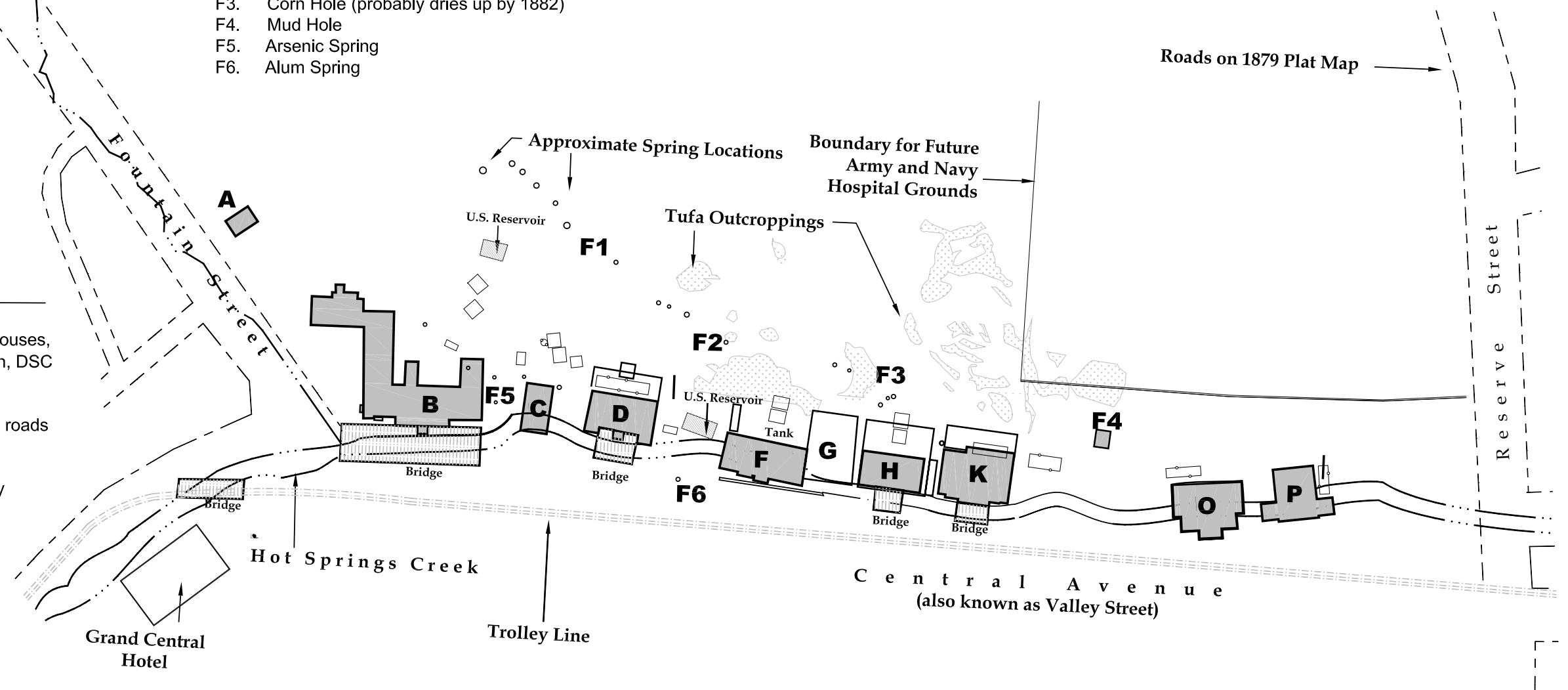
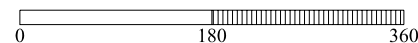
Map Notes and Sources

1880 Plat of Reservation Front Showing Bathhouses, Sites, and Springs, on Hot Springs Reservation, DSC 128-60026

1879 Map of Hot Springs Reservation showing roads and Hot Springs Creek, DSC 128-60691

1880 St. Louis Iron Mountain Southern Railway Brochure

1878 Plan Arlington Hotel, DSC 128-60584



The Creek Goes Underground (1884-1891)

Study Area – Historical Overview

Advertising brochures, guides and albums printed during this period describe – complete with artists’ illustrations--a luxurious spa city. Many of the artists and writers took liberties to exaggerate the level of luxury and finesse of the surroundings (see figures 2-52 through 2-58).⁷⁰ Although greatly improved, the town was still rugged at the beginning of this period. Between 1884 and 1891 the landscape of Bathhouse Row was changed dramatically by the installation of the creek arch (see figure 2-51),⁷¹ construction of sidewalks, and implementation of lawns, street trees, and ornamental vegetation.

By 1888, the leased sites on Bathhouse Row all had Victorian-style bathhouses. By 1891, a government free bathhouse had been built in the center of the Row, in-ground reservoirs had been constructed to help distribute thermal water, and the Eastman and Park hotels, elaborate facilities complete with landscaping, had gone up just south of Bathhouse Row. Despite the improvements, dangerous conditions continued to exist. In 1890 business was booming while the old buildings were crumbling. The Secretary of the Interior sent a special investigator to Hot Springs to evaluate the condition of the bathhouses. Thomas H. Musick noted that two of the bathhouses, the Big Iron and the Old Hale, were no longer “fit for use,” and several others needed remodeling. He indicated that all new building should be in brick and iron, stone and concrete.⁷²

Bathhouse Row: Creek Arch Installation and Major Landscape Change

Despite the more controlled development of buildings, the landscape of Bathhouse Row continued to be dominated by the ragged and abused creek. A turning point came on 7 August 1882 with the approval of a federal appropriation for covering Hot Springs Creek with a masonry arch.⁷³ Work began in late 1883 to enclose the creek from Whittington to Malvern Avenue in an underground brick arch for flood and sewage control. This was upgraded in 1886 when a sewer pipe was installed in the creek arch. The area above the “creek arch” was graded and landscaped creating space for a linear tree-lined park – providing a basis for the first formal landscape to appear in the valley. In 1885 stone walls and steps were built around the Alum Spring for easier access. In 1888 the first Superior, Horse Shoe, Lamar, and Magnesia bathhouses opened and the Army and Navy General Hospital was constructed. By the end of 1887, the landscape took on a more polished appearance with lawns, walkways and formally

⁷⁰ Cutter, *The Cutter’s Guide to the Hot Springs of Arkansas’s* (1887 and 1890), and the Hirshfield Souvenir Albums 1884 and 1891.

⁷¹ The creek arch was completed in 1884, although one section was torn out and replaced in 1886.

⁷² Musick, *Investigation of Hot Springs Affairs*, Report to the Secretary of the Interior, 1890; Paige and Harrison, 79.

⁷³ From testimony taken before the Committee on Expenditures in the Interior Department relative to certain things connected with the Government property at Hot Springs, Arkansas, see House Executive Document No. 89, Forty-eighth Congress, first session, 17 June 1884.

landscaped areas. In 1888 approximately three hundred deciduous trees, lawn, and clover were planted in the "bath-house park."⁷⁴ Sidewalks to the bathhouses, some slightly inclined, were added between 1885 and 1889. The Government Free Bathhouse was built slightly behind and above the Horse Shoe and Magnesia bathhouses in 1890-1891. It opened to the public in February 1891. Also in 1891 the Government Pumphouse and impounding reservoir were constructed at the corner of Central Avenue and Reserve Street. The Government Pumphouse however was never to be used for its intended purpose. A March 1891 law prohibited the use of pumps if gravity flow was sufficient to move water.

Formal Entrance / Stevens Balustrade

The Formal Entrance/Stevens Balustrade was not yet developed during this period. Although no photographs have been found that illustrate the eventual site of the component landscape, it was flanked by the Palace Bathhouse on the south and the Independent Bathhouse on the north, during this period (see Figure 2-59).

Arlington Lawn

The Arlington Lawn was not yet developed during this period. The eventual site of the component landscape was the home of the Arlington Hotel and the new Rector Bathhouse during this period.

Grand Promenade / Mountain Sidegrounds

During this period the area that would eventually become the Grand Promenade and Mountain Sidegrounds were mainly utilized by a pleasure drive and a supply road for the bathhouses. In addition, the Government Free Bathhouse, Ral Hole, Corn Hole, and Lamar Spring were present. The Government Free Bathhouse was constructed over the Mud Hole. A reservoir and cooling tanks were located between the Arlington Hotel and the pleasure road. Cooling tanks were located behind or beside all of the bathhouses. The southern portion of the Mountain Sidegrounds was wooded, and dominated visually by the Army and Navy Hospital complex. The middle and northern portions contained wooded areas and areas of large tufa outcrops, as well as the capped springs.

Hot Springs, North and West Mountains

Hot Springs Mountain Road was paved in 1884, making the route more appealing as a pleasure drive. The three and one-half mile road included entrances at Fountain Street, and at the Army and Navy Hospital Complex (two entrances). In addition, the pleasure drive included a route that extended along the eastern side of the Bathhouse Row buildings with a loop turn-around at the southern end. Sometime between 1885 and 1895 the Hot Springs Mountain Observatory tower was struck by lightning and burned to the ground.⁷⁵ Roads were constructed on West Mountain.

⁷⁴ See Superintendent Charles Field's *Hot Springs Reservation Annual Report to the Secretary of the Interior*, 1889. The saplings on the bathhouse lawns were also photographed by West Virginia Senator Kenna.

⁷⁵ Shugart, *Summary of Hot Springs Mountain Observatory*. Hot Springs National Park archives.

Happy Hollow

The Happy Hollow Spring was a popular attraction. In the 1880s photographer Norman MacLeod opened a studio in Happy Hollow. His business eventually grew into an amusement park that included pony rides, a donkey trolley, theater, and small zoo.

Whittington Park and Gulpha Gorge

Neither of these sites was developed yet during this period.



Figure 2-50: Creek Arch under construction, ca. 1883 (source: HOSP 15094, C. W. Calohan photograph) The building in the upper right is the Avenue Hotel. The Whittington portion of the creek arch meets the Central Avenue portion at the Park-Central intersection.

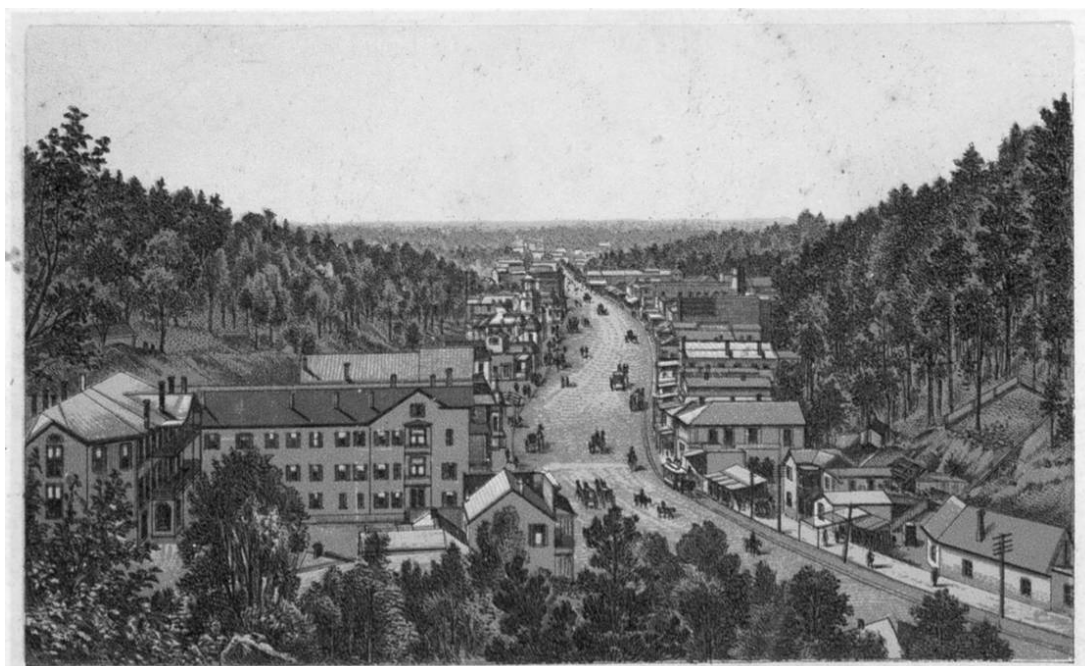


Figure 2-51: Artist's Rendering of Central Avenue, Looking South, 1884 (source: *Souvenir of Hot Springs, Arkansas, 1884*, Hirshfield, page 1)



Figure 2-52: Artist's Rendering of Upper Portion of Central Avenue, Looking North, 1884 (source: *Souvenir of Hot Springs, Arkansas, 1884*, Hirshfield, page 2)

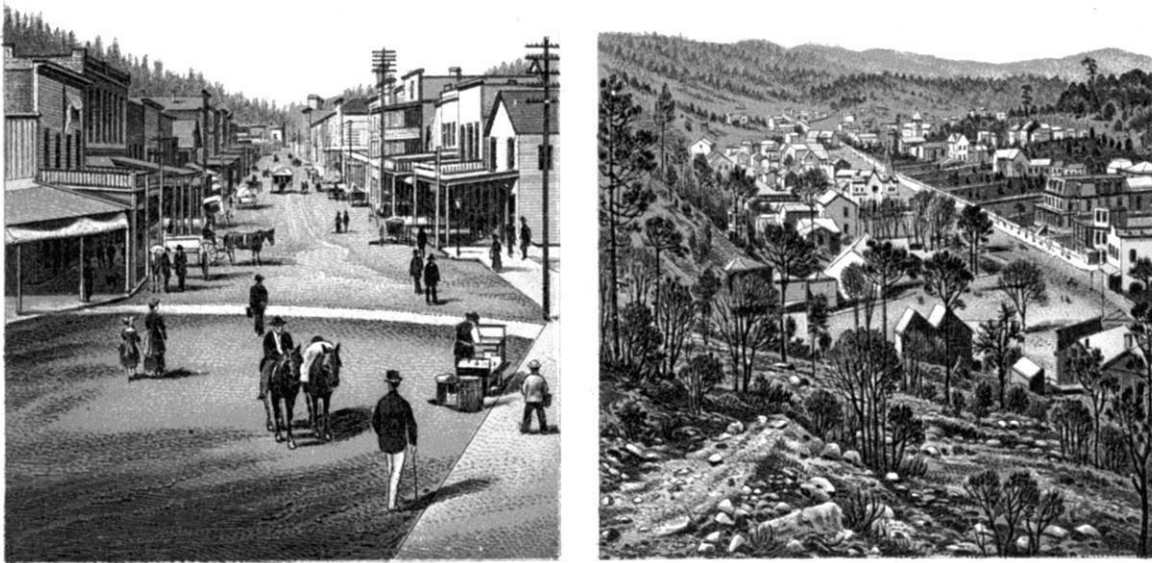


Figure 2-53: Artist's Rendering of Lower Portion of Central Avenue (left) and Whittington Avenue (right), 1884 (source: *Souvenir of Hot Springs Arkansas*, 1884, Hirshfield, page 3)

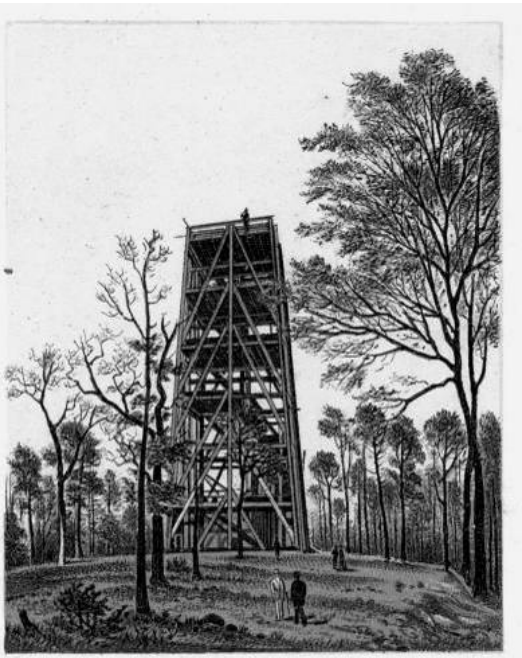


Figure 2-54: Artist's Rendering of the Observatory on Hot Springs Mountain, 1884 (source: *Souvenir of Hot Springs Arkansas*, 1884, Hirshfield, page 13)

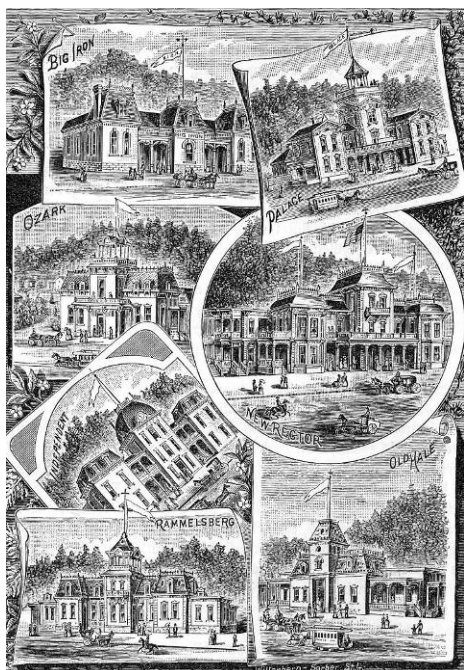


Figure 2-55: Collage of Artist's Renderings of Bathhouses (source: Cutter's Guide, 1887, page 32)

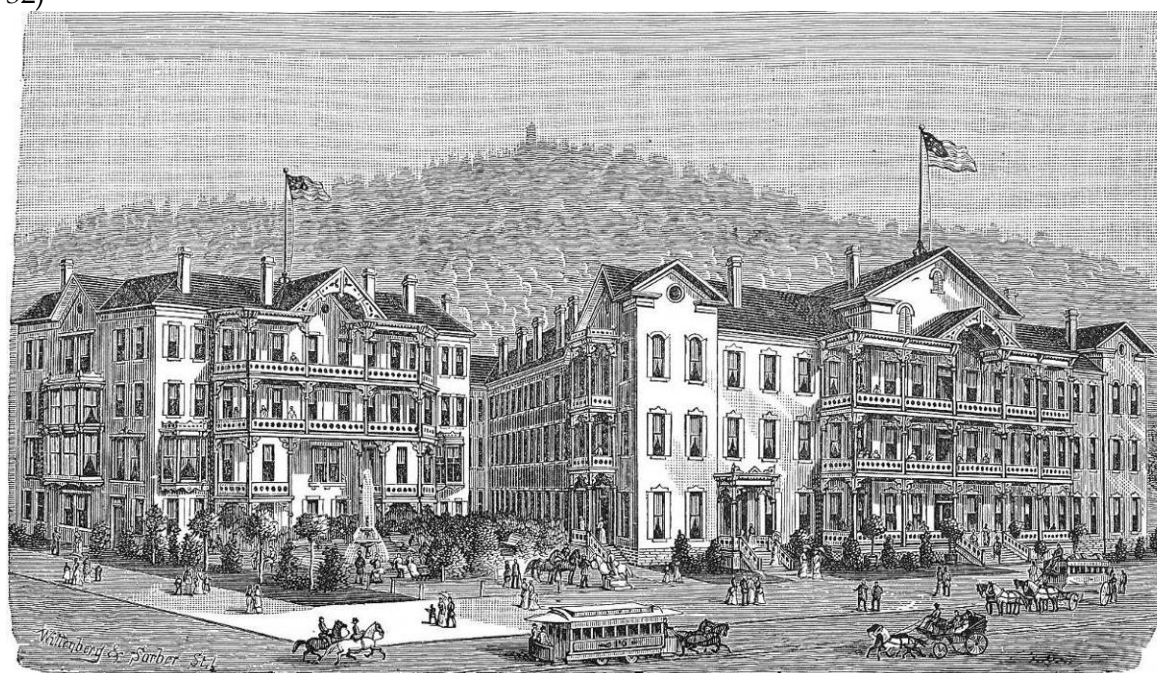


Figure 2-56: Artist's Rendering of Central Avenue at the Arlington Hotel, 1887 (source: Cutter's Guide, 1887, page 42)



Figure 2-57: Artist's Rendering of the Army and Navy Hospital and Grounds, 1887 (source: Cutter's Guide, 1887, page 70)

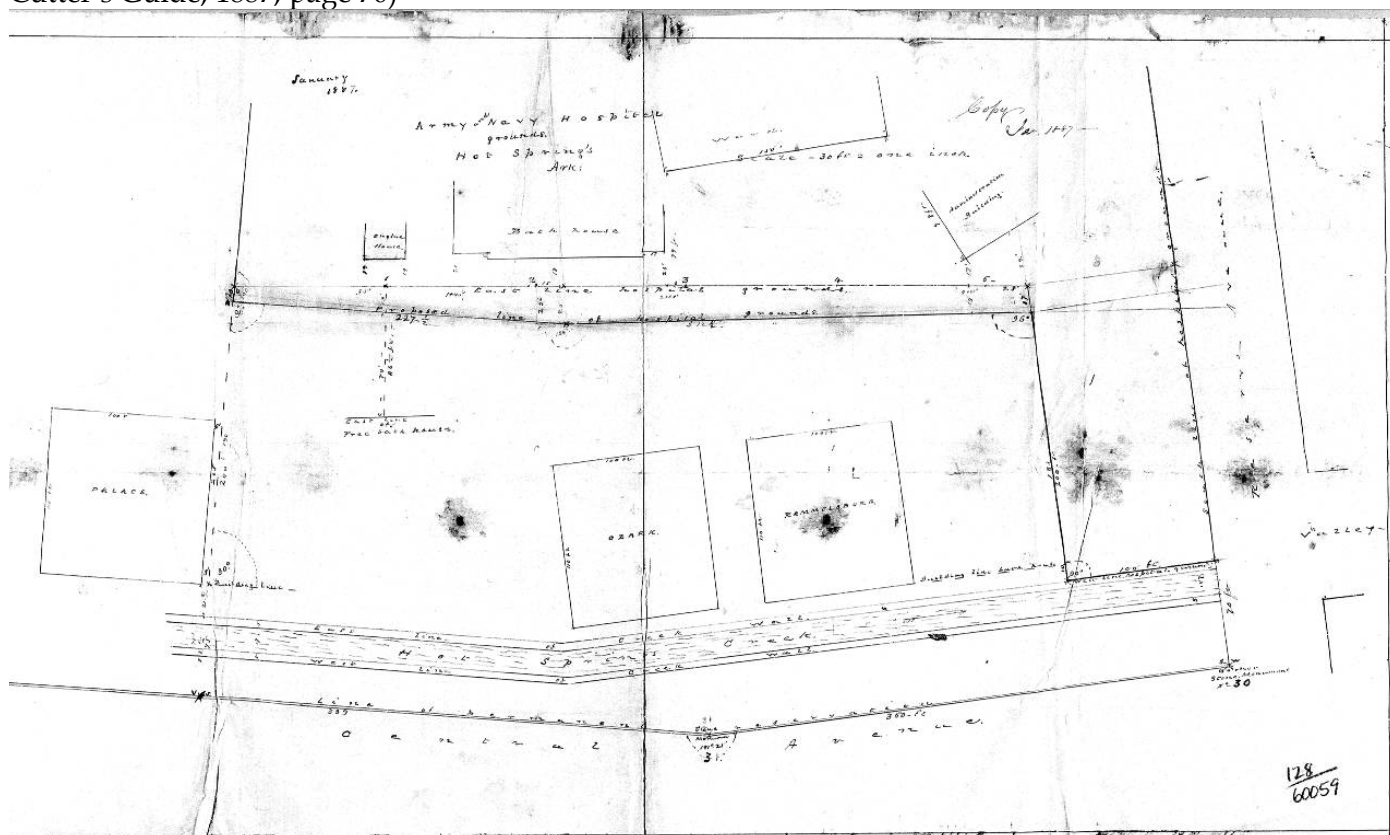


Figure 2-58: 1887 Plat of Central Avenue at Reserve Street (source: DSC 128-60059)

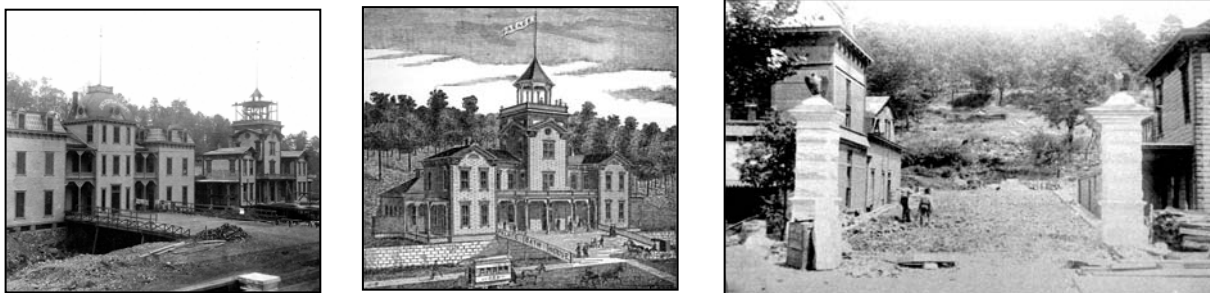


Figure 2-59: Independent Bathhouse (left) and Palace Bathhouse (center) flanking the area that would eventually become the Formal Entrance (right) (source: Hot Springs National Park)



Figure 2-60: Maurice Bathhouse, ca. 1892 (source: Hot Springs National Park)



Figure 2-61: Third Hale Bathhouse following construction of the creek arch, ca. 1884 (source: HOSP 15081) Note: The first floor and entry to the bathhouse are above the street level, as the building was present before the creek arch was constructed.

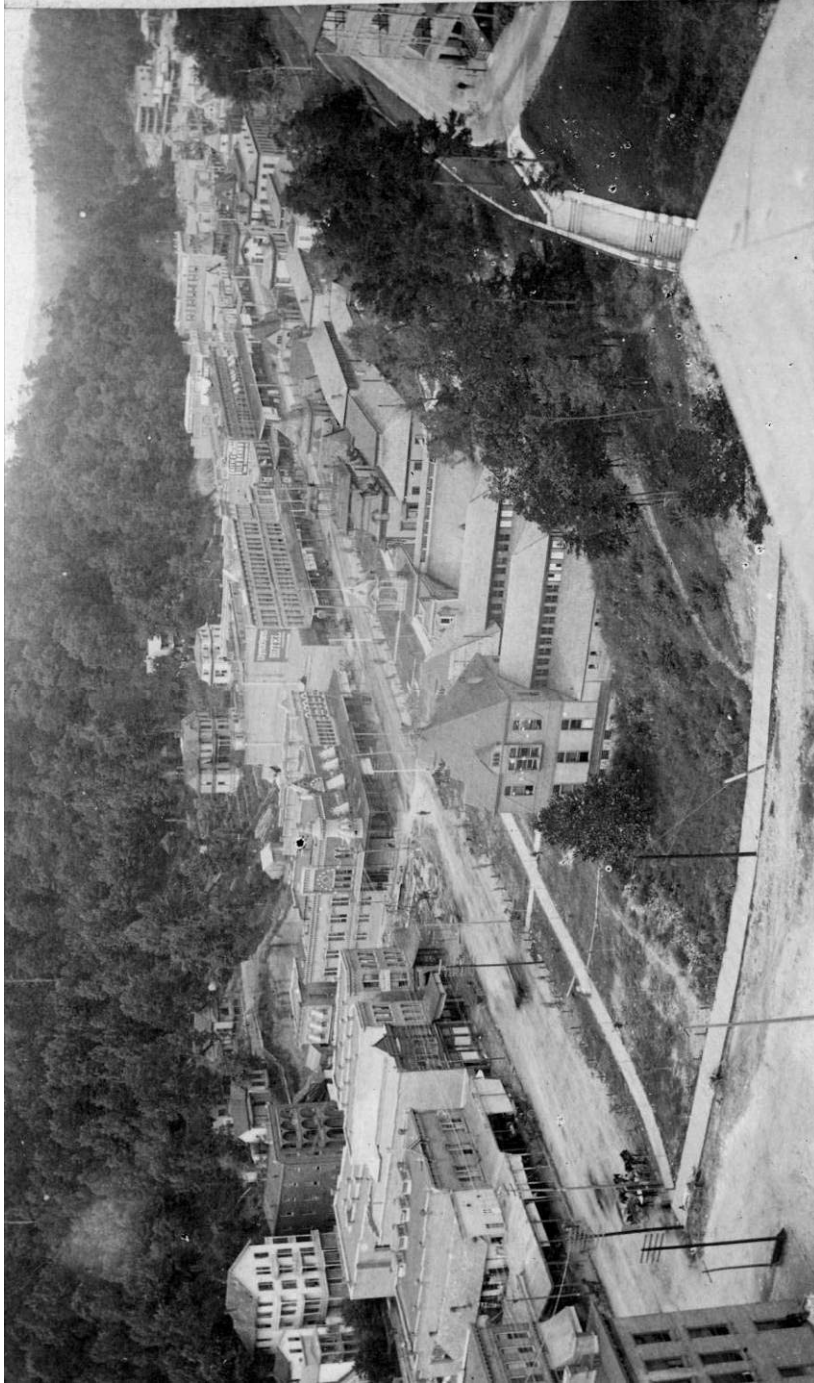


Figure 2-62: Downtown Hot Springs, summer 1890 (source: Hot Springs National Park digital files) Note that landscape improvements in place include lawns, sidewalks, and street trees. The Army/Navy Hospital has been built, along with the extant retaining wall and steps from Reserve Street to the hospital site. Also, there is a path leading from the Reserve Street sidewalk (boardwalk) into the wooded area between the Army/Navy site and the backs of the bathhouses. Central Avenue is more uniform—in alignment, width and surface—and the buildings on the western side of the street create a linear frontage that defines the streetscape.



Figure 2-63: First Lamar Bathhouse, 1889 (source: the Kenna Collection, courtesy of the West Virginia Cultural Center, not to be reproduced without their permission)



Figure 2-64: First Ozark Bathhouse, 1889 (source: the Kenna Collection, courtesy of the West Virginia Cultural Center, not to be reproduced without their permission)



Figure 2-65: First Superior Bathhouse, 1889 (source: the Kenna Collection, courtesy of the West Virginia Cultural Center, not to be reproduced without their permission)



Figure 2-66: Horseshoe Bathhouse, 1889 (source: the Kenna Collection, courtesy of the West Virginia Cultural Center, not to be reproduced without their permission)

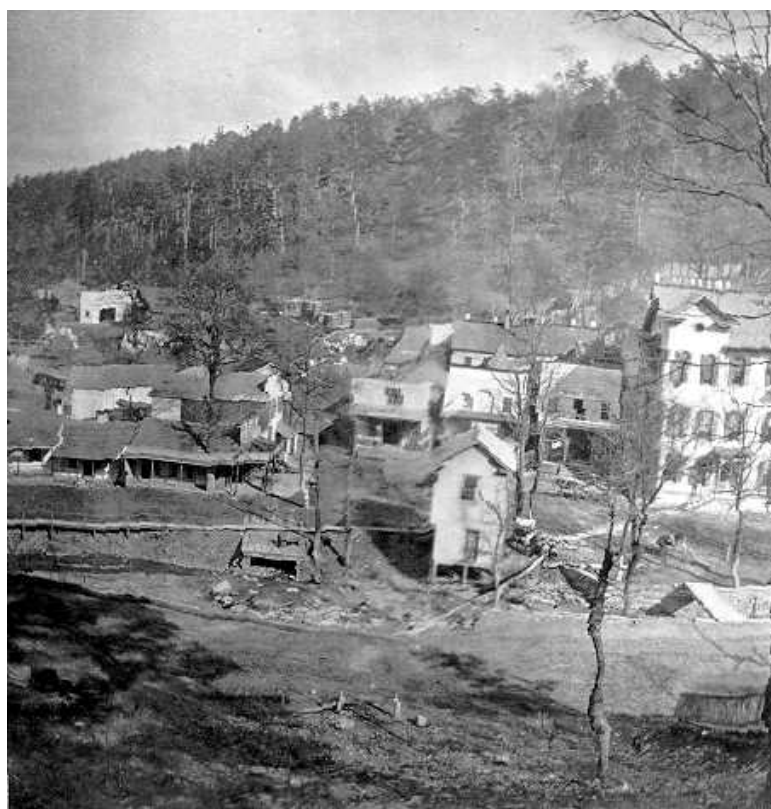


Figure 2-67: View of Happy Hollow (source: HOSP 8678, Stereograph, image by H. A. Balch)
Note rows of storefronts—some have signs. The corner of the Arlington Hotel is at the right of the image. Note the reinforced banks of the creek at the lower right, and the foot bridge crossing the creek.

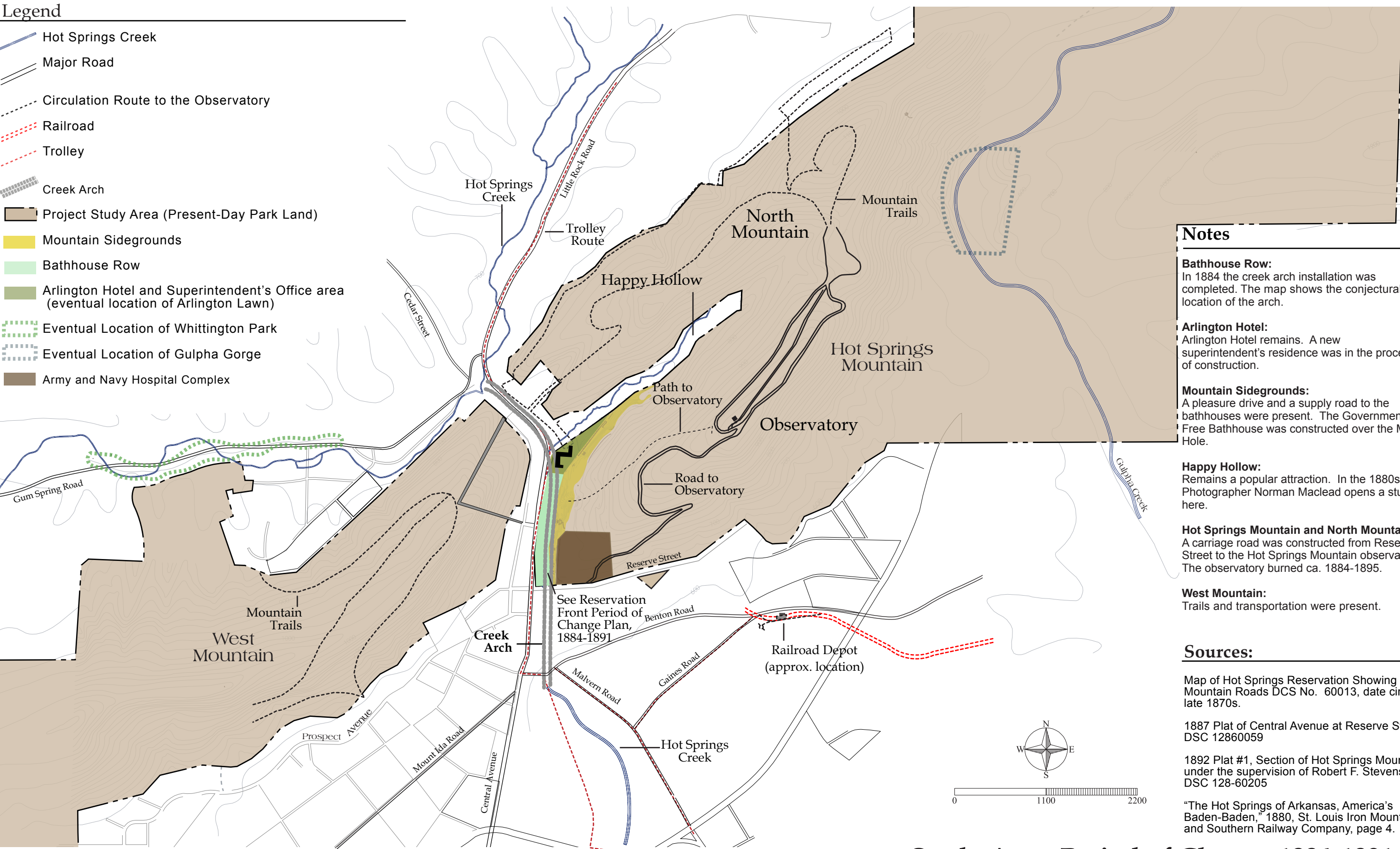
The next two pages include:

Figure 2-68: Study Area Context, Period of Change 1884-1891 and

Figure 2-69: Reservation Front, Period of Change Plan, 1884-1891

Legend

- Hot Springs Creek
- Major Road
- Circulation Route to the Observatory
- Railroad
- Trolley
- Creek Arch
- Project Study Area (Present-Day Park Land)
- Mountain Sidegrounds
- Bathhouse Row
- Arlington Hotel and Superintendent's Office area (eventual location of Arlington Lawn)
- Eventual Location of Whittington Park
- Eventual Location of Gulpha Gorge
- Army and Navy Hospital Complex



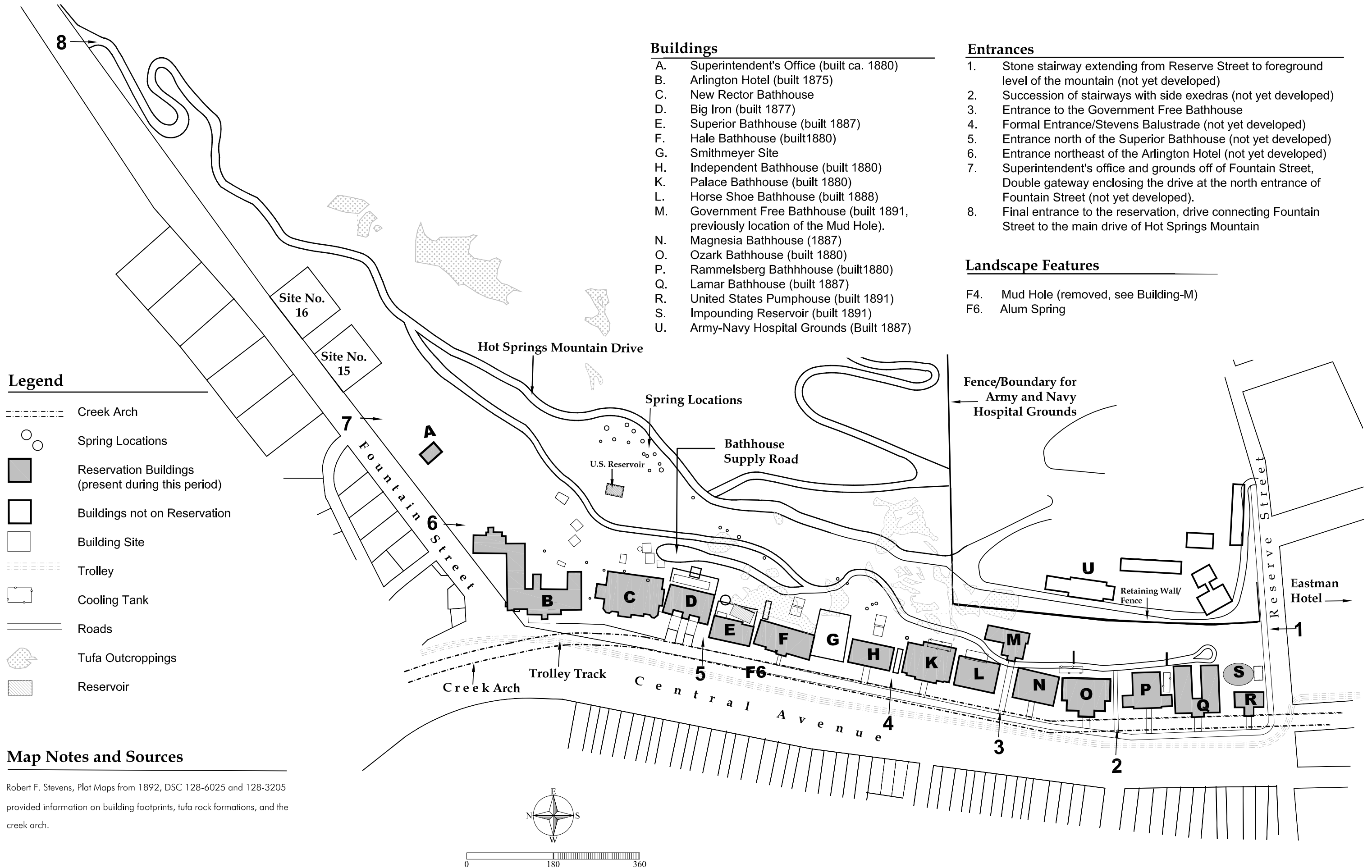
Notes

- Bathhouse Row:**
In 1884 the creek arch installation was completed. The map shows the conjectural location of the arch.
- Arlington Hotel:**
Arlington Hotel remains. A new superintendent's residence was in the process of construction.
- Mountain Sidegrounds:**
A pleasure drive and a supply road to the bathhouses were present. The Government Free Bathhouse was constructed over the Mud Hole.
- Happy Hollow:**
Remains a popular attraction. In the 1880s Photographer Norman Maclead opens a studio here.
- Hot Springs Mountain and North Mountain:**
A carriage road was constructed from Reserve Street to the Hot Springs Mountain observatory. The observatory burned ca. 1884-1895.
- West Mountain:**
Trails and transportation were present.

Sources:

- Map of Hot Springs Reservation Showing Mountain Roads DCS No. 60013, date circa late 1870s.
- 1887 Plat of Central Avenue at Reserve Street, DSC 12860059
- 1892 Plat #1, Section of Hot Springs Mountain, under the supervision of Robert F. Stevens, DSC 128-60205
- "The Hot Springs of Arkansas, America's Baden-Baden," 1880, St. Louis Iron Mountain and Southern Railway Company, page 4.

Study Area, Period of Change 1884-1891



Map Notes and Sources

Robert F. Stevens, Plat Maps from 1892, DSC 128-6025 and 128-3205 provided information on building footprints, tufa rock formations, and the creek arch.

A Landscape Design for Hot Springs Reservation (1892-1911)

This period of landscape change begins in 1892, when Lieutenant Robert Stevens of the Army Corps of Engineers sent the first of his annual reports to the Secretary of the Interior on how the reservation “improvements” were progressing. It ends in 1911 after major changes to the landscape were implemented but before the revival of Bathhouse Row that began in 1912, marking the beginning of the next period of landscape change.

At this time, a major effort to design and implement landscape improvements occurred at Hot Springs. An increased emphasis on the design of the landscape reflected a budding national awareness of designed landscapes, and reaction to the exposition at the Chicago World’s Fair. The firm of Frederick Law Olmsted, Sr., the nationally respected landscape architect, was hired to develop designs for the park. The firm’s involvement in the Hot Springs plans ended prematurely, and Lieutenant Robert Stevens went on to guide the design and implementation of the reservation landscape.

Bathhouse Row was already established as the front door for the Reservation as the primary location of the park’s architectural resources. Lt. Stevens conceived of Bathhouse Row as an “architectural park” where buildings and landscape would unite into one cohesive space. During this period several bathhouses along Bathhouse Row were rebuilt (Arlington Bathhouse/ previously Rector, Hale, Maurice/Independence, Imperial), and new structures were also constructed (second Arlington Hotel, Imperial Bathhouse, expansion of the Army-Navy General Hospital). The park included a total of ten “entrances” that provided access from Bathhouse Row to the Mountain Sidegrounds. These “entrances” represented a new philosophy of development at Hot Springs, wherein the landscape was utilized as an amenity. The Formal Entrance/Stevens Balustrade and Bandstand Pavilion were designed and built between 1894 and 1896. By 1899, deciduous trees were planted along walkways, entrance ramps (some inclined) linked the walkways with the bathhouses, and a paved entrance connected the Government Free and the Magnolia Promenade. Roads and trails on Hot Springs, North, and West Mountains were developed and improved, providing access for carriages, hikers, horseback riding, and bicycling. The Whittington Lake Reserve was designed and constructed, and then modified during this period.

In 1911 approximately 200,000 people visited national parks.⁷⁶ The majority of those visitors traveled to either Platt National Park or the Hot Springs Reservation. Combined, these parks received an estimated 145,000 visitors that year. In comparison, the third and fourth most visited parks were Yellowstone (23,054 visitors) and Yosemite (12,530 visitors).⁷⁷

⁷⁶ Carr, *Wilderness by Design: Landscape Architecture and the National Park Service*, 2.

⁷⁷ *Ibid.*, 114-116.

Study Area

In the spring of 1892, funds amounting to \$75,000, raised through the sale of public lots and lease receipts at Hot Springs, were designated for the improvement of the reservation. An additional \$4,000 was appropriated for roads. Lieutenant Robert F. Stevens, of the office of the Acting Assistant Quartermaster, of the Army and Navy General Hospital at Hot Springs, was directed by the Secretary of the Interior to prepare plans for the improvements. Stevens oversaw the design and implementation of improvements at the reservation through 15 September 1895.

His three annual reports, dated 30 June 1893, 30 June 1894, and 15 September 1895, provide detailed accounts of the efforts undertaken each year. An engineer by training, Stevens had a strong sensibility for the aesthetic qualities of landscape and architectural features. In addition, he was unusually capable in addressing planning/design issues at both broad and detailed levels. His reports eloquently describe design goals that elaborate on what he considers to be the most essential components of the design for the reservation. These include general elements related to circulation, vegetation, buildings, fountains, and drainage; as well as detailed directions regarding materials, and workmanship. Throughout his reports he refers to the professional designers, including architects, landscape architects, and sculptors, consulted to ensure a high level of quality for features including the fountains, pagodas, and formal entrance.

The improvements at the reservation were focused upon Hot Springs Mountain, West Mountain, and North Mountain and design estimates included work to be done at the “Lake Reserve” at Whittington Avenue. Stevens’ tasks were two-fold. First he was to prepare plans and estimates for the improvement of the grounds with the development of parks, roads, walks, and other features of a health resort, including the development of an improved method for the supply and means of application for the water resources of Hot Springs. He was then directed to implement these plans.⁷⁸

Stevens oversaw surveys conducted to document the existing conditions from 16 June 1892 through 1 November 1892. The maps were complete by 1 March 1893. The degree of detail used for the surveys was “graduated to the nature of the improvements contemplated in each section,” as follows:

*The foreground was surveyed and mapped in 1 foot contours, and in detail to show actual landscape conditions as to location of trees, rocks, ledges, etc. The higher grounds were mapped in 3, 5, and 10 foot contours, with more general topographical details. Especial care was taken to show the exact location of springs and of permanent lines, building sites, etc.*⁷⁹

Stevens contacted Frederic Law Olmsted, Sr., and requested that he personally provide a design for the park. Olmsted, known today as the “father of landscape architecture,” was

⁷⁸ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1893, 3-4.

⁷⁹ *Ibid.*, 4.

known nationally for his work on major projects including New York's Central Park, the Boston Park System, and was in the midst of planning for the Chicago World's Fair. The firm, Olmsted & Company, was committed to several large projects around the country and Olmsted's health was failing. Olmsted was reluctant to agree to accept the project, in particular noting that the travel would be difficult and the government was not committed to constructing the complete design. A series of design sketches were passed between Stevens and the Olmsted office. Since several of these include both Stevens' signature and notations made by the Olmsted staff, it is difficult to determine which parts were provided by Stevens and which were developed by Olmsted. Some examples of the sketches are included herein. The design concepts that were eventually implemented were assuredly influenced by the exchange.

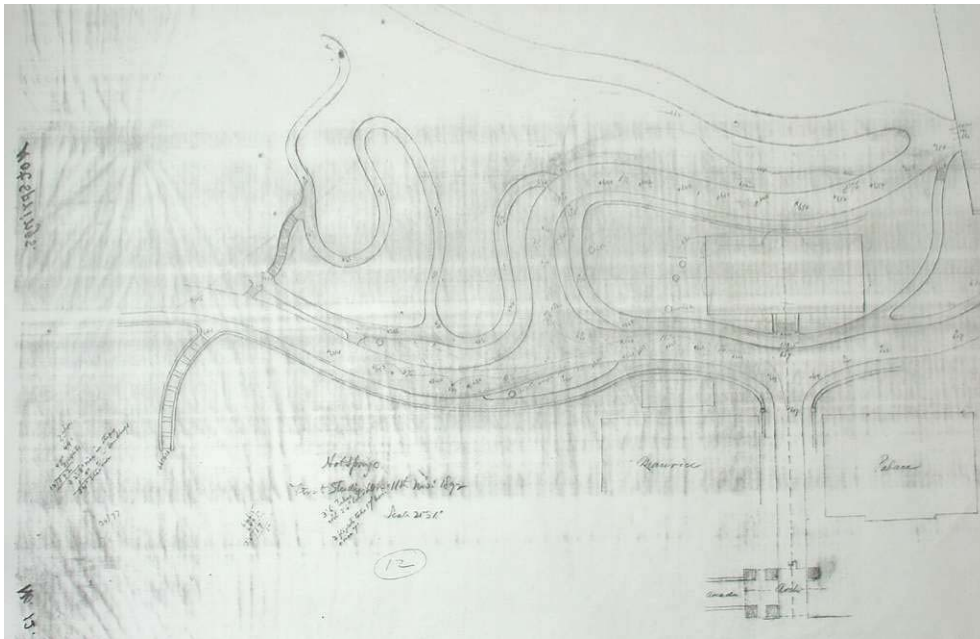


Figure 2-70: Portion of a Design sketch for Formal Entrance and Foreground Park, 1892
(source: Courtesy National Park Service, Fredrick Law Olmsted National Historic Site, 1294-12, "First Study, 10-11th November, 1892).

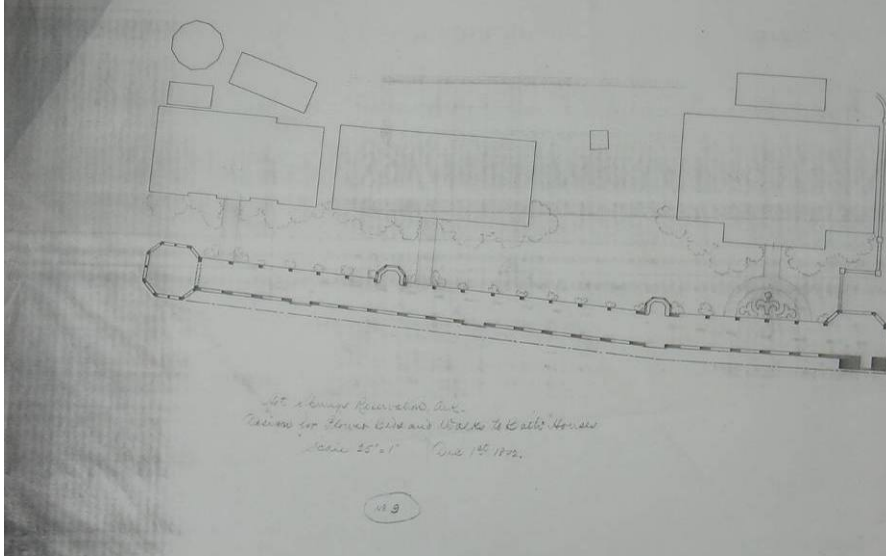


Figure 2-71: Portion of a Design for Flower Beds and Walks to Bathhouses, December 1, 1892 (source: courtesy of National Park Service, Fredrick Law Olmsted National Historic Site). Note that the formal design by Olmsted's office was rejected by the National Park Service.

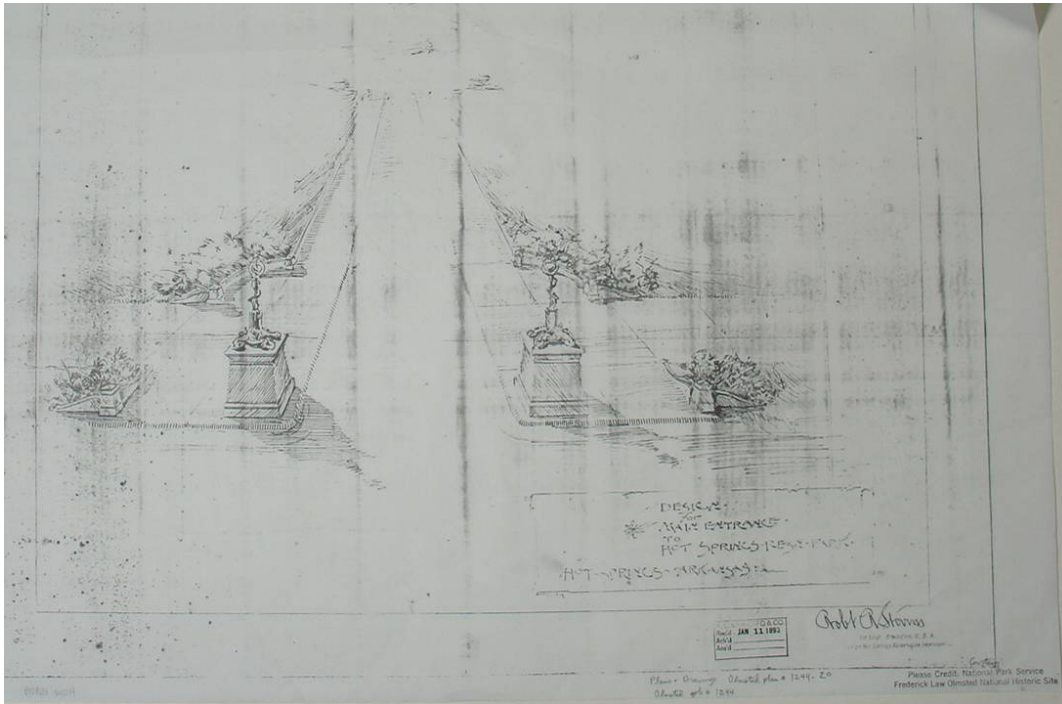


Figure 2-72: Design of the Main Entrance to Hot Springs National Park signed by Robert R. Stevens, (Source: National Park Service, Fredrick Law Olmsted National Historic Site, Olmsted 1244-20). Note the drawing was forwarded by Stevens to the Olmsted office.

According to Stevens' 1893 report, the design developed for the reservation involved work of engineers, landscape architects, and architects. He explains:

The plans of the engineering features, which included the roads walks, etc., formed the base lines of the entire work, and were laid out upon the maps before these were forwarded for the landscape outlines. For consultation and assistance in the preparation of the landscape plans the services of Mr. F. L. Olmstead [sic], landscape architect, of Boston, Mass., were employed. Owing to inconveniences as to distance, and to unforeseen conditions which arose, this work was not carried out as had been at first contemplated. Composite landscape plans adapted to the actual features of the ground, however, were finally completed and filed under the approval of the Secretary of the Interior. ...The architectural details as to entrance compositions, and other finished masonry, have been prepared for the work now in hand.⁸⁰

In general, the overall design for the reservation provided roads and walks along the entire mountain sides (including Hot Springs, North and West Mountains) and parks in the foreground. Numerous pavilions and fountains were proposed along the route of Hot Springs Mountain Road.⁸¹ Stevens also recommended "incidental improvements" for the mountains that included casinos, hotels, observatories, and parks to be funded by private sources on leased government land within the reservation boundaries.⁸²

⁸⁰ Stevens, 1893, 4.

⁸¹ Ibid., 5. More detailed notes are provided in the report.

⁸² Ibid., 11. While today a casino denotes a place for gambling, in the latter half of the nineteenth century the word casino had a broader meaning. The Webster's Dictionary defined a casino as a small public house or a building used for social meetings, having rooms for public amusements.

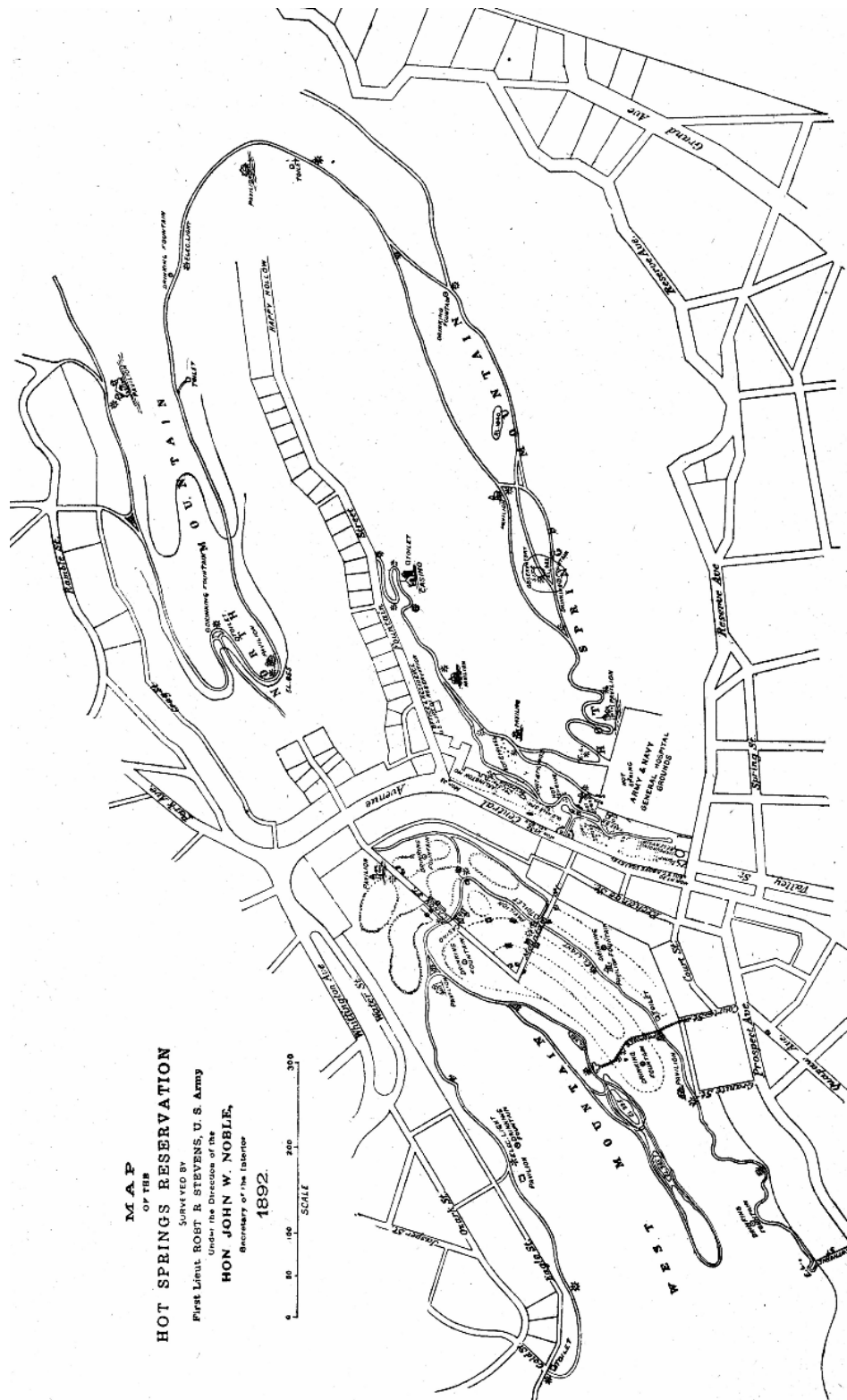


Figure 2-73: Proposed Improvements to Hot Springs Reservation, 1892, by First Lieutenant Robert R. Stevens, U.S. Army (source: Hot Springs National Park)

MAP SHOWING IMPROVEMENTS ON NORTH MOUNTAIN, HOT SPRING MOUNTAIN, AND THE RESERVATION FRONT (BATH-HOUSE ROW) ON CENTRAL AVENUE, BETWEEN FOUNTAIN STREET AND RESERVE AVENUE.



Figure 2-74: Stevens Improvements, Map 2

MAP SHOWING PROPOSED IMPROVEMENTS ON WEST MOUNTAIN, ALSO VIEW OF BATH HOUSE SITES ON THE PERMANENT RESERVATION, AND LOCATION OF ARMY AND NAVY HOSPITAL.

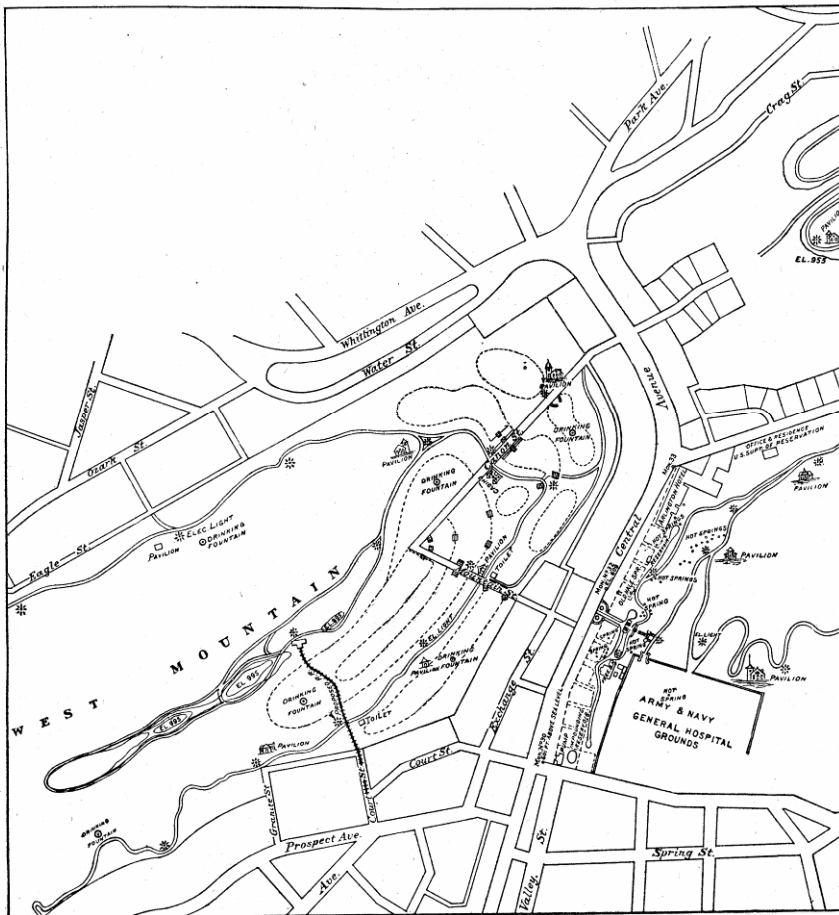


Figure 2-75: Stevens Improvements, Map 3

In June 1894 Stevens reported that improvements to the landscape involved altering the native woodland and planting new vegetation to enhance views and create masses and voids accentuating the outdoor spaces. In addition, shelters and drinking fountains were added to provide visitor amenities, and major overlooks were developed as destination points on the mountain roads. These activities were moving forward: *"Vistas are cut through the trees, timber thinned to give alternations of open views and dense growth, and shrubbery and vines are planted to give effects with rocks and in recesses on the mountain side. Shelter buildings and drinking fountains are added at central or lookout points."*⁸³ Stevens pointed out that the character of the improvements on the mountains were less formal than those implemented in the "lower portion" of the reservation. In this area the addition of a "lawn park" in front of the bathhouses, improvement of the foreground park, design of "general park entrances" from the street, and implementation

⁸³ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894, 4-5.

of a system of drives and supply roads, encompassed the major emphasis of the effort.⁸⁴ In addition, Stevens described four types of fountains to be placed along the Reservation Front including: 1) at the southwest corner of the reservation a carved marble fountain with an outlet of bronze eagle heads (taken from an old Venetian composition), the eagles were crafted by the sculptor Edward Kemeys; 2) and 3) two Romanesque fountains at the exedras of the main entrance were constructed of carved Italian marble as designed by Architect James Reily Gordon of San Antonio; 4) a limestone fountain capped with marble at the north end of the Reservation Front was designed by Messrs. Trobridge, Colt & Livingston of New York; 5) a cold water wall fountain at the arch in the first stairway facing the main entrance at the Reservation Front. In addition, drinking fountains were to be placed along the mountain side in the future.⁸⁵

Stevens' report filed on 15 September 1895 was his final duty related to the Hot Springs Reservation. In it he explained that the administration of the improvements at the reservation had been transferred to Superintendent Little. During the previous year Stevens was transferred to Fort Yellowstone, Wyoming. His final report includes a summary of work completed during the past year, and recommendations for future operations. He explains that the master plan includes *"two main centers for improvement as finished parks – Hot Springs Mountain front, and the lake reserve in Whittington avenue valley."* He elaborated indicating that the two parks are meant to serve as anchors for the overall design, and that their different functions help to balance the overall reservation. *"The construction of two representative parks at opposite locations on the reservation, and in the city limits, as objective grounds at each end of the improvement plan will afford a finish and balance to the entire work hardly less effective than the diversity afforded between the parks themselves in their contrasting forms of landscape development."*⁸⁶

This final report also provides emphasis on specific aspects of design and construction. Regarding the development of the mountain roads, he stresses a *"...strict adherence to the system of grades established,"* noting the *"...frequent tendency in construction to steepen grades for the sake of shortening distances, thus detracting seriously from the advantages of a road as a drive."* Regarding the finishing of masonry work within the reservation, he directs: *"It is recommended that, as a detail of the improvements, all brick masonry in the park, including that of the upper reservoir, be masked with stonework."* Regarding the management of vegetation to construct views he reveals an excellent understanding of the need for subtlety, *"In the wooded grounds of the mountain, considerable opening of vistas by thinning of timber will be needed. At some points the cutting of trees several years since, evidently for that end, has left the effect rather of lanes through the woods. Judicious thinning of bordering timber will be required in these cases, also, to restore natural effects."*⁸⁷ These notes as well as the other written documents related to Stevens' work at Hot Springs imply that his involvement in the major design efforts undertaken in the early 1890s was ultimately responsible for the production of the design and a major phase of the implementation of that design.

A map titled "Map of the City of Hot Springs with subdivisions and additions," was prepared by Howard D. Mitchell, City Civil Engineer, and published in 1895. Stevens' 1895

⁸⁴ Ibid., 5.

⁸⁵ Ibid., 8.

⁸⁶ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1895, 5.

report refers to this map, indicating that the *proposed* mountain roads “have been incorporated in the city map of Hot Springs recently prepared by Engineer Mitchell.”⁸⁸

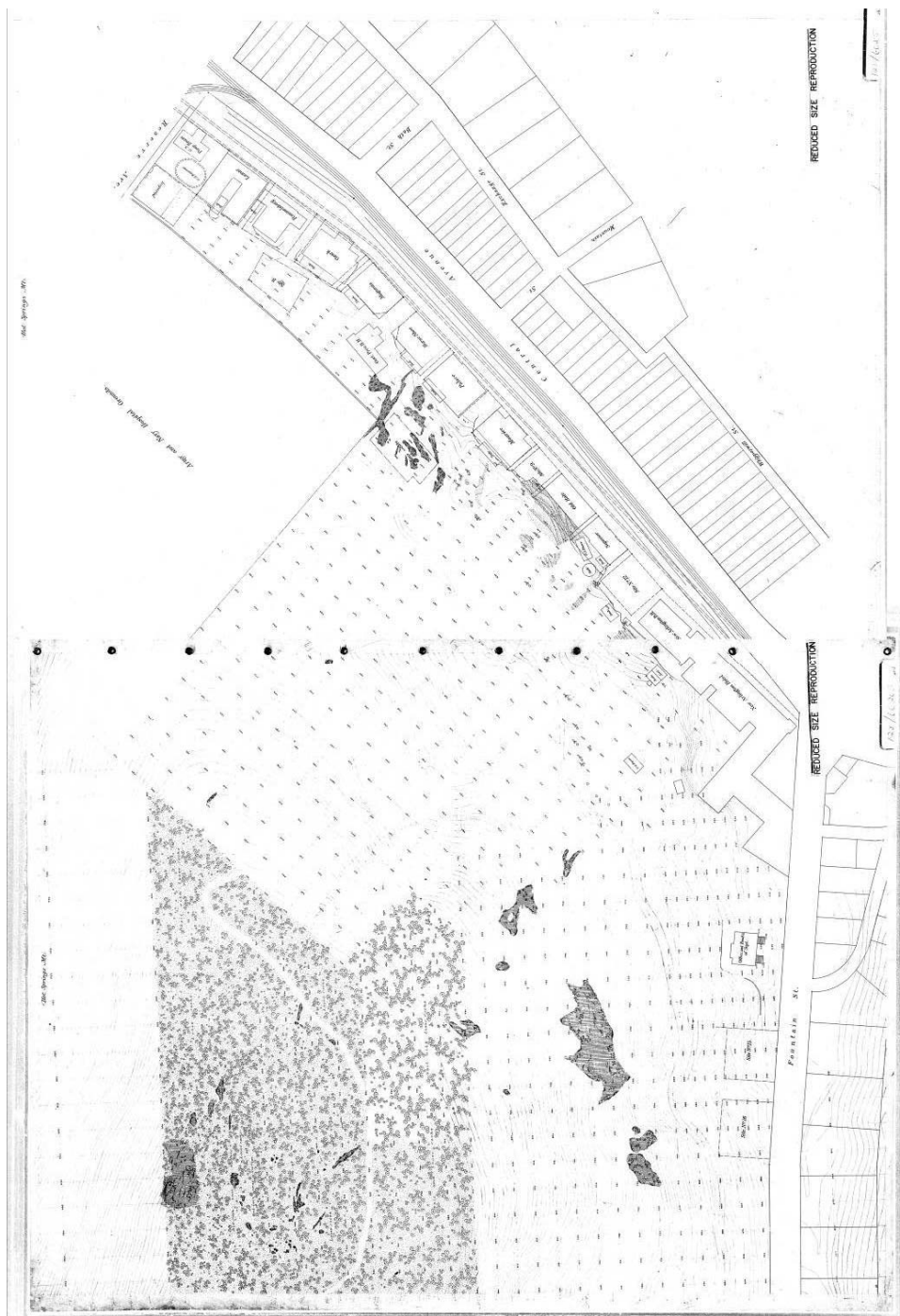


Figure 2-76: Existing Conditions Survey (prepared under Stevens' direction), 1892 (source: 128-60205)

⁸⁷ Ibid., 6.

⁸⁸ Ibid., 6.

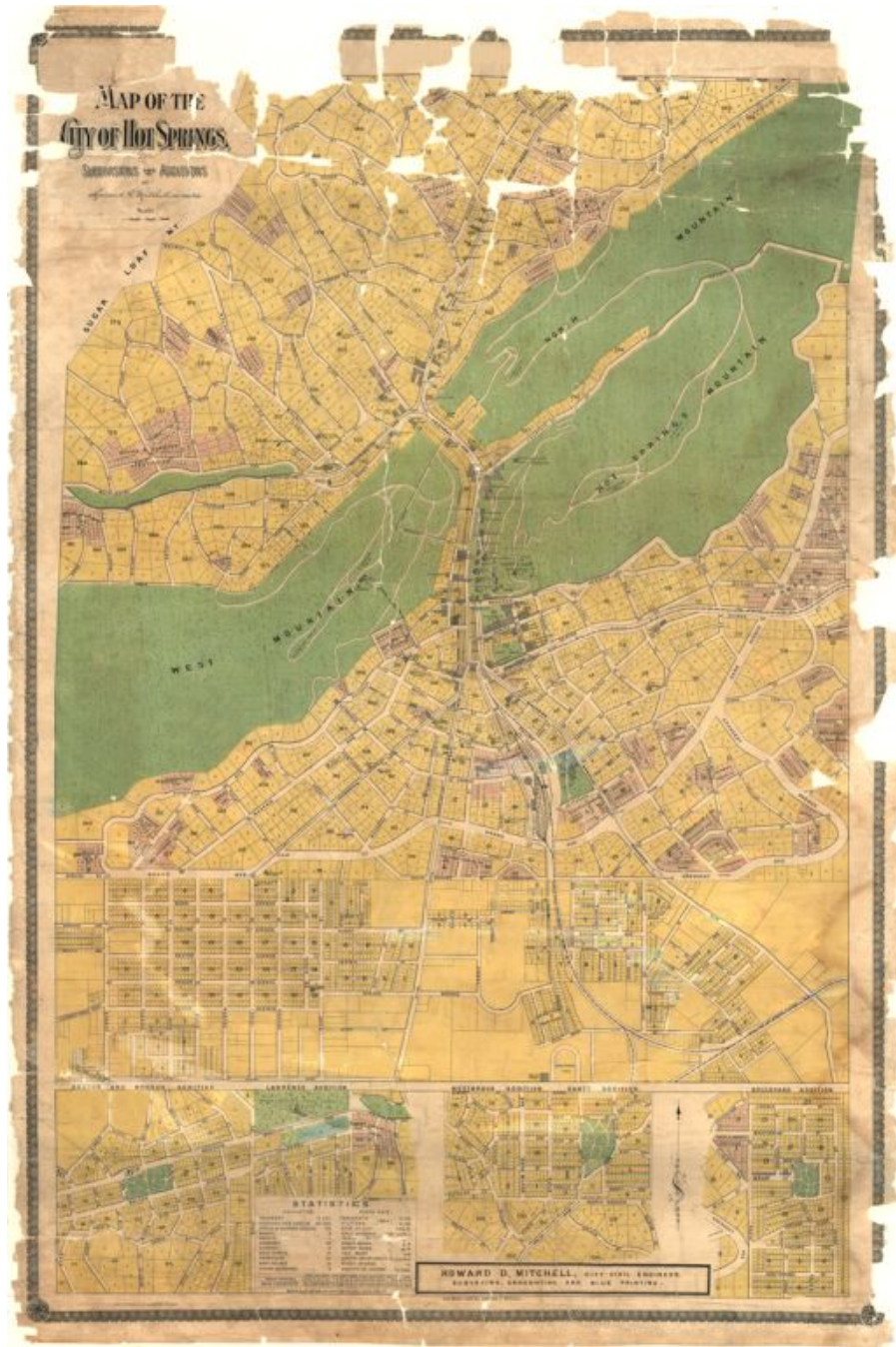


Figure 2-77: Map of the City of Hot Springs with subdivisions and additions, 1895. Howard D. Mitchell, City Civil Engineer, Surveying, Draughting and Blueprinting. Note the map includes the bathhouse buildings, the route to the observatory and a route to the top of West Mountain, the Army and Navy Hospital Building, Hot Springs Bathhouse (across Fountain Drive from the Arlington), streets, trolley tracks, passenger depot and freight depot, no indication of pedestrian routes or vegetation (other than that park areas and green spaces are defined). No indication of the creeks or water bodies.

Bathhouse Row, Landscape Characteristics, 1892-1911

Bathhouse Row was historically designed as an "architectural park" where buildings and landscape would unite into one cohesive space. Bathhouse Row is located along Central Avenue in the downtown core of the City of Hot Springs.

Although the spring water remained the main draw for visitors to the area, by the end of this period Bathhouse Row had been developed to a point where the springs and creek were no longer visible features on the landscape. Additions of buildings, enlargement of others, implementation of the creek arch and pipes for hot water transportation, and other activities that served to formalize the landscape all resulted in reducing the previous visibility of the springs, creek, native topography, and rock outcrops. The steep slopes and rock outcrops on the eastern side of the buildings were still present to some extent, however blasting for roads and buildings during this period changed the visual appearance of this area as well. The "lawn park" was defined by Stevens as the main public front of the reservation. His description presented in his annual report of 1894 indicated:

It is a practical level, planted in blue-grass lawns, with selected trees and groups of shrubbery. A concrete promenade extends up the entire front, and, with car landings on the street and paved cross walks to the bath houses, forms a useful and attractive finish to the reservation and the street front. A marble hot-water fountain is to be placed in the center of the south extremity of the promenade and another forms a similar feature at the northern end. Two other fountains are to be placed about the center of the front, and, with the exedras and entrances, completes the architectural and useful features of this ground. The park is shaded with well-grown trees, and in a lawn border along the front of the promenade is a row of Lombardy poplars, presenting a marked feature along the street. Further out in the same border a line of magnolia trees are planted to replace the poplars, as shade, when these have served their term of usefulness.⁸⁹

Reservation superintendents began ordering deciduous trees to be planted along Bathhouse Row as soon as the creek arch was backfilled in 1884, but it was during this period that the trees began filling out enough to affect the character of the landscape. Photographs taken in this era illustrate extensive plantings along the western side of Bathhouse Row, including trees, shrubs, and herbaceous plants. The care taken to nurture the plants is evidenced by the stakes and structures constructed to protect them from damage and possibly to control the growth patterns.

Bathhouse Row came into its own as a pedestrian promenade. In addition to providing a pedestrian circulation route, the sidewalks, fountains, entrances, plants, and buildings and porches all enforced a feeling of grandeur that encouraged strolling, strutting, and social interaction along the corridor. The landscape organization of Bathhouse Row became more formal and solidified as the park entrances, fountains, vegetation, and other improvements were implemented. Central Avenue, Reserve Street, and Fountain Street served as the main vehicular circulation routes through the heart of the reserve. The Bathhouse Supply Road on

⁸⁹ Stevens, 1894, 5-6.

the eastern side of the Bathhouse Row buildings was formalized and provided a means for providing service access to the bathhouses without conflicting with the visitor entrances to the buildings. Tram tracks, situated along (parallel to) Bathhouse Row, provided a means of public transportation from the train station to the heart of town.

Pedestrian routes included the walkways along the western side of the bathhouses, as well as a sidewalk on the opposite side of Central Avenue. These provided a highly visible pedestrian promenade for visitors. Eight entrances to the park existed including: the Reserve Street Entrance, the Entrance between the Ozark and Rammelsberg bathhouses, the Entrance to the Government Free Bathhouse, the Formal Entrance, the entrance near the Arlington Hotel, the superintendent's residence and grounds (Fountain Street), the gateway at the drive entrance near the Army and Navy Hospital grounds, and the entrance at the drive connecting Fountain Street to Hot Springs Mountain Drive. In 1912 a sidewalk and retaining wall were built behind the Maurice Bathhouse. Entrance walkways to the bathhouses provided organization for and access to the landscape.

Numerous existing buildings were demolished, others were renovated or expanded to accommodate new styles and functions, and new ones were constructed. This list includes the major architectural changes during the period:

- *Arlington Bathhouse*, built 1892, on site of former Rector Bathhouse
- *Hale Bathhouse*, built 1892, on site of at least three previous Hale bathhouses
- *First Arlington Hotel* underwent significant changes from 1875-1892 including substantial additions (demolished to make way for Second Arlington Hotel) This hotel incorporated the Rector House/Hotel when it was created in 1875. The Rector House/Hotel was probably built ca. 1870.
- *Second Arlington Hotel*, built 1893, brick building built on the site of the First Arlington Hotel. The DeSoto Rock, called the Tufa Rock was probably in its present position from at least 1892, when the second Arlington Hotel was built (see figure 2-149).⁹⁰
- *Maurice Bathhouse*, remodeled and renamed 1893, built in 1880 as the Independent Bathhouse (the Maurice was then demolished in 1911 to make way for the current building).
- *Imperial Bathhouse*, built 1893
- *Army and Navy General Hospital Building Eight* (shops, laundry, and autopsy room) , built 1901
- *Alum Spring Pavilion*, 1897, located in front of the Hale Bathhouse.
- *Government Pump House*, remodeled 1898, converted for use as the superintendent's office and reservation headquarters.

In ca. 1892, hot spring water cooling tanks were constructed for most of the bathhouses. These were built of wood with Victorian-style exterior features that were meant to screen their function. They were difficult to maintain and eventually deteriorated and became eyesores. Utility poles and overhead lines were dominant visual features along Bathhouse Row early in

⁹⁰ The builders apparently built around the rock, rather than attempting to blast it away, due its proximity to several springs.

the period.⁹¹ As the vegetation matured, it helped to buffer the effect of these elements. A short fence is apparent along the boundary between Bathhouse Row and Central Avenue in a photograph taken early in the period (see Figure 2-77). It is likely the fence was erected to help establish a more defined edge to the road – allowing landscape improvements and improving pedestrian safety along the promenade. The fence is not apparent in photographs taken shortly after the turn of the century (see Figure 2-83).

Five fountains were installed in 1895 including: the John W. Noble Fountain, the South Exedra Fountain, the North Exedra Fountain, the Shell Fountain in Stevens Balustrade, and the Block Fountain near the Arlington Hotel (replaced in 1897 by the elaborate Hoke Smith Fountain). In 1896 a popular open spring (one of the last four) situated in a retaining wall between the Government Free Bathhouse and the Stevens Balustrade received a limestone façade with a cut stone arch curving over the spring itself and engraved with the words, “Stevens Spring.” One fountain pavilion was built, the Alum Spring Pavilion (the only hot spring on the west side of Hot Springs Creek) in 1897.

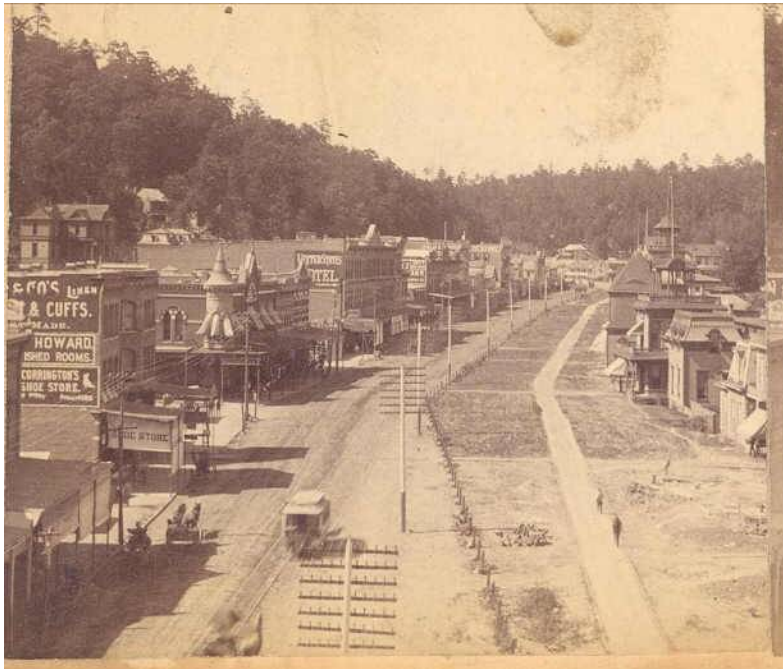


Figure 2-78: 1890s Bathhouse Row south end looking north (source: Hot Springs National Park)

⁹¹ On 22 December 1892, Superintendent Frank Thompson wrote to the Secretary of the Interior that the Western Union Telegraph Company had agreed to move their telegraph lines from the east side to the west side of Central Avenue from Fountain Street to Reserve Street. They were removed shortly thereafter. The electric lines remained on the east side of the street.



Figure 2-79: Alum Spring Pavilion and Bathhouse Row south of the Arlington Hotel, after 1900. (source: Hot Springs National Park)

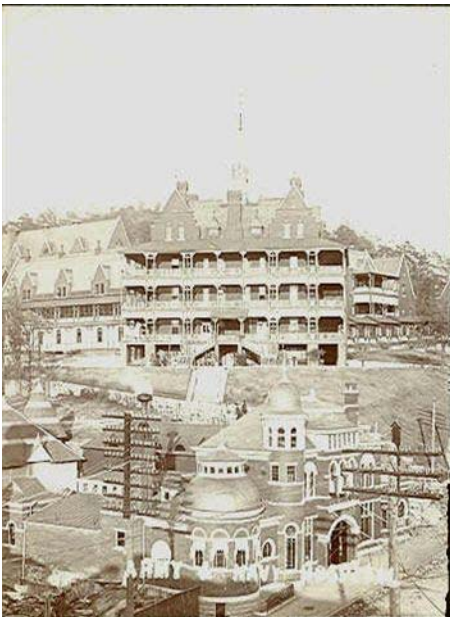


Figure 2-80: ca. 1890s Army Navy Hospital above, the Imperial Bathhouse below (source: Hot Springs National Park)



Figure 2-81: Palace Bath House, ca. 1895 (source: Hot Springs National Park)

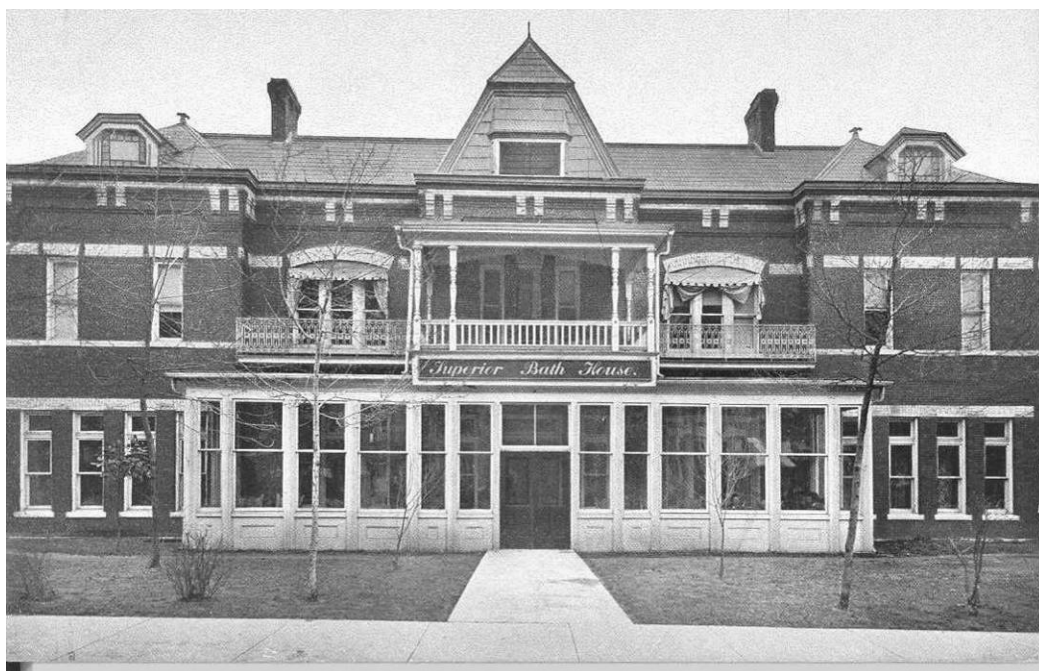
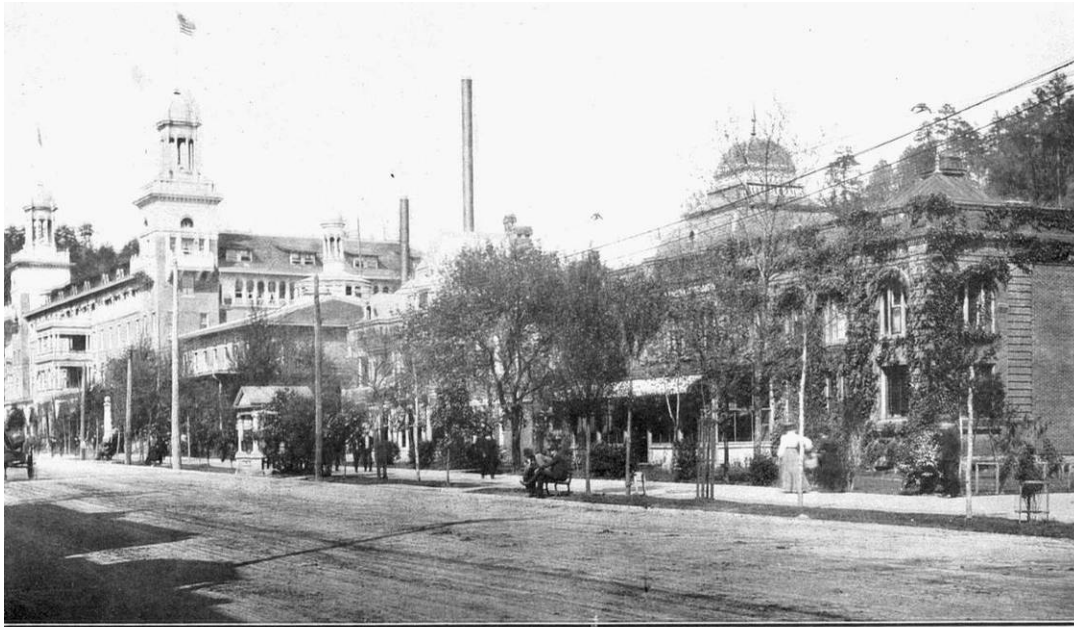
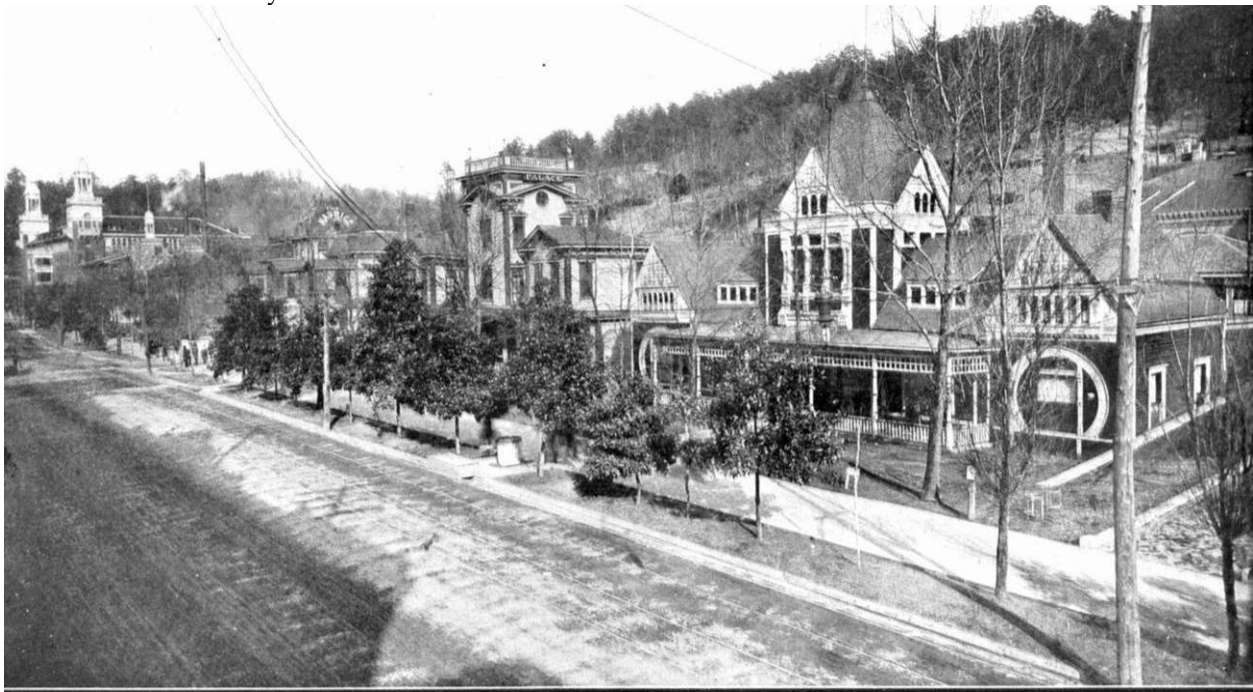


Figure 2-82: The Original Superior Bath House, ca. 1888-1916 (source: Hot Springs National Park)



The Arlington Hotel. Arlington Bath House. Superior Bath House. The Hale Bath House.

Figure 2-83: Bathhouse Row, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 2, No.1. – Bath House Row.) Notice that the plants are protected by enclosures formed by wooden stakes.



The Arlington Hotel. The Maurice Bath House. The Palace Bath House. The Horse Shoe Bath House.

Figure 2-84: Bathhouse Row, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 3, No.2 – Bath House Row – Photo by Upton)



The Arlington Hotel. The Magnesia Bath House. The Ozark Bath House. Army and Navy Bath House.

Figure 2-85: View looking northeast, Bathhouse Row, ca. 1903. Entrance #2 and the South Park are on the right (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 4).



Army and Navy Hospital. The Rammelsberg Bath House. Hotel Eastman. The Lamar Bath House.

Figure 2-86: View east toward Bathhouse Row and the Army and Navy Hospital, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 5)



View from Army and Navy Grounds, Looking West.



Drives and Walks Back of the Arlington.



Hot Springs Mountain Drive.



Horse Shoe Bend, Hot Springs Mountain.

Figure 2-87: Views of Hot Springs Mountain, including the gravel road to the east of the bathhouses (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 6)



Figure 2-88: "Pagoda Spring" Pavilion (also referred to as Fountain Street Pavilion) at Happy Hollow/Fountain Street, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 7)



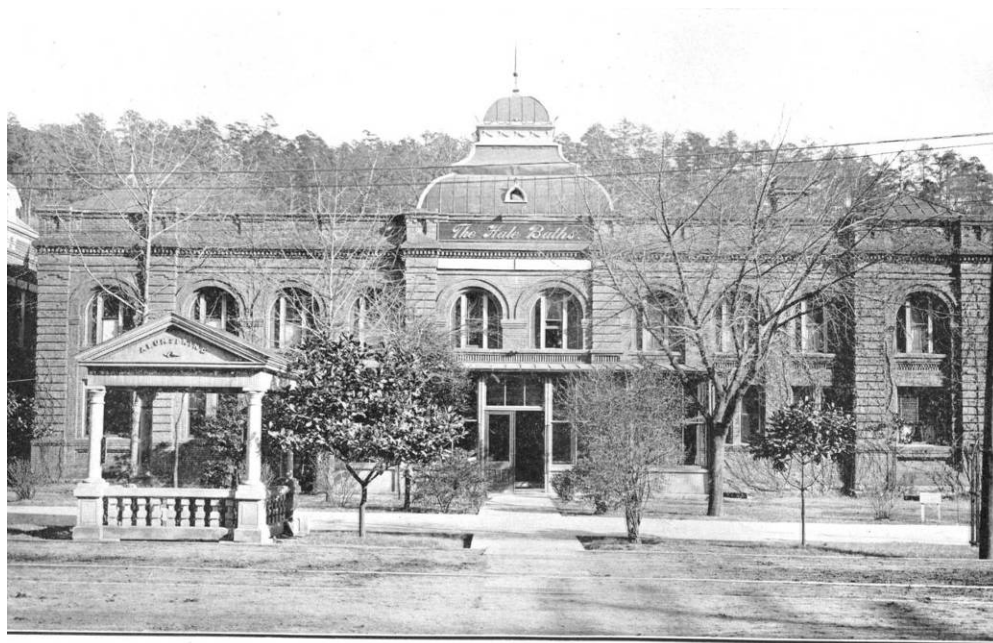
Army and Navy Hospital.
The Rammelsberg Bath House.

Hotel Eastman.
The Lamar Bath House.

Figure 2-89: Bathhouse Row and the Army and Navy Hospital Grounds, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903)



Figure 2-90: Maurice Spring , ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 10)



THE HALE BATH HOUSE—Roots & Eastman, Proprietors.

Figure 2-91: Hale Bathhouse and Alum Spring Pavilion, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 36)



Figure 2-92: Magnesia Bathhouse, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 38) Notice the fence around the plants.



Figure 2-93: Bathhouse Row facing Southeast, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 12)

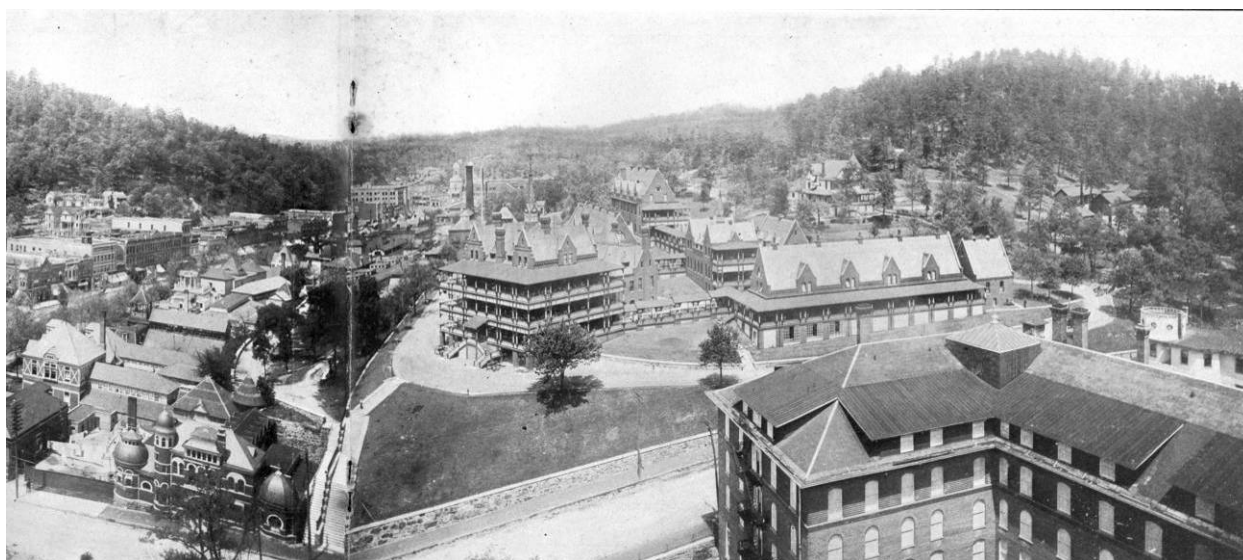


Figure 2-94: Hot Springs view from the Eastman Hotel, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 29)



Figure 2-95: View of Central Avenue and Reserve, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 30)



THE IMPERIAL BATH HOUSE—Rix & Barnes, Proprietors. P. J. McFadden, Manager.

Figure 2-96: Imperial Bathhouse, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 32)

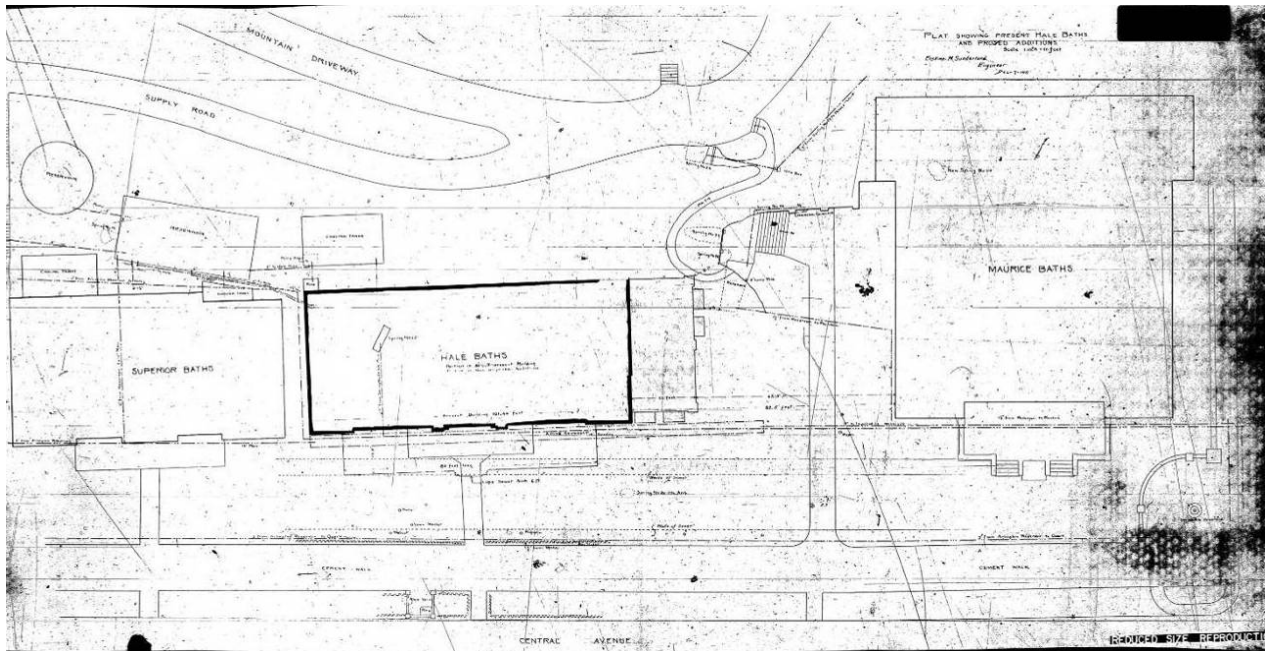


Figure 2-97: Part of 1911 site plan for area around Superior, Hale, and Maurice bathhouses “Olmsted 1890s sketch, Main Entrance.” (source: Denver Service Center, 128-60104)

Formal Entrance/Stevens Balustrade, Landscape Characteristics, 1892-1911

The Formal Entrance/Stevens Balustrade was built during this period. Construction began in 1894 and ended in 1896. In his 1894 report regarding the design of the Reservation, Stevens indicated that the “entrances on the front present a special feature in their prominence and the effects given to their architecture by the rising background of the mountain side.” Of the eight entrances he designed, Entrance Number Four was to be the “main entrance.” This main entrance (today known as the Formal Entrance or Stevens Balustrade) was intended to provide a central connection between the Reservation Front and the higher grounds. As described by Stevens, the entrance:

...opens on the street front as a sloping, paved roadway, flanked with sidewalks and streetcar landings. On each side, in the lawn park and opening inward and on to the front promenade, is a paved exedra surrounding a central drinking fountain and inclosed by a paneled wall, which curves in to a massive stone column surmounted by sculptured bronze eagles, the marking pieces of the entrance.

At the base of the high ground of the mountain, and squarely fronting the opening of the main entrance, is a stone stairway rising in a vertical face, with central corbel inclosing a wall fountain. Stairways ascend on each side in crossing flights, with a central landing at the top. The composition shows entirely white cut stone. The front is faced with 6 inch veneering and the stair is inclosed by an outside line of balusters, and the landings by balusters and paneled parapets. The trimmings are appropriately molded. Turning off from this masonry front the drive makes a curve to the southward, and, passing again

along the foreground, crosses through the line of the general stairways at the top of the lower stairs. From this road crossing the entrance plan continues in a second stairway, landing in the foreground park with side stairs and court returns.

The winding flight of stairs, broken by the park openings, but consisting of three, five, and seven steps, connects with the upper composition of stairways. This, one each side, is flanked at the landing of the first central flight of steps with octagon exedras inclosed with paneled parapets in white cut stone. These courts form the base of the double flights of stairs which complete the rise to the terrace front and main road⁹²

The entrance included a formal planting design within the planters and planting areas defined. The area around the Formal Entrance was landscaped in the “romantic” style, including lawns interspersed with shade trees on graded slopes. In 1896 the Bandstand Pavilion was constructed, completing the design as presented by Stevens.

⁹² Stevens, 1894, 6-7.

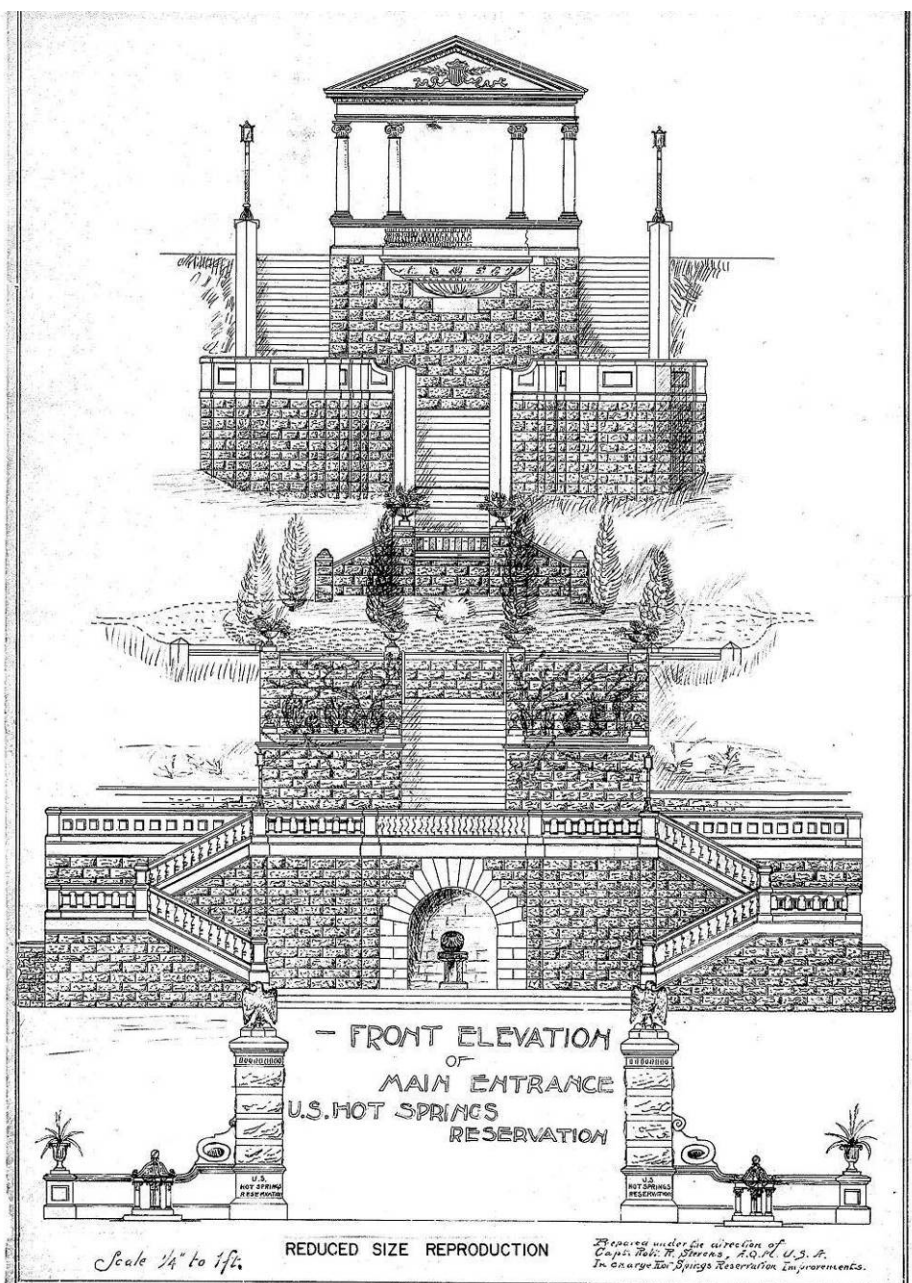


Figure 2-98: Elevation of the Formal Entrance by Robert R. Stevens (source: DSC 128-60388)

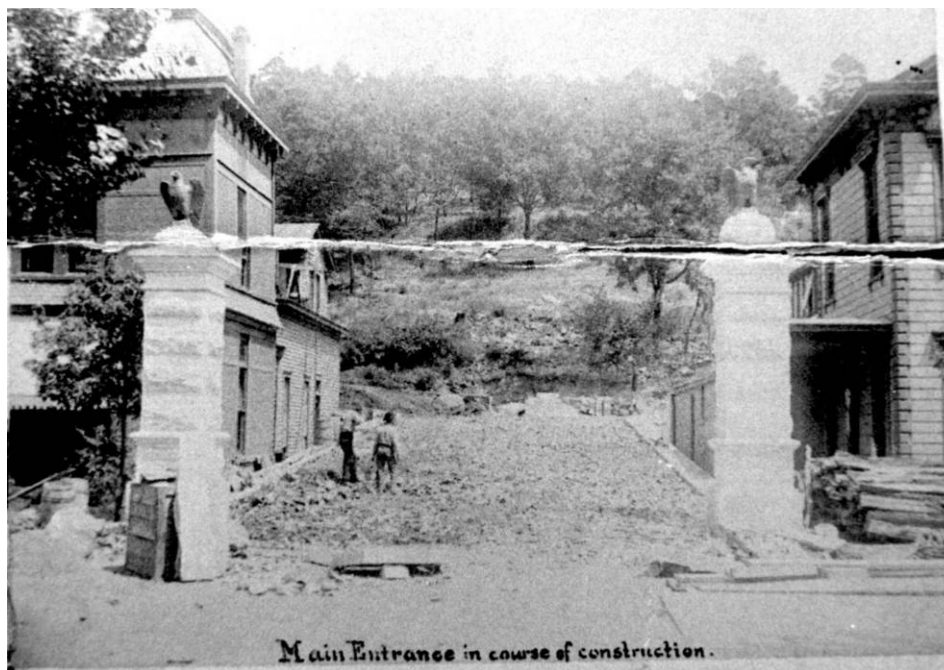


Figure 2-99: Formal Entrance under Construction, 1893 (source: Hot Springs National Park)

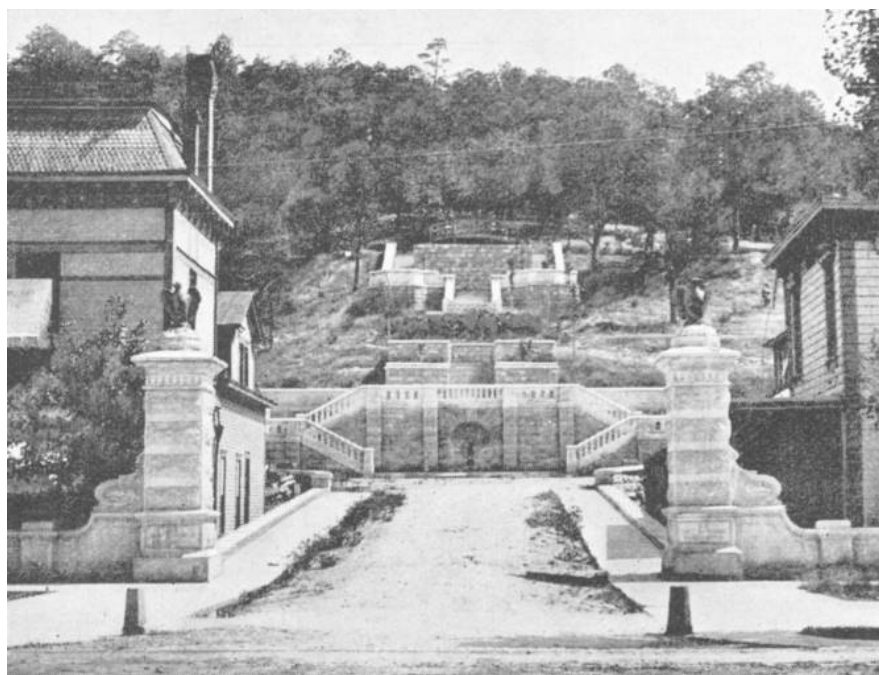


Figure 2-100: Formal Entrance, 1895 (source: Hot Springs National Park)



Figure 2-101: Formal Entrance, 1896 (source: Hot Springs National Park)



Figure 2-102: Bandstand at Balustrade, 1901 (source: Hot Springs National Park)

Arlington Lawn, Landscape Characteristics, 1892-1911

During this period the Arlington Hotel and Bathhouse were located on the site that is currently the Arlington Lawn. More information regarding the buildings is provided in the Bathhouse Row Landscape Characteristics section.

Mountain Sidegrounds/Grand Promenade, Landscape Characteristics, 1892-1911

The Grand Promenade was not yet constructed during this period. The area where it is currently located was occupied by a service road (called the Bathhouse Supply Road) and in what Stevens defined as the Mountain Sidegrounds that included the South Park, Foreground Park, Tufa Park and Wooded Park (see below) at the beginning of the period (see Figure 1-2 and Figure 4-5). Some illustrations show open “lawns” with ornamental plants in this area. In particular, the southern portion between the Army and Navy building and the bathhouses appears manicured with graded turf terraces and some ornamental plants in several illustrations. The construction of the Formal Entrance provided a pleasant pedestrian route into the Mountain Sidegrounds. A graded road and a supply road were present on the east side of the bathhouses and a small path was located in the southern-most park, the South Park.

In 1894 Stevens described his concept of the Mountain Sidegrounds:

***Mountain-sidegrounds.--** The second division of the lower grounds opens from the lawn park by means of the front entrances, and extends up to a general terraced way having about the level of the War Department grounds, and forming with them a continuous embankment front around the mountain side. This terrace forms the main open way of the drives and walks of the reservation and the natural limit of the foreground improvements. Its park finish, in stone stairways, above and below, and in masonry bridges at crossings; its close connection through a massive entrance, with the form of the War Department inclosure, and its common level with the street at the south entrance to those grounds, all give this terraced way the prominence and effect of a second or upper front over the street and along the mountain side. Below this line the foreground is divided into three main parks.*

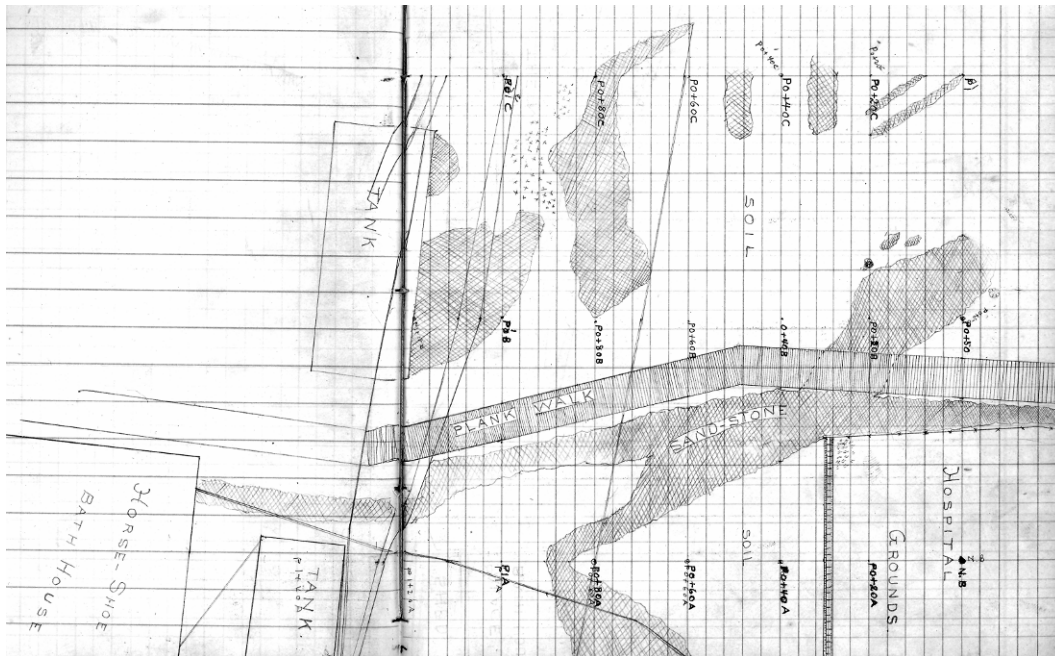
***South park:** extends from the Government bath house southward in front of the Army and Navy general hospital inclosure to Reserve Avenue. It is improved as a hillside park, with a drive and walks connecting entrances, and with natural planting of shrubbery and lawns.*

*The **foreground park** is the central portion of the mountain front. It extends northward from the Government bath house, and is opposite to the main entrance to the reservation. Its boundary along the lower road is a finished range work wall surmounted by a slope; on the upper side the limiting line is formed by the embankment of the main roadway terrace. On the north side of the grounds are the natural woods opened by roads and walks, and sloping down to groups of springs arched with white novaculite stone. In the background above are the finished grounds and north entrance of the War Department, adjoining on the north the wooded parks of the mountain. The design of this park, in connection with the main entrance and other park construction in the vicinity, embodies*

the representative work of the reservation improvements. In its center is a circular ground, shaded with trees, and terraced to form an intermediate landing for the main stairway plan, as well as a central ground of the park. It is to be finished with some ornament in lamps and vases. From this landing ground connecting walks lead off to adjoining grounds on the north, and a walk, passing as a lane between shade trees, leads to the new open springs in the south of the park.

The **tufa park** forms the last of these special grounds. As the ground recedes to the northward from the main entrance the hot water formation stands out more upon the mountain, and at one section the rock shown unbroken hot-water deposit. The upper portion of this ground is entirely of exposed tufa, the surface having a slightly rounded form and moderate incline. It is left mainly as a tufa park to show the natural features of the hot-water deposit. Some planting of the ground in shrubbery and grass has been made and has shown good results, unexpectedly, considering an existing impression that the tufa soil is not favorable to vegetation. In this park is located the upper reservoir and the highest group of hot-water springs. The springs bordering the drive have been arched with white rustic stone, and are finished around with planting of vines and shrubbery. This vicinity is the northern limit of the outcropping tufa.

The remainder of the foreground along Fountain street is finished as a **wooded park**, with natural walks leading, by ramps, to the main drive.⁹³



Hot Springs, North and West Mountains, Landscape Characteristics, 1892-1911

In 1910 Superintendent Harry Myers commissioned architect J. G. Horn to design a fountain pavilion at Lookout Point on Hot Springs Mountain (the Pagoda Shelter). An old well beside the nearby observation tower was to supply a fountain placed in the center of the structure. Local builder Gibson Mills constructed the building for \$1030 and installed the triangular stone fountain. Unfortunately, when drilling commenced, all were dismayed to find the proposed water supply had dried up. After other attempts to find underground water also failed, the fountain was removed and stored to protect it from damage.⁹⁴

⁹⁴ Shugart, "Pagoda Shelter Summary," unpublished report, Hot Springs National Park archives.

year of operation 15,222 passengers walked or rode to its top. Adults paid 25 cents and children under 12 paid 15 cents for the privilege, which resulted in a gross revenue of \$3,805.65 during the first year.⁹⁵



Figure 2-105: Stone Steps and Path Leading to the Summit of Hot Springs Mountain, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1903, page 11)

Happy Hollow, Landscape Characteristics, 1892-1911

Happy Hollow was a bustling community containing MacLeod's amusement park, Magnesia Spring and other attractions. By 1890 the superintendent's office on Fountain Street was dilapidated and in 1891 construction on a new building began. The large stucco and tile structure was designed to serve as both office and home for the superintendent. The building was completed in 1893 and utilized as for its intended dual purpose for six years. In 1899 the pump house at the south end of Bathhouse Row was converted into an office for the superintendent, and the Fountain Street building served solely as a residence. At the intersection of Fountain Street and Central Avenue the Superintendent's residence site was improved with the addition of stone walls and ornate landscape features, as illustrated in the 1906 "Gem Souvenir" (see figure 2-7).

⁹⁵ Shugart, "Hot Springs Mountain Tower Summary," unpublished report, Hot Springs National Park archives.



Figure 2-106: Happy Hollow, 1905 (source: HOSP 13441)



RESIDENCE OF M. A. EISELE, SUPERINTENDENT HOT SPRINGS RESERVATION. — Fountain Street (Happy Hollow).

Figure 2-107: Residence of M. A. Eisele, Superintendent Hot Springs Reservation, Fountain Street (Happy Hollow) (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, 1906)

Whittington Park (Whittington Lake Reserve), Design and Construction, 1892-1911

In his third and final report regarding improvements to the reservation, Robert Stevens specifically addressed the role of Whittington Park in the overall plan for the reservation. He referred to the “*lake reserve in Whittington Avenue valley*” as one of two main centers for improvement as a finished park. The other, of course, was the Hot Springs Mountain front. His intent was for the two parks to serve as anchors for the overall property design – with different functions that would help to balance the overall reservation. He considered the parks’ contrasting style of landscape design at “*opposite locations on the reservation*” to be of benefit in adding diversity to the overall development, and in tying together the various parts of the park and creating a “*balance to the entire work.*”⁹⁶

In 1896, the federal government purchased land for Whittington Park increasing the size of the reservation to 911.63 acres. The Department of the Interior approved designs for the park in 1896. Superintendent William Little implemented them by the end of 1897. The design was in the Romantic Garden style, including two lakes, bridges, pavilions, curvilinear pedestrian paths, a bandstand, caretaker cottage, and an iron fence that enclosed the entire park and included ornate entrance gates. The lakes were to include small boats for visitors to use for recreational purposes. Ornamental plants were installed creating pleasant masses and openings that framed and guided views, and took advantage of the reflective qualities of the lakes. Although the intent was for the lakes to be deep enough to retain water during the dry seasons, during construction bedrock was met at five feet below the ground surface. This raised the cost of construction, and limited the excavation to an inadequate depth. During seasons of diminished flow of Whittington Creek, the lakes became stagnant, unpleasant, and potential health hazards. Certainly the design appreciated a short period of approval. An article published in February 1901 glowed: “...*charming and romantic lakes [can be found in the] Reserve Park on Whittington Avenue.*”⁹⁷ However, by 1905 complaints regarding the tendency of the lakes to become stagnant led to them being filled during that year.

Once the lakes were filled, attempts were made to beautify the park – the creek banks were stabilized with rock and concrete, and trees and flowers were added in the former lake areas. The area continued to serve as a park and changes were made to accommodate use including the replacement of all of the wooden bridges with concrete bridges in 1910. Tennis grounds and two additional pavilions were constructed.

Superintendents Harry H. Myers (1909-1913) and Charles R. Trowbridge (1913-1914) oversaw other improvements that included adding more bridges, building a comfort station, and implementing additional landscaping. During the tenure of Superintendent William Parks (1914 to 1922), he recommended that the area be returned to the city. This did not occur. In 1920, a six-room brick residence was constructed in the park to replace the old gardener’s quarters.

⁹⁶ Stevens, 1895, 5.

⁹⁷ *The Herald*, Illustrated Edition, February 1901, photograph caption from the Hot Springs National Park brochure, *The Heyday of Whittingham Park*.

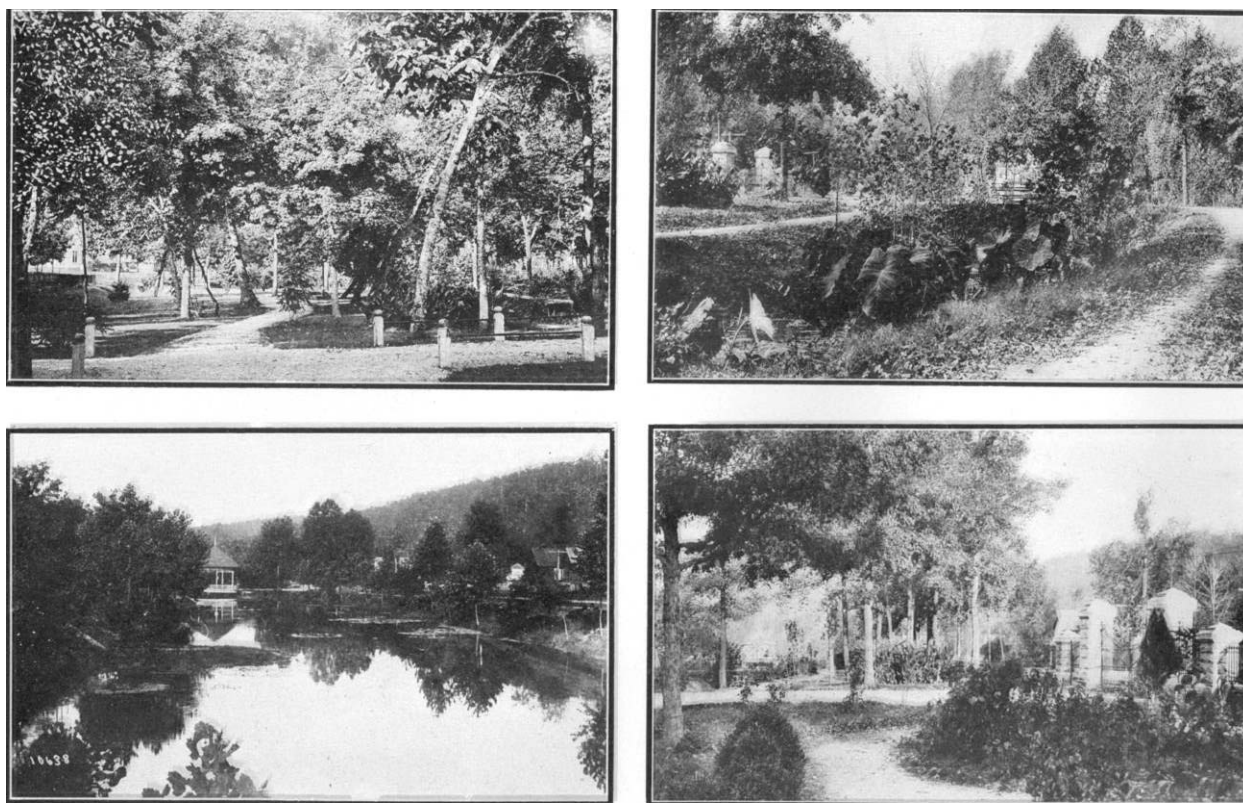


Figure 2-108: Four Views of Whittington Park, ca. 1903 (source: Charles Cutter and Sons, *The Gem Souvenir of Hot Springs Arkansas*, ca. 1903)













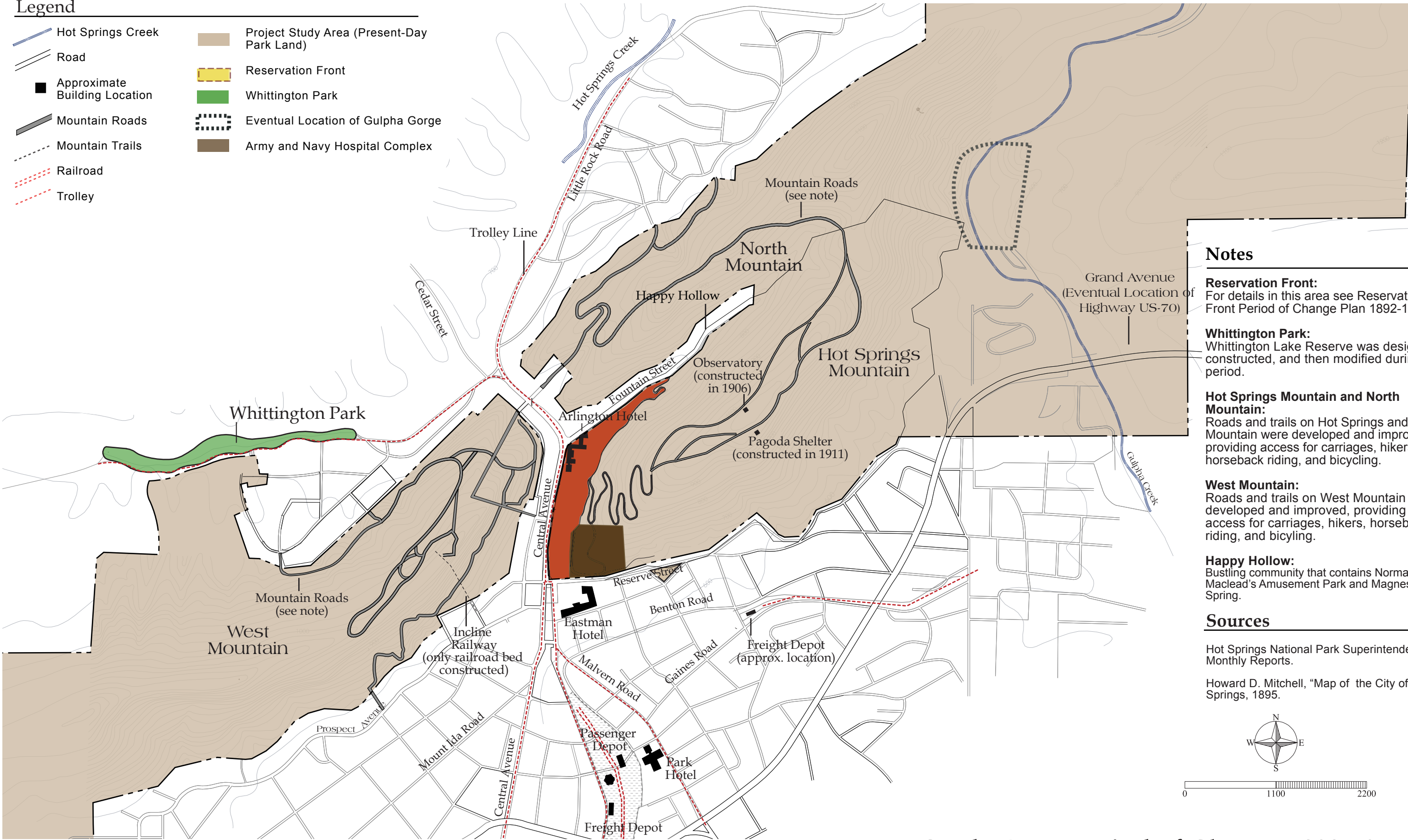
GRAND ENTRANCE AND BAND PAVILION, RESERVE PARK.
A sample scene of the Government's beautiful parking of the Hot Springs spa.

Figure 2-109: Whittington Park Grand Entrance, 1908 (source: Persinger Booklet, 1908)

Following Pages: Figure 2-111: Study Area Context, Period of Change, 1892-1911 and Figure 2-112: Reservation Front, Period of Change Plan, 1892-1911

Legend

-  Hot Springs Creek
-  Road
-  Approximate Building Location
-  Mountain Roads
-  Mountain Trails
-  Railroad
-  Trolley
-  Project Study Area (Present-Day Park Land)
-  Reservation Front
-  Whittington Park
-  Eventual Location of Gulpha Gorge
-  Army and Navy Hospital Complex



Notes

Reservation Front:
For details in this area see Reservation Front Period of Change Plan 1892-1911

Whittington Park:
Whittington Lake Reserve was designed, constructed, and then modified during this period.

Hot Springs Mountain and North Mountain:
Roads and trails on Hot Springs and North Mountain were developed and improved, providing access for carriages, hikers, horseback riding, and bicycling.

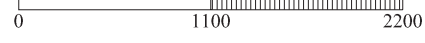
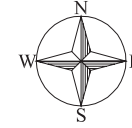
West Mountain:
Roads and trails on West Mountain were developed and improved, providing access for carriages, hikers, horseback riding, and bicycling.

Happy Hollow:
Bustling community that contains Norman Macleod's Amusement Park and Magnesia Spring.

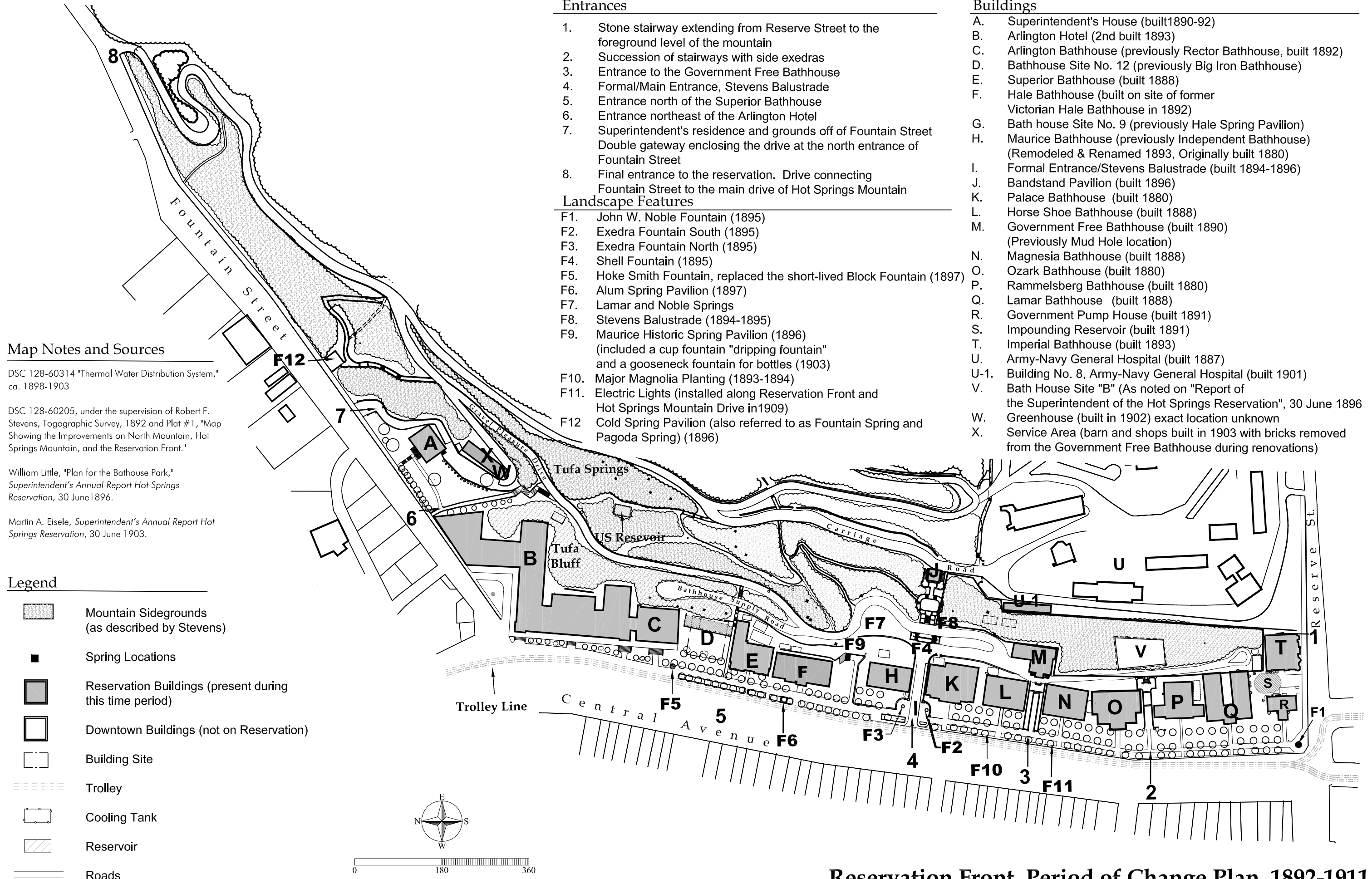
Sources

Hot Springs National Park Superintendent's Monthly Reports.

Howard D. Mitchell, "Map of the City of Hot Springs, 1895."



Study Area, Period of Change 1892-1911



Architectural Transformation and National Park Service Landscape Design, 1912-1930

During this period, the landscape of Hot Springs National Park was shaped by two major design influences – each inspiring change of a different nature. One affected Bathhouse Row, and the other impacted all other areas within the park. Bathhouse Row was transformed through a major modification of the buildings and architectural vocabulary within the landscape. Although the overall landscape of Bathhouse Row was not altered dramatically, the changes in the buildings were reflected in the evolving formal, urban character of the landscape. The remaining areas of the park were influenced by the newly budding theory of park design that was emerging within the National Park Service.

As the bathhouses were replaced or expanded, the landscape of Bathhouse Row was adjusted to respond to the building changes. All of the current bathhouses were constructed or completed during this period. The second Arlington Hotel burned down and the third Arlington Hotel was constructed in 1924 on a new site, off reservation land, making the former site available for landscaping and the emergence of Arlington Lawn as a park. Bathhouse Row underwent a major planting effort in 1914, including the addition of Magnolias and the installation of electric lights. Streets adjoining the park were paved resulting in a more urban character, and less dust.

Park roads were opened for automobile traffic. The trail systems became more formalized and emphasized as a part of the overall health regime. The Oertel System of Graduated Exercise designated trails based on their level of difficulty. Four levels were identified and prescriptions were given to patients for the trails they should use. The trail included 87 markers that were set in concrete and placed 300 feet apart. They were painted to match the trail map.⁹⁸

National Park Service Theory of Landscape Design

In other portions of the park the changes to the landscape were more typical of those occurring at other national parks throughout the nation. During this period the establishment of the National Park Service, and the ensuing emergence of a national philosophy of park design, led to changes to the landscapes of the parks within the system. Hot Springs Reservation was seen by many as simply a resort development – not worthy of national park status. Yet Stephen T. Mather, a staunch opponent of “unworthy” properties considered for national parks, favored Hot Springs and advocated for its designation as a national park. Mather’s influence on the design and development of the parks within the system is indisputable.

On 13 May 1918 a statement of policy meant to guide the administration of the National Park Service was formalized. The policy also established that park design and planning would be based on the principles of landscape preservation and harmonization. Intrusions to the

⁹⁸ Park, *Hot Springs National Park Superintendent’s Annual Report*, 1915, 7.

landscape were to be minimized, and development was to blend with the natural surroundings. The statement of policy was paramount in guiding National Park Service planners and designers. Its influence was substantial as noted by Linda McClelland:

In the fifteen years following the 1918 declaration of policy and preceeding the massive expansion of park development that began in 1933, the National Park Service landscape architects and engineers forged a cohesive style of naturalistic park design.⁹⁹

At Hot Springs, the landscape of Bathhouse Row had been developed well before the establishment of the NPS and its policy statement, and Bathhouse Row and Whittington Park were formally designed landscapes defined by major architectural elements. Oddly enough, when Mather hired the firm of Mann and Stern to prepare a design for the park in 1917, the result was not a proposal to harmonize the natural and built environments. Mann and Stern's plan proposed a series of rectilinear formal gardens to be imposed upon the base of Hot Springs Mountain, within and to the east of Bathhouse Row. While this design was never implemented, over the next several decades changes to the park landscape would reflect the stylistic philosophy of the design, rather than that of the overall park service.¹⁰⁰ No documentation has been discovered to illuminate the response of Mather to Mann and Stern's design. One hint may be found in Mather's request for Jens Jensen to visit the park in 1918 to provide design guidance.¹⁰¹

Also of interest is the fact that the remainder of Hot Springs Reservation/National Park was treated by the NPS designers and developed in accordance with the overall organization's approach to design and development. The roads, trails, picnic areas and overlooks reflect the basic design tenets adopted by the NPS including the use of native materials, and blending of the new elements into the natural environment.

In 1914 a new residence on Reserve Street was designated for the park medical director and later it housed the park superintendent. Eventually the assistant superintendent would occupy the former superintendent's residence on Fountain Street. Four-hundred and eighty feet of concrete sidewalk, curb, and gutter were constructed along Reserve from the Army and Navy General Hospital grounds to the front of the new superintendent's residence.¹⁰²

⁹⁹ McClelland, 134-136.

¹⁰⁰ Mann and Stern Architects to Stephen T. Mather, Director, National Park Service, 1 March 1918; copies of three of the drawings are on file at Hot Springs National Park; the work was authorized by an Act of Congress, approved 12 June 1917 (Pub. #21). Mann and Stern submitted a proposal to Mather on 19 June 1917. The proposal has not been located.

¹⁰¹ McClelland, page; Carr, page; and Hot Springs National Park Superintendent's Monthly Report, months. In addition to the formally trained landscape architects that were added to the NPS staff during its early years, "...some of the most prominent landscape architects of the day offered the Park Service free consultation. Jens Jensen, for example, advised on planting plans for Hot Springs Reservation, Arkansas, 1918; Olmsted advised on Lafayette (now Acadia) National Park in 1919; and both Olmsted and Harvard Professor James Sturgis Pray advised on developments at Yellowstone in 1921," Carr, 95.

¹⁰² Park, *Hot Springs National Park Superintendent's Monthly Report*, 2 July 1914 and 3 August 1914.

A concrete “runway” was constructed at the entrance to the grounds of the residence on Fountain Street. It was most likely meant to improve drainage. Also, an irrigation system was installed. In addition, a sixteen foot long culvert was constructed on Fountain Street.

Also in 1914, on Hot Springs Mountain a brick pumphouse was completed and 2000 linear feet of 2” pipe were laid between the pumphouse and the pavilion to supply water for the drinking fountain. A concrete base was constructed for a water tank adjacent to the Observatory. In addition, a large stone gutter and stone retaining wall were constructed along a trail on the west slope of Hot Springs Mountain.¹⁰³

¹⁰³ Park, 2 July 1914.

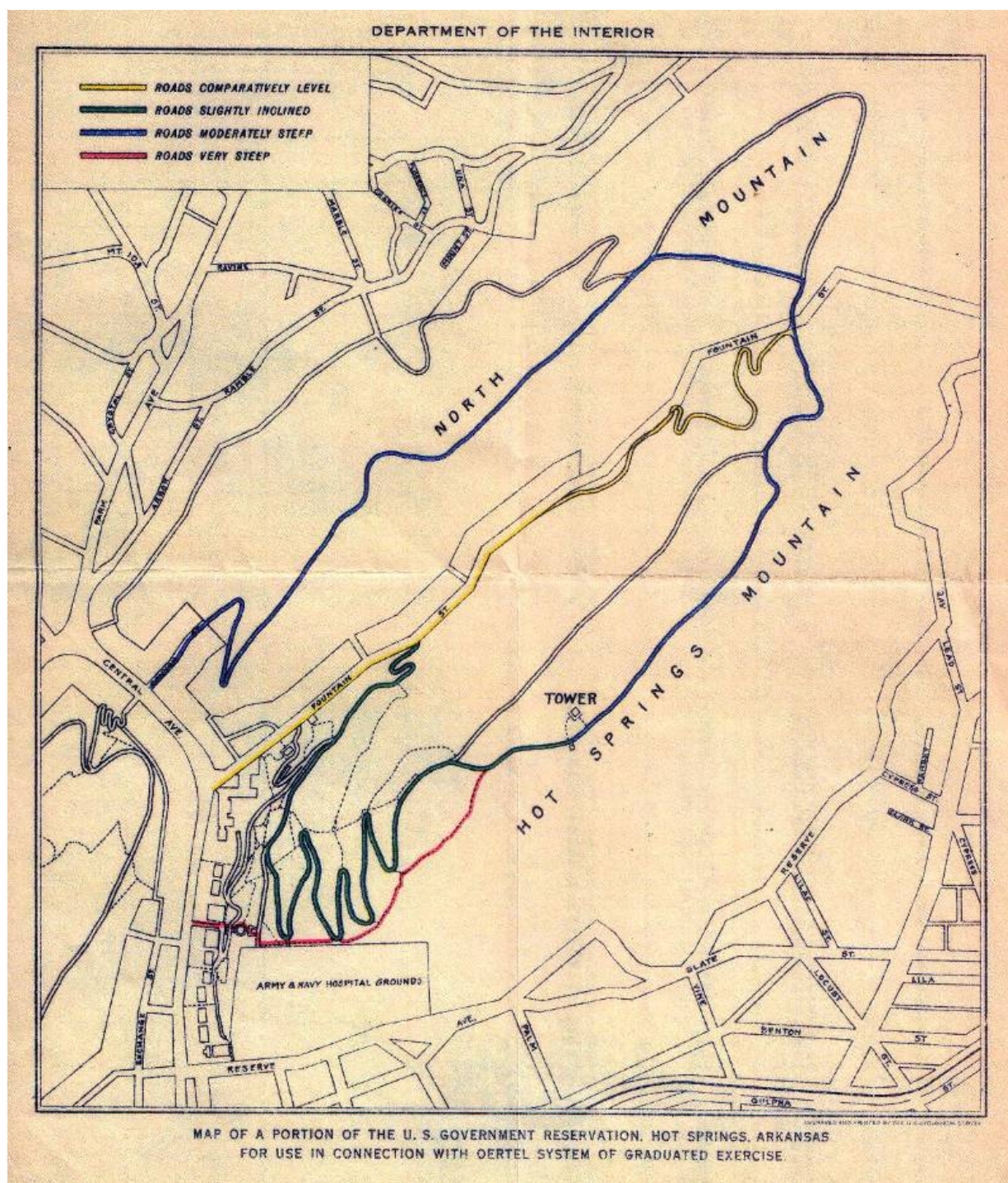


Figure 2-113: Oertel System of Graduated Exercise Map (source: Hot Springs National Park, digital file "Oertel Map front") Note: The trail system was completed in 1914.

1-518.

Information for use in determining distances, elevations, and grades in connection with map on other side.
All grades are ascending unless marked —; grades marked — are descending.

ELEVATIONS ON HAPPY HOLLOW ROAD BEGINNING AT CENTRAL AVENUE AND FOUNTAIN STREET. COMPARATIVELY LEVEL (YELLOW).			
Monuments.	Grade.	Elevation.	Distance.
1	Per cent.	Feet.	Feet.
2	2.5	620.10	300
3	3.1	628.45	600
4	3.81	640.90	900
5	4.0	652.95	1,200
6	3.43	663.25	1,500
7	3.93	675.05	1,800
8	5.21	690.70	2,100
9	5.68	707.45	2,400
10	8.52	733.02	2,700
11	9.89	762.70	3,000
12	7.75	786.05	3,300
13	7.52	808.03	3,600
14	6.68	828.39	3,900
15	7.29	850.28	4,200
16	7.08	871.53	4,500
17	6.71	891.08	4,800
18	6.41	910.93	5,100
19	7.10	932.25	5,400

ELEVATIONS ON ROAD ON HOT SPRINGS MOUNTAIN FROM FOUNTAIN STREET TO TOWER. SLIGHTLY INCLINED (GREEN).			
Monuments.	Grade.	Elevation.	Distance.
6	3.61	874.10	1,800
7	4.20	886.71	2,100
8	1.19	890.05	2,400
9	0.28	890.85	2,700
10	1.29	894.74	3,000
11	-0.11	894.39	3,300
12	-0.82	891.88	3,600
13	3.37	902.06	3,900
14	4.13	914.44	4,200
15	5.04	929.58	4,500
16	4.65	943.25	4,800
17	4.12	955.60	5,100
18	4.47	969.00	5,400
19	4.48	982.38	5,700
20	4.11	994.72	6,000
21	4.82	1,009.20	6,300
22	6.72	1,026.37	6,600
23	0.19	1,027.95	6,900
24	5.80	1,040.36	7,200
25	8.84	1,060.40	7,500
26	8.81	1,070.54	7,800
27	8.57	1,082.51	8,100
28	6.55	1,092.20	8,400
29	8.22	1,106.87	8,700
30	7.71	1,104.08	9,025

ELEVATIONS ON ROAD ON NORTH AND HOT SPRINGS MOUNTAINS FROM CENTRAL AVENUE AND CANYON STREET TO TOWER ON HOT SPRINGS MOUNTAIN. MODERATELY STEEP (BLUE).			
Monuments.	Grade.	Elevation.	Distance.
1	10.43	851.31	200
2	13.33	891.31	600
3	9.80	920.72	900
4	5.52	937.31	1,200
5	8.60	957.12	1,500
6	8.99	984.09	1,800
7	9.88	1,013.73	2,100
8	11.06	1,046.90	2,400
9	13.16	1,080.38	2,700
10	7.85	1,096.95	3,000
11	8.00	1,103.95	3,300
12	4.04	1,106.07	3,600
13	6.97	1,116.00	3,900
14	11.46	1,131.27	4,200
15	-1.61	1,129.83	4,500
16	-2.66	1,126.03	4,800
17	2.28	1,128.86	5,100
18	5.94	1,134.86	5,400
19	-1.85	1,132.12	5,700
20	-8.69	1,123.13	6,000
21	-11.21	1,111.88	6,300
22	-4.07	1,107.26	6,600
23	-6.88	1,099.53	6,900
24	-0.66	1,098.64	7,200
25	-1.44	1,097.31	7,500
26	6.44	1,103.62	7,800
27	9.67	1,113.64	8,100
28	5.46	1,119.03	8,400
29	-0.70	1,118.93	8,700
30	4.91	1,124.67	9,000
31	5.63	1,130.55	9,300
32	-1.37	1,127.44	9,600
33	6.00	1,133.92	9,900

ELEVATIONS ON PATH FROM CENTRAL AVENUE TO TOWER ROAD. VERY STEEP (RED).			
Monuments.	Grade.	Elevation.	Distance.
1	12.87	844.91	300
2	14.67	868.93	600
3	22.40	906.13	900
4	12.78	919.49	1,200
5	19.27	939.30	1,500
6	15.17	957.89	1,800
7	14.13	970.15	2,100
8	6.32	976.15	2,400

¹ Starting point of road on Hot Springs Mountain to Tower.
² Junction of Happy Hollow Road and main road on Hot Springs Mountain.

M. D.

Figure 2-114: The back of the Oertel Trail Map served as a prescription form. (source: Hot Springs National Park, digital file: Oertel Map back)

In 1914, the Department of the Interior created a new position for a general superintendent of Yosemite National Park and landscape engineer for national parks and Mark Daniels was appointed to the position. For the first time the responsibility for preparing all of the national parks for the public was entrusted to a single individual—certainly, in retrospect, a precursor to the establishment of the National Park Service as a unified organization administering the national parks. The creation of the position was a reflection of the beginning of a national philosophy of park design, and a precursor to the establishment of a federally administered National Park Service. Conferences held in 1915-1917 focused on the issues

involved in developing the facilities related to parks, in particular lodging, roads and trails.¹⁰⁴ Mark Daniels identified concerns and concepts for providing accommodations at national parks and shared these at the 1915 national park conference in San Francisco.¹⁰⁵

During the same year, the leadership role for the national parks was assigned to Stephen T. Mather, whose vision and energy would guide the formative years of the National Park Service.¹⁰⁶ On 25 August 1916, the United States National Park Service was established by Congress.¹⁰⁷ In 1917, the administration of the existing national parks and monuments, including Hot Springs Reservation, was transferred to the National Park Service, headed by Mather. On 4 March 1921 an act of Congress resulted in the designation of Hot Springs National Park as the eighteenth National Park.¹⁰⁸

Mather had a vision to provide accommodations and transportation opportunities to ensure the national parks would be within the reach of all Americans. He set about informing the public about the “scientific, scenic, and historic values of the parks,” through the distribution of publications including pamphlets, a portfolio, and guide maps for parks.¹⁰⁹ Mather strove to provide greater accessibility to the national parks, by improving routes of transportation and developing cooperative relationships with railroad companies. These efforts were meant to develop a transportation network that would link the individual parks.

Mather also advocated for the development of “gateways” at the entrances to parks as elements of particular importance. He urged the construction of entrance structures in harmony with their environments, stressing that they should be simple, dignified, and low cost structures. These served the dual purpose of marking park boundaries and providing a transition for visitors “to an environment where nature predominated and amenities were rendered inconspicuous through harmonious structures.” The gateways also “introduced an architectural theme that harmonized with the natural setting of each location and could be carried over into the development of similar areas elsewhere in the park, giving a consistent identity to park structures.”¹¹⁰ The impulse to get the people to the parks, and to provide adequately for their access and accommodations, led to a surge in the development of roads, trails, and buildings within the national parks.

On 13 May 1918, a statement of policy to guide the administration of the National Park Service was established. The policy directed that park design and planning be based upon the principles of landscape preservation and harmonization, and be conducted by a landscape engineer:

¹⁰⁴ McClelland, *Building the National Parks*, 123-130. T. Warren Allen outlined a process for designing park roads, and Gabriel Sovulewski addressed the design and construction of trails, at two of these conferences.

¹⁰⁵ *Ibid.*, 123-127. Mark Daniels was appointed by the secretary of the interior as the general superintendent of Yosemite National Park and landscape engineer for national parks in 1914.

¹⁰⁶ *Ibid.*, 123-124.

¹⁰⁷ The National Park Service Act of 25 August 1916 (39 Statute 535), established the National Park Service.

¹⁰⁸ Redesignated Hot Springs National Park Act of 4 March 1921 (41 Statute 1407).

¹⁰⁹ McClelland, 131.

¹¹⁰ *Ibid.*, 124-126.

In the construction of roads, trails, buildings, and other improvements, particular attention must be devoted always to the harmonizing of these improvements with the landscape. This is a most important item in our program of development and requires the employment of trained engineers who either possess a knowledge of landscape architecture or have a proper appreciation of the esthetic value of park lands.¹¹¹

"Mather's thinking was clearly influenced by the landscape architecture profession's position on the stewardship of natural areas and the growing movement for parks across the nation. Common practices used in country or rustic areas of city parks were immediately adopted. Construction was to disturb the ground as little as possible. Improvements were to be of native materials and rustic in character. Obtrusive development was to be avoided altogether or placed in inconspicuous locations and screened from public view."¹¹²

Plans for a World-Class Spa and Design Recommendations by Mann and Stern, 1917

Around 1917 the city of Hot Springs developed an ambitious plan for the area generally bounded by Ouachita, Central, Prospect, and Market Streets. The planned development was meant to result in a "world-class spa." The federal property within Hot Springs Reserve was to update facilities to mirror the city's improvements. The vision apparently had the approval of the NPS, and Stephen T. Mather hired the Little Rock architectural firm of Mann and Stern to prepare a development plan for Hot Springs Reservation, including recommendations for improvements to the park.¹¹³

The focus of the design effort by Mann and Stern was on the Bathhouse Row area.¹¹⁴ Mann and Stern identified Central Avenue as a "...*narrow gorge between Hot Springs Mountain, and North and West Mountains,*" providing the only through street in the City and the necessary location for the street car lines and all north and south traffic. The firm described this as the most important of the three streets bounding the park (the others being Fountain Street and Reserve Street) for the previous reason and due to the presence of Bathhouse Row, "...*consisting of the finest bathhouses in Hot Springs.*" The City side of the street is indicated to have the "*most representative business houses.*"

In setting the stage for their recommendations, Mann and Stern indicated that the importance of Central Avenue as a transportation corridor left only the distance from the eastern curb of the street to the base of Hot Springs Mountain as the area available for architectural development on the Reservation. "*The distance from the curb to where the mountain rises abruptly from the street level is approximately 150 feet; the 50 feet nearest the curb are nicely planted with grass, shrubs and trees, with the sidewalk in between. The balance of space, back to the mountain, is cut up into bathhouse sites, of which about half have been developed with good buildings within the last five years...*" (Hale, Maurice, Fordyce, and Buckstaff bathhouses). Plans for the

¹¹¹ National Park Service, Statement of Policy, 1918.

¹¹² McClelland, 134-135.

¹¹³ Shugart email to Brenda Williams, 15 August 2006.

¹¹⁴ Since neither Mather's letter of request to the firm, nor the proposal letter from Mann and Stern to Mather, have been located, it is unclear if it was Mather's intent that the design efforts focus on the entire property, or were to be limited to Bathhouse Row.



¹¹⁶ Ibid.

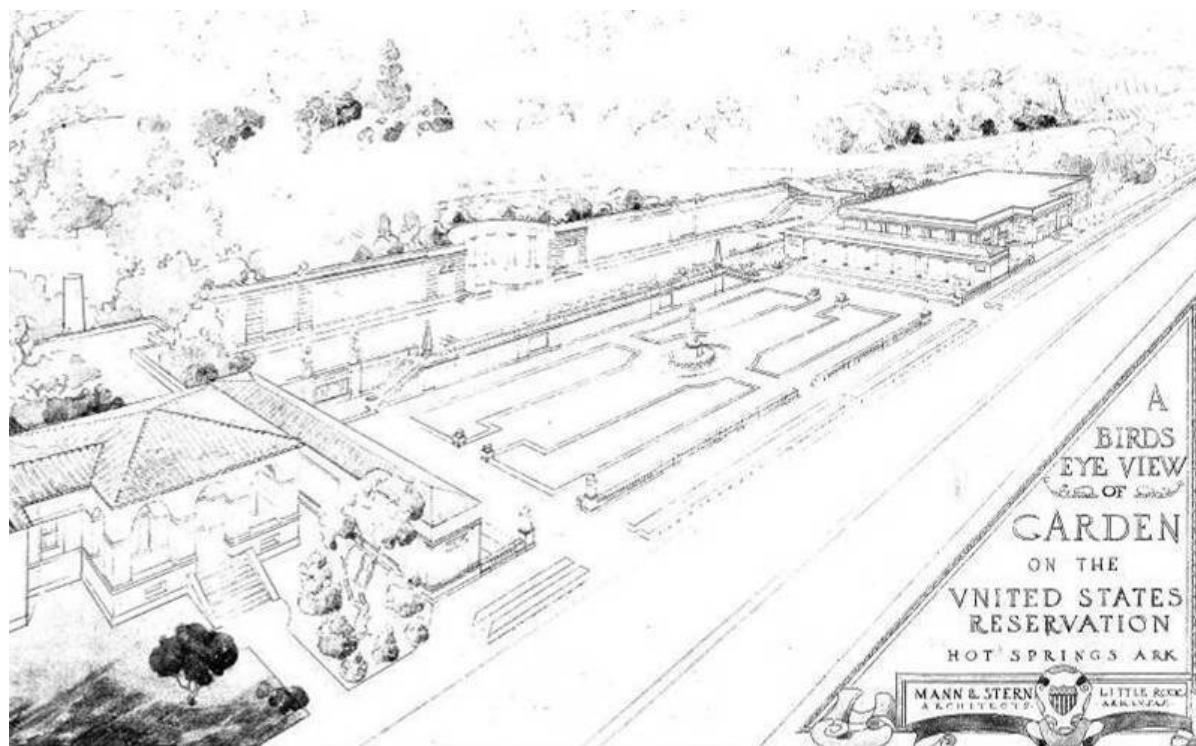


Figure 2-116: Proposed Design for Reservation Development by Mann and Stern, 1917
(source: Denver Service Center 128-60249)

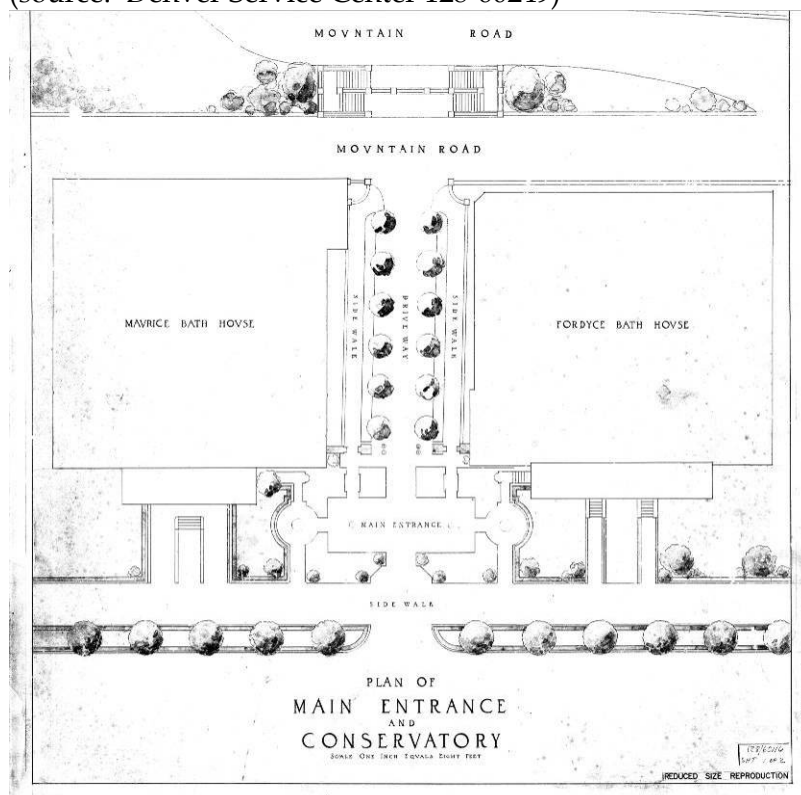


Figure 2-117: Plan of the Formal Entrance Design by Mann and Stern, 1917

In 1918 Director Mather appointed Charles P. Punchard Jr. to fill the role of the National Park Service's first landscape engineer (or park designer). A major challenge for Punchard was to convey the philosophy of harmonization and landscape preservation to the superintendents who made decisions for each park. Mather and Punchard were informed and involved in the issues and proposals for development at each park. The parks had advisory boards, commonly made up of local businesspeople, members of outing clubs, environmental clubs, and other park supporters, that also guided decisions on park development. In order to address improvements necessary at the parks, the NPS often utilized the services of prominent landscape architects outside the service.¹¹⁷ Hot Springs was no exception, as local business people, Mather, and landscape architect Jens Jensen were all involved in providing guidance for future development.

In November 1918 Stephen T. Mather visited Hot Springs Reservation and ordered that a "*large quantity of tulip, hyacinth and narcissus bulbs*" be planted along the Reservation front for its "*beautification and general appearance during the months when the greatest number of tourists visit Hot Springs.*"¹¹⁸ The following month, noted landscape architect Jens Jensen visited the park at the request of Director Mather. Jensen directed the park regarding the layout of the bulbs ordered by Mather (9,930 tulip, 4,000 narcissus and 1,500 hyacinth bulbs).¹¹⁹

In 1927, Frank A. Kittredge became the chief engineer of the National Park Service. Kittredge brought extensive experience in building park roads to the position and played a major role in the nation park road program. The primary control over the aesthetic and protective concerns related to road construction continued to be addressed by the landscape architects. Therefore, the engineering division and the landscape architecture division worked collaboratively to design roads and trails that were harmonious with the natural setting of each park.¹²⁰

¹¹⁷ McClelland, 136 and 157; *Reports of the Department of the Interior for the Fiscal Year Ending June 30, 1919*.

¹¹⁸ Park, 1918.

¹¹⁹ Park, *Hot Springs National Park Superintendent's Monthly Report*, 9 January 1919. Jensen was at the park on 7 December 1918; also McClelland, 382; and correspondence from William H. Tishler to Brenda Williams, 14 August 2006. In addition to directing the planting of bulbs, he met with local representatives and "...offered valuable suggestions in the line of landscape work for the Reservation and city generally, which were well received and highly appreciated." Jensen and Mather were good friends. In 1913, Jensen and Mather were two of the three members of the Prairie Club's Conservation Committee. Jensen, Mather, and Harold Ickes (who became secretary of the interior in 1933) were all founding members (in 1913) of the Chicago Chapter of the Friends of Our Native Landscape, an organization focused on preserving natural landscapes in the Midwest.

¹²⁰ McClelland, 189-190.

Study Area, Landscape Characteristics, 1912-1930

The park continued to address issues related to runoff from the mountains during storms. To avoid flooding of Central Avenue and control storm waters from North Mountain headed toward Central Avenue, a four by three foot concrete storm sewer was installed at Canyon Street in 1925. Also in 1925, a sewer pipe was laid in the creek arch to replace the deteriorating tile drain installed in 1886.

Management of the campground at Gulpha Gorge was transferred to the park in 1924. Improvements included a well and pumphouse, electricity, enlargement of the existing swimming pool, large new changing booths, a community house with laundry facilities, a comfort station, caretaker cabin, roads and a bridge. Picnic grounds and campsites for tent and trailer camping increased the recreational opportunities available within the park.¹²¹

This period saw intense interest, development, and use of the mountain roads and trails within the park. Comfort stations, shelter houses, and pavilions were built on Hot Springs, North, and West Mountains, and the observatory at Hot Springs Mountain was rebuilt. Beautification of the landscape during this period is well documented. Trees, shrubs, wildflowers, and groundcovers were planted to beautify the overall appearance of the park. Greenhouses and a plant nursery were built for propagation of plants to be used within the park. Plants were also used as screens for unappealing elements.¹²² The lawns, sidewalks and streets were also improved.

¹²¹ Superintendent's Annual and Monthly Reports. *Hot Springs National Park Superintendent's Monthly Report*, 2 November 1924: "...wild flower seeds scattered on the mountains..."

¹²² See Bolten, *Hot Springs National Park Superintendent's Monthly Report* and Bolten, *Hot Springs National Park Superintendent's Annual Report* for 1925. An example includes the planting of Creeping Ivy along the mountain side at the old Arlington Hotel site, along the walls of the reservoirs, and behind the Bathhouses to "beautify spots."

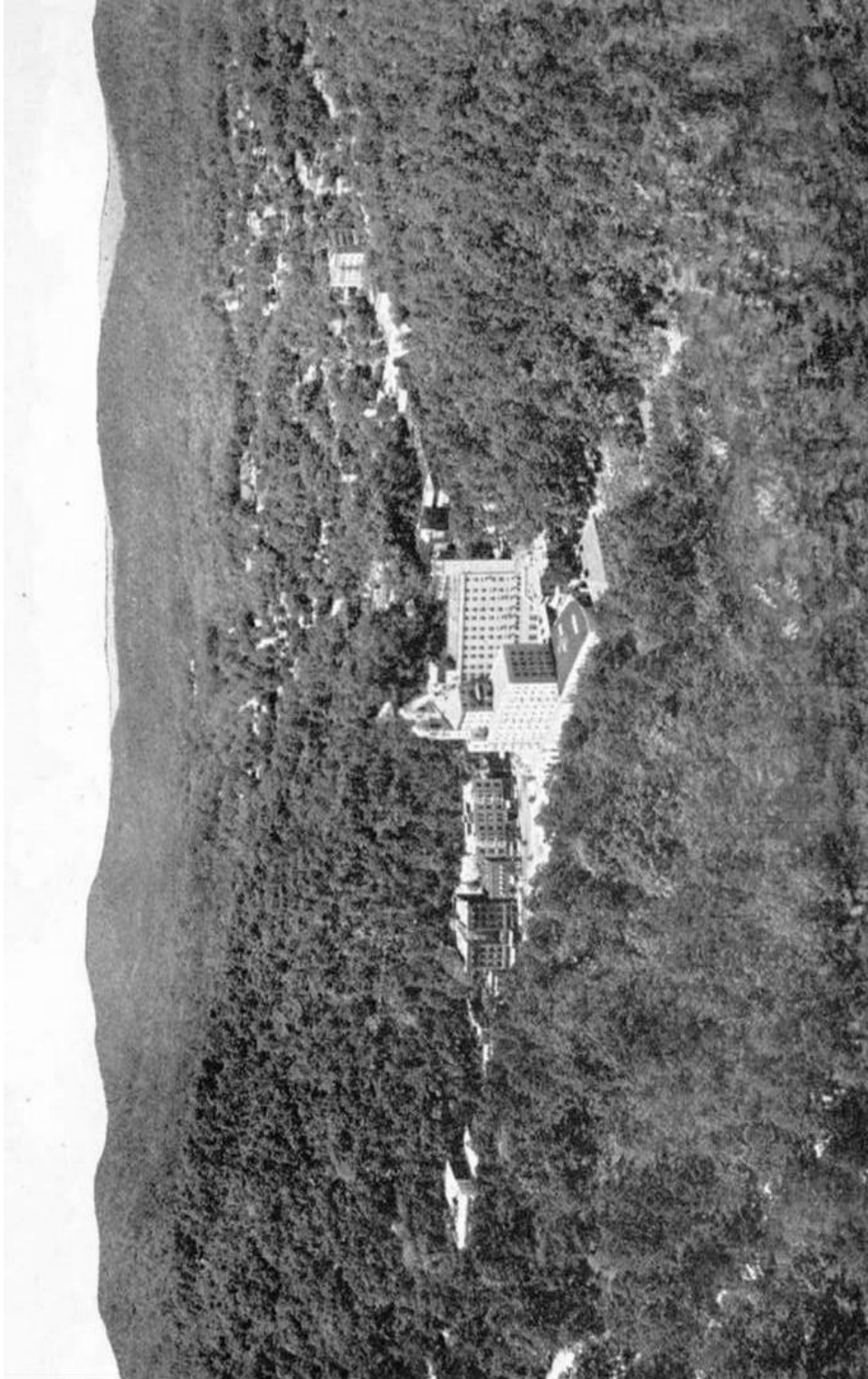


Figure 2-118: View of Arlington Hotel and Hot Springs from Observation Tower, ca. 1927-28
(source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819723)

Bathhouse Row, Landscape Characteristics, 1912-1930

The designation of the reservation as a national park ushered in the final phase of building construction culminating in the architectural character of Bathhouse Row today. During this period major changes to the buildings within the park impacted the overall landscape design. As current bathhouse lease terms came to an end, the Department of the Interior required substantial improvements to be made, in order for the leases to be renewed. To meet the requirements for fire resistance and sanitation, many old buildings were removed and replaced with new structures. As the bathhouses were replaced or expanded, and the former Victorian cooling tanks were removed, some were replaced with new cooling tanks in the 1920s.

In September 1914 the old electric light poles were removed from the Reservation front.¹²³ By 1918 the park saw increased pedestrian and automobile traffic, causing some concerns. That summer signs were placed at the Formal Entrance to the Mountain Sidegrounds warning that automobiles were prohibited from using the roadway.¹²⁴

In November 1914 concrete sidewalks were installed in front of Bathhouse Row and between the Ozark and Buckstaff bathhouses. Flower bulbs including Dutch hyacinths, tulips, narcissus and jonquils were planted in beds and in December twelve Magnolia trees were planted on the reservation. A 180 foot long by three foot high by one foot thick wall was constructed in the “ravine” on Hot Springs Mountain behind the Maurice Bathhouse.¹²⁵

During this period the vegetation of Bathhouse Row was formally arranged with rectilinear lawn terraces edged by pruned hedges. In addition, shade trees and ornamental trees lined the sidewalk along the Reservation front. The first major planting of Magnolias at the Reservation occurred in 1914. Maples were planted in the lawn surrounding the Government Free Bathhouse. By 1917 a privet hedge bordered the walkway along Bathhouse Row and “summer” ornamental plants and flowers were distributed throughout the area in the spring.¹²⁶

By the fall of 1918, a box hedge was present on both sides of the sidewalk along Bathhouse Row from the superintendent’s office to the Arlington Hotel. The hedge was enclosed by green stakes and wire to “prevent persons getting off street cars or crossing from the opposite side of the street to the Reservation from crossing the lawn between the curb and the outside of the concrete walk along the Reservation front.” The stake and wire treatment was also extended along the “entrance walks” from the street to the Reservation front.¹²⁷ The “white way” light poles were painted pea green and the bases were painted bronze green in September.¹²⁸

¹²³ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 3 October 1914.

¹²⁴ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 2 August 1918.

¹²⁵ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 5 December 1914 and 8 January 1915.

¹²⁶ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 3 April 1917 and 3 May 1917.

¹²⁷ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 8 November 1918.

¹²⁸ Park, *Hot Springs National Park Superintendent’s Monthly Report*, 8 October 1918.

Concrete walks were built from the Main Promenade (Bathhouse Row) to the new Comfort Stations flanking the Quapaw Bathhouse. In March, 1924, shrubs were planted in front of the comfort stations as directed by Mann and Stern. The plants included Chinese Arbor Vitae, Amorence Privet, Wax Plants, Barberry, English Juniper, and Japonies.¹²⁹ In November additional shrubs were planted along Bathhouse Row and at the Superintendents office and in February 1925 twenty crepe myrtle shrubs were planted at the grounds of the Government Free Bathhouse.

Most of the buildings currently present on Bathhouse Row were constructed or completed during this period.

1. *Maurice Bathhouse*, rebuilt 1911, opened 1 January 1912, remodeled 1915, previously Independent Bathhouse
2. *Buckstaff Bathhouse*, built 1911, opened 1 February 1912, replaced the Rammelsberg
3. *Arlington Hotel*, rebuilt 1913, burned down 1923
4. *Third Arlington Hotel*, built 1924, new site off government property
5. *Hale Bathhouse*, south wing added, rebuilt 1914, Classical Revival (the new wing utilized a site that was designated, but never used for a bathhouse, but the Victorian Hale used more of that site than the new building)
6. *Fordyce Bathhouse*, built 1914-1915, replaced the Palace Bathhouse
7. *Superior Bathhouse*, rebuilt 1915, opened 16 February 1916, replaced the first Superior Bathhouse
8. *Government Free Bathhouse*, removed 1921 (Sharon's review notes indicate it was demolished in 1922 – the new Government Free Bathhouse opened on Reserve and Spring Streets)
9. *Ozark Bathhouse*, rebuilt 1922
10. *Quapaw Bathhouse*, built 1922, replaced Horseshoe and Magnesia (the two sites were merged)
11. *Removal of Most of the Cooling Towers*, created more open landscape between buildings on Bathhouse Row.
12. *Women's and Men's Comfort Stations*, built 1923
13. *Lamar Bathhouse*, rebuilt 1923
14. *Greenhouse near Cold Spring Pavilion*, built 1924

Small Scale Features, Bathhouse Row, 1912-1930

- *Electric Lights*, installed 1914 along Bathhouse Row. Fifteen ornamental steel cluster lights (with five globes on each pole) were erected on Bathhouse row. The lighted area was called the "white way."
- *Curbs*, reconstructed along Bathhouse Row promenade sidewalk.
- *Fence*, built 1925, along Bathhouse Row to protect lawn beneath magnolia trees.
- *Fountains Present:*
 - *John W. Noble Fountain*
 - *Exedra Fountains (North and South)*
 - *Shell Fountain*

¹²⁹ Bolten, *Hot Springs National Park Superintendent's Monthly Report*, 3 April 1924. The plant Japonies is not familiar. It may be a type of rose or other shrub.

- *Hoke Smith Fountain*
- *Ornamental Tufa Fountain*, installed behind the Maurice Bathhouse in 1912
- *Major Harry M. Hallock Fountain (formerly Alum Spring Pavilion)*, removed 1921
- *Maurice Spring Fountain*
- *Stevens Fountain*



Figure 2-119: Superior Bathhouse, 1916, newly opened (source: Hot Springs National Park)



Figure 2-120: Bathhouse Row photograph by Jens Jensen, 1918 (copyright The Morton Arboretum, hot_springs-1) *need to obtain permission to reproduce
Note the first Lamar Bathhouse on the right, canopy trees, shrubs, sidewalk and ornamental light posts and fixtures.



Figure 2-121: Women's Comfort Station, ca. 1920s (source: Hot Springs National Park)



Figure 2-122: Hale Bathhouse (1915-1938) (source: Hot Springs National Park)



Figure 2-123: Noble Fountain, ca. 1925 (source: Hot Springs National Park)



Figure 2-124: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181977



Figure 2-125: Central Avenue looking north toward Arlington Hotel, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819718)



Figure 2-126: Central Avenue Looking North, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181971)

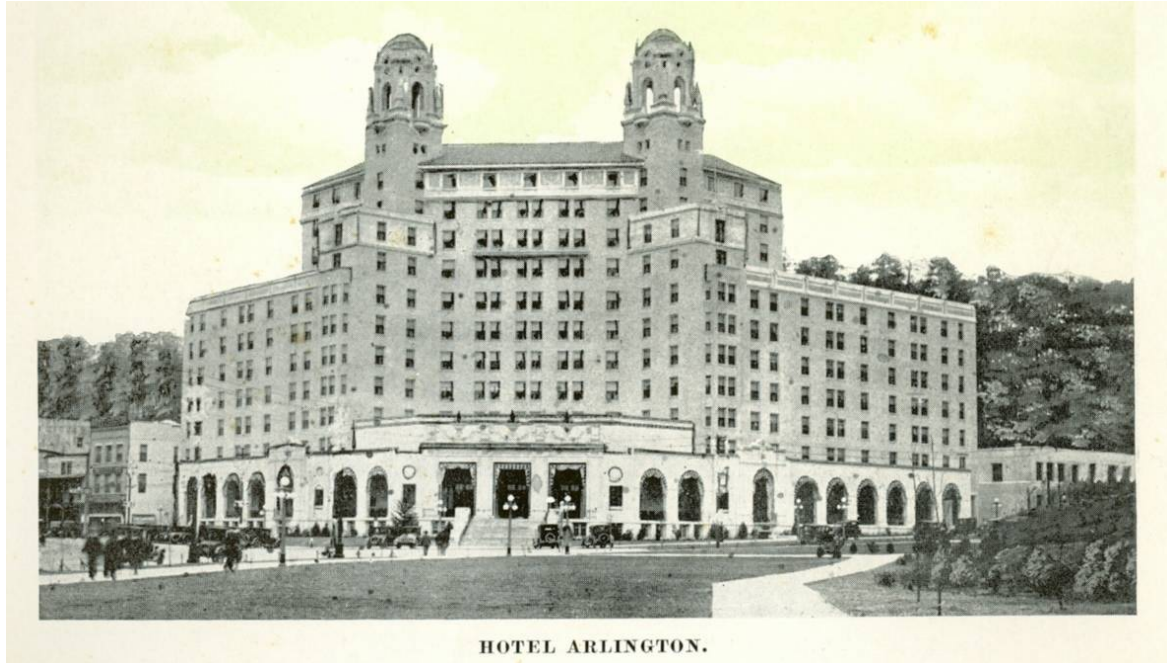


Figure 2-127: Hotel Arlington, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181973)



Figure 2-128: U. S. Army and Navy General Hospital, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819730)



Figure 2-129: Quapaw Bathhouse, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181975)



Figure 2-130: Hale Bathhouse, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181976)



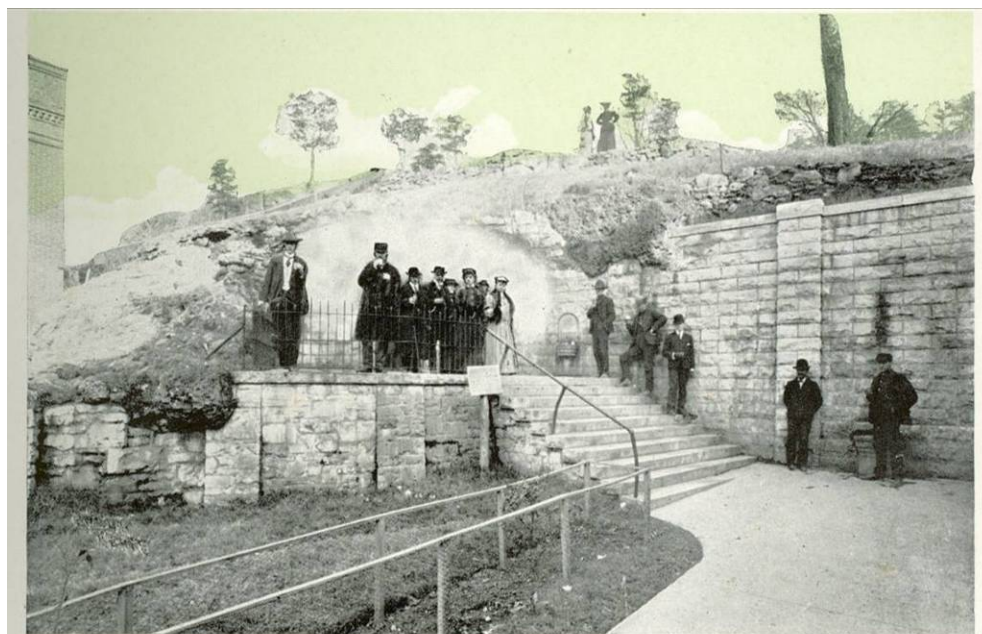
OZARK BATH HOUSE.

Figure 2-131: Ozark Bathhouse, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819711)



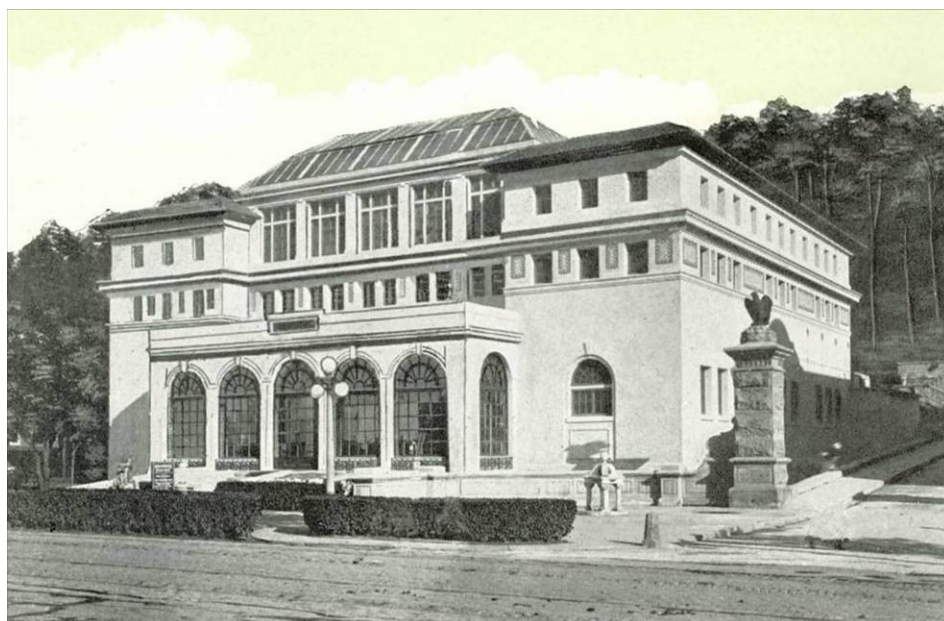
LAMAR BATH HOUSE.

Figure 2-132: Lamar Bathhouse, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819714)



DRINKING HOT WATER AT MAURICE SPRING.

Figure 2-133: Maurice Spring, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819717)



THE MAURICE BATH HOUSE.

Figure 2-134: Maurice Bathhouse, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819724)



CENTRAL AVENUE, LOOKING NORTH.

Figure 2-135: Central Avenue looking north, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819726)

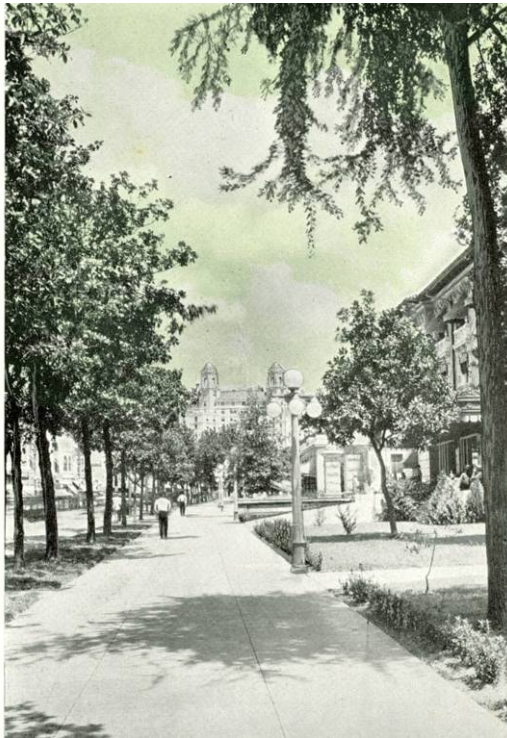
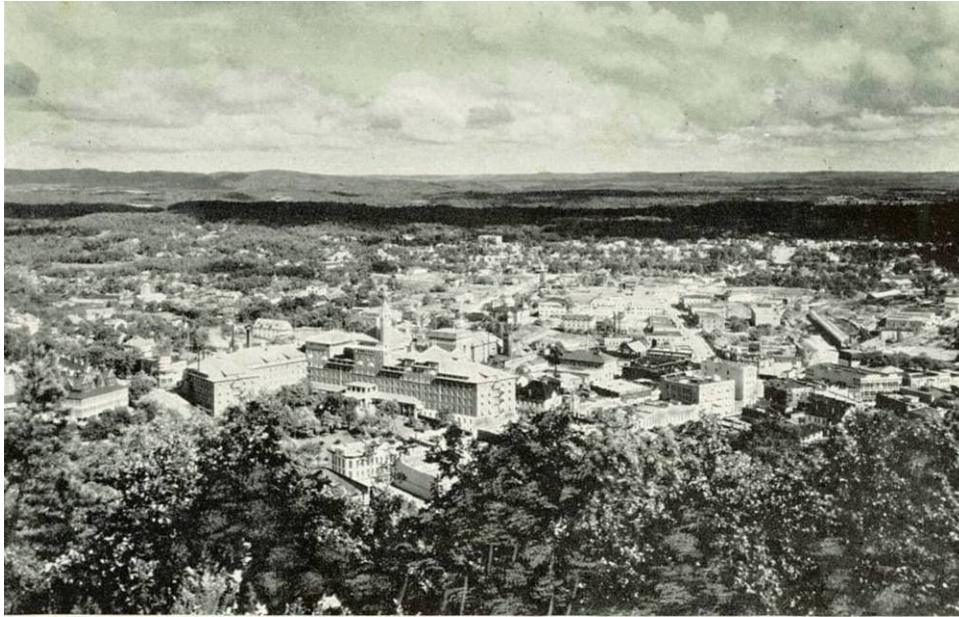


Figure 2-136: Bathhouse Row Promenade looking north toward the Arlington Hotel, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819727)



BIRD'S-EYE VIEW OF HOT SPRINGS, FROM WEST MOUNTAIN.

Figure 2-137: View of Hot Springs from West Mountain, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819732)

Formal Entrance, Landscape Characteristics, 1912-1930

In 1915 the entry and sidewalk at the Formal Entrance were paved. This change led to a more finished character for the site.



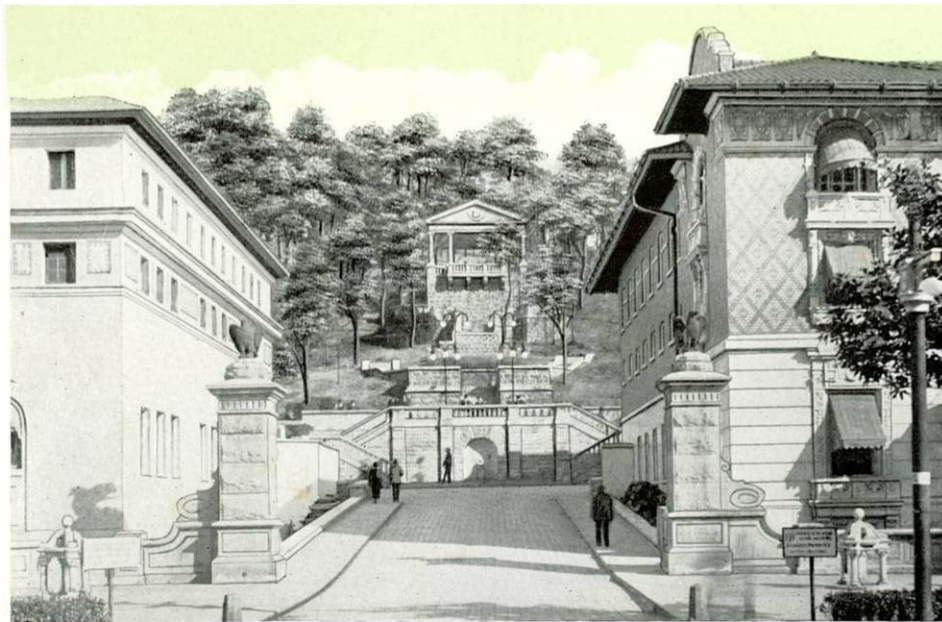
Figure 2-138: Formal Entrance, 1915 before paving (source: Hot Springs National Park)



Figure 2-139: Formal Entrance, October 1915 (source: Hot Springs National Park)



Figure 2-140: Formal Entrance, photograph taken by Jens Jensen, 1918 (copyright The Morton Arboretum, hot_springs-9) *need to obtain permission to reproduce



ENTRANCE TO GOVERNMENT RESERVATION

Figure 2-141: Formal Entrance, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819712)

Arlington Lawn, Landscape Characteristics, 1912-1930 (former Arlington Hotel Site)

During this period, the park at Arlington Lawn was created. After the second Arlington Hotel burned down in 1923, the third Arlington Hotel was constructed in 1924 across Fountain Street on private land, and the former hotel site became available for a landscaped park. A design for the park at Arlington Lawn was developed by Landscape Engineer Hill.¹³⁰ In the fall of 1924 landscape improvements were implemented, including the construction of a concrete walk, gravel walks, and planting of ornamental plants including a border of southern crepe myrtle installed along the concrete walk. These were the first landscape improvements associated with the establishment of Arlington Lawn as a park.¹³¹

In the area surrounding the superintendent's residence, twenty rose bushes were planted. These plants were transplanted from "various parts of the park."¹³² The fire that destroyed the second Arlington Hotel also claimed a nearby greenhouse that was used to provide winter shelter for tropical plants (including banana trees) that were used to enhance the plantings along Bathhouse Row. A replacement greenhouse was built in 1924.¹³³

Beginning in 1924, pedestrian circulation at Arlington Park was accommodated by several concrete sidewalks. Primary access was provided via the sidewalk that extended between Central Avenue and Bathhouse Row; it continued along Fountain Street to the northeast. A secondary, parallel sidewalk ran along the base of the slope from the northeast corner of the Superior Bathhouse northward toward Fountain Street. Four crosswalks connected the secondary sidewalk with the Bathhouse Row sidewalk: one located at the northern end of the Superior Bathhouse (entrance #5); a second aligned with the northern end of the reservoir; a third at the intersection of Central Avenue and Fountain Street, and the fourth at Fountain Street aligned with one of the entrances to the Arlington Hotel. The sidewalks defined the Arlington Lawn landscape as a formal lawn/park. Before 1930 a trail from the intersection of the secondary sidewalk and crosswalk #3 to the Mountain Sidegrounds was installed roughly in the location of the current Lower Tufa Terrace Trail.

The most prominent vegetative feature during this period is the mown lawn bordered by the sidewalks. In addition, shrubs and flowers were located along the base and slope of the tufa outcrop. Also, a few small shrubs were planted at the intersection of the Arlington Lawn sidewalk and the sidewalk from the intersection of Central Avenue and Fountain Street.

A hot spring water reservoir was present in the Arlington Lawn landscape directly north of the Superior Bathhouse (see figure 2-143 and 2-144). The building was set back from Central Avenue, near the back of the bathhouse, taking advantage of a jog in the slope to help diminish its visual impact on the overall appearance of the park. The one-story rectangular building had a low profile.

¹³⁰ Bolten, *Hot Springs National Park Superintendent's Monthly Report*, 2 August 1924.

¹³¹ Bolten, *Hot Springs National Park Superintendent's Monthly Report*, October 1924, also 2 November 1924.

¹³² Bolten, *Hot Springs National Park Superintendent's Annual Report for 1924*.

¹³³ Ibid.

In 1916 an embankment/retaining wall behind the second Arlington Hotel (now Arlington Lawn) was constructed, and summer blooming flowers were planted (see figures 2-143 and 2-144 and the Period of Change Map, 1912-1930).¹³⁴ The "Tufa Rock" was renamed the DeSoto Rock after it was dedicated and a plaque installed in 1932. Street lights matching those along Bathhouse Row were located along the Central Avenue edge of the Arlington Lawn.



Figure 2-142: Arlington Lawn, Central Avenue and Hot Springs Mountain facing south, ca. 1927-28, with annotations (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181972)

¹³⁴ Hot Springs National Park Superintendent's Monthly Report, 4 May 1916.

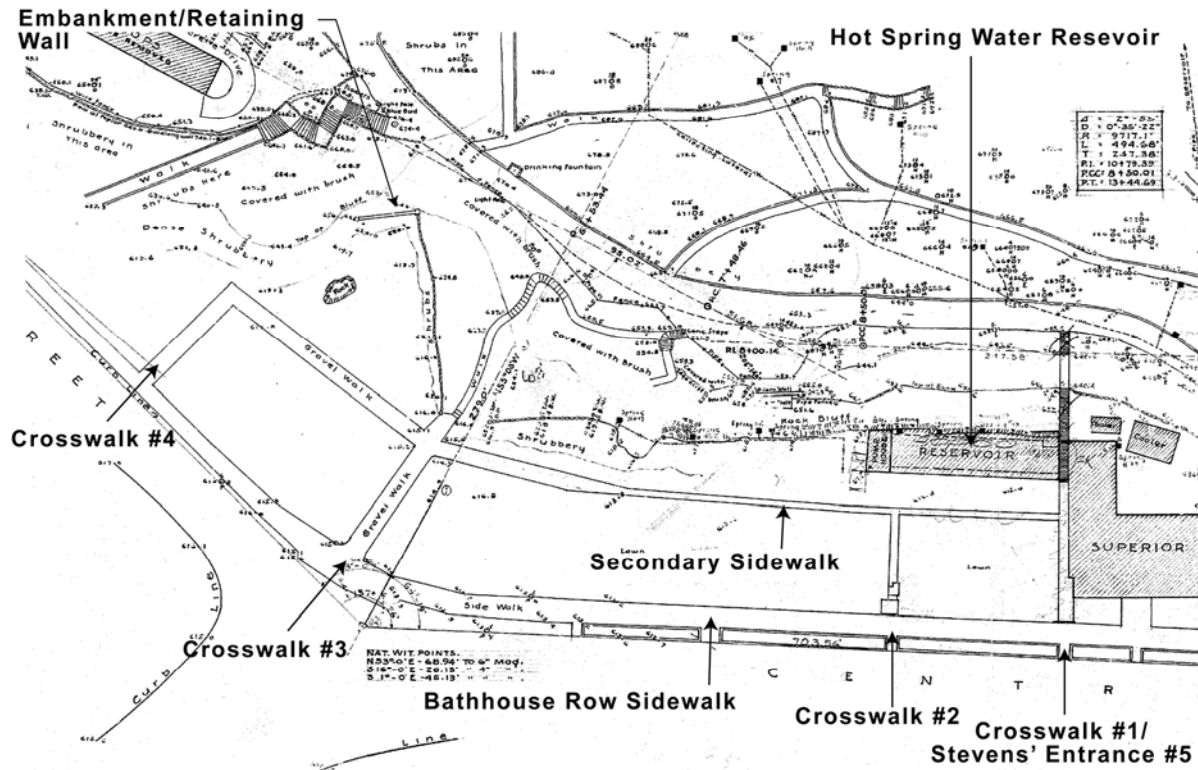


Figure 2-143: Arlington Lawn Plan, ca. 1924-1930 Survey field work by J.G. Cross, drawn by McDaniel, with annotations (source: Denver Service Center 128-6008A, card scanner 2958005 page 2)

Mountain Sidegrounds/Grand Promenade, Landscape Characteristics, 1912-1930

The Mountain Sidegrounds and the area that is currently the Grand Promenade served several purposes during this period. The promenade was not yet in place, and the bathhouse supply road occupied the linear corridor behind (on the east side of) the bathhouses. The road was used by service and supply vehicles. Its eventual use as a pedestrian/recreational corridor was foreshadowed as the supply road, particularly the northern portion near the Arlington Hotel, was also a popular walking and bridle path. The bottom portion of Hot Springs Mountain Drive defined the eastern edge of the Mountain Sidegrounds and provided similar recreational opportunities to visitors. The area north of the Arlington Hotel, between Fountain Street and Hot Springs Mountain Road, contained a plant nursery operated by the park. It was used to supply ornamental vegetation for the park.

At the end of this period an extensive thermal water collection and distribution system was constructed. Designed by National Park Service engineer J. B. Hamilton, it was put into place in 1930-1931. The old brick spring boxes (part of the 1902 collection and distribution system) were replaced and large reservoirs were constructed. Extensive trenching was required to install new pipes, and old spring boxes that no longer serviced active springs were buried.¹³⁵ In 1914, over 1,500 linear feet of pipe were installed to irrigate plants on Hot Springs Mountain.

In 1925, trees were planted along the walks at the Fountain Street Superintendent's residence to beautify the site, and around the barn, to screen it from view. Also, three greenhouses were built near the park barn and terraces were built on the mountain side adjacent to the greenhouses to serve as areas for propagation of hedges and other plants.

During this period, the Mountain Sidegrounds contained three general types of vegetation. Beginning at the south end near Reserve Street and moving toward the north, the area at the southern end was mostly open lawn terraces with scattered vegetation. The removal of the Government Free Bathhouse opened up the views and opportunities for vegetation in this area. Immediately north of the Formal Entrance, the vegetation included shade trees and lawn in the level and gently sloping areas. The areas with steep slopes contained a groundcover of ivy. Continuing to the north, the vegetation increased in density, including clusters of trees and shrubs with lawn and vines as groundcover. The northernmost portion of the Mountain Sidegrounds included dense woodland and steep slopes.

¹³⁵ Shugart, government review comments: One buried spring box was struck and damaged during trenching in 2001 because the spring was no longer included on modern maps.



Figure 2-144: "Hot Springs on Hot Springs Mountain," ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819719)



SCENE ON HOT SPRINGS MOUNTAIN

Figure 2-145: Path and Stone Steps at Mountain Sidegrounds, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819720)



Figure 2-146: Service Drive behind Bathhouse Row, Photograph by Jens Jensen, 1918
(copyright The Morton Arboretum, hot_springs-8) *need to verify permission



Figure 2-147: Pleasure Drive and Foreground Park, Hot Springs Mountain Sidegrounds, ca. 1924 (the second Arlington Hotel is visible on the left); tinted photograph postcard (source: HOSP 3490)



Figure 2-148: "Driveway on Hot Springs Mountain" tinted photograph postcard, ca. 1924
(source: HOSP 4120)



Figure 2-149: Tufa Rock, at Base of Hot Springs Mountain, from Arlington Hotel Portico,
tinted photograph postcard, date (source: HOSP 4124)

Hot Springs Mountain, North Mountain, and West Mountain, Landscape Characteristics, 1912-1930

From the beginning of January to the end of March in 1915, over 1,360 linear feet of rubble stone mortared retaining walls, two foot high and one-foot thick were built on Hot Springs Mountain. In addition, stone and concrete gutters were constructed along Hot Springs Mountain Road in the following locations: above and below “Lover’s Lane” and below the Observation Tower. In the ravines on the west slope of the mountain 2,048 square feet of concrete bottom and 1,885 cubic feet of rubble stone retaining wall were installed.¹³⁶ In 1914 thermal spring water was piped from the Army-Navy cooling tanks of cooled thermal water to the Pagoda Shelter and a drinking fountain was installed.

The trail systems within the park became more established and emphasized as a part of the overall health regime during this period. On Hot Springs Mountain, the Oertel System of Graduated Exercise designated trails based on their level of difficulty. Four levels of difficulty were identified on the map and prescriptions were given to patients for the trails they should use.

A “Horseback Guide to Indian Trails” was published after Stephen T. Mather’s visit to the park (in 1916-17). A plan prepared in 1915 indicates alignments of trails and roads along Hot Springs Mountain and also illustrates the stone drainage channels. Trails to Happy Hollow and the Goat Rock were constructed, along with the steps and bench at Goat Rock.

In 1916 a road was built from the summit of North Mountain down the north slope to Ramble Street. The West Mountain roadway was opened to automobiles on 22 February 1916. It quickly became very popular, leading to additional maintenance requirements.¹³⁷

From 1924 through 1926 improvements were made to the roads on Hot Springs and North mountains. New trails were constructed, including one that led from the ridge road on North Mountain to the Goat Rock Trail; another led from the Switchback Trail to Hot Springs Mountain footpaths; and a trail from the Hot Springs Mountain Tower to the Dead Chief Trail. By 1927, Hot Springs and North Mountains included nine trails: Dogwood, Arlington, Magnesia, Seal, Switchback, Shortcut, Dead Chief, Iron Springs, and Goat Rock.

Pedestrian circulation on West Mountain was improved with the implementation of several projects. In 1924 concrete steps were constructed near the Exchange Street entrance to provide better access to the trail at this steep embankment. By 1927 there were three trails in place on West Mountain including the Whipporwill Trail, the Sunset Trail, and the Angel’s Flight Trail. In 1928 the High Point Trail (now called the Mountain Top Trail) was completed, providing a route for horses and pedestrians between the Prospect entrance and the Whittington Avenue entrance. A trail connecting the road with the Hawthorne Trail was completed in 1928.

Changes to the buildings and structures on Hot Springs, North, and West Mountains during this period included updates, maintenance, and cosmetic improvements to existing structures. In addition, several new structures were constructed.

¹³⁶ *Hot Springs National Park Superintendent’s Monthly Report*, 10 February 1915; 5 March 1915; 9 April 1915.

¹³⁷ *Hot Springs National Park Superintendent’s Monthly Report*, November 1918.

Hot Springs and North Mountains

- *Pagoda Shelter Sign*, installed as a warning of the legal consequences of vandalism at the Pagoda Shelter.
- *Drinking Fountain on Hot Springs Mountain*, installed 1914 at the pavilion.¹³⁸
- *Hot Springs Mountain Observatory Road*, 1920 the road to the tower was rebuilt.
- *Hot Springs Mountain Observatory*, 1926 structural and cosmetic improvements included strengthening and tightening the tower's cross rod braces to eliminate sway, and cosmetic improvements including the application of stucco to the brick walls.
- *Greenhouse*, built 1924
- *North Mountain Shelter House*, built 1927 of native stone and heavy timbers
- *Hot Springs Mountain Stone Shelter House*, built 1929 (at junction of zigzag trail leading to the tower and the trail from the footpaths on Hot Springs Mountain).
- *Drinking Fountains*, installed 1929, four in all including three in the area of the Mountain Sidegrounds and one midway between the street and the tower.

West Mountain

- *West Mountain Stone Shelter Pavilion*, built 1924
- *West Mountain Stone and Timber Shelter House*, constructed 1927
- *West Mountain Stone Comfort Station*, completed 1928
- *West Mountain Stone Shelter House* (overlooking Majestic Hotel), completed 1929

In 1924 wildflower seeds were scattered on the mountains. In 1928 cedars, hollies, and pines were planted on the slopes of West Mountain in locations where vegetation had been lost.¹³⁹

¹³⁸ Shugart, *Pagoda Pavilion Summary*.

¹³⁹ *Hot Springs National Park Superintendent's Annual Report*, 1924 and 1928. The report does not indicate how the vegetation was lost, however given the history of landslides on that road that is the probable cause of vegetation loss.

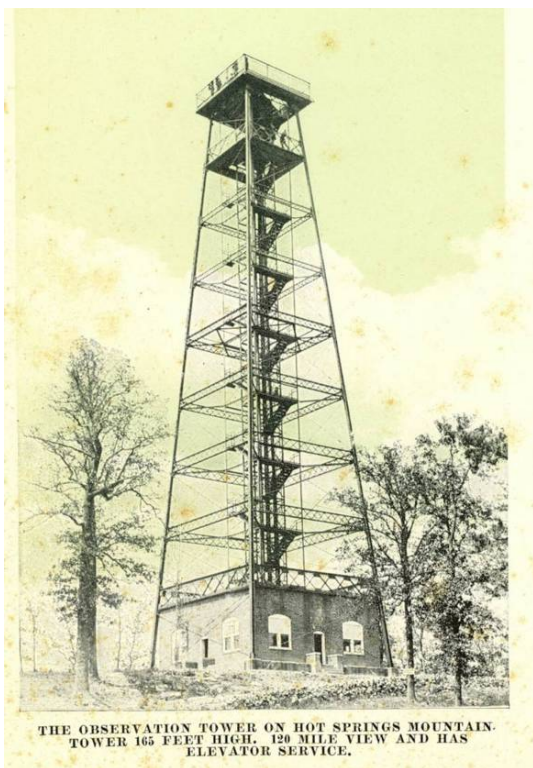
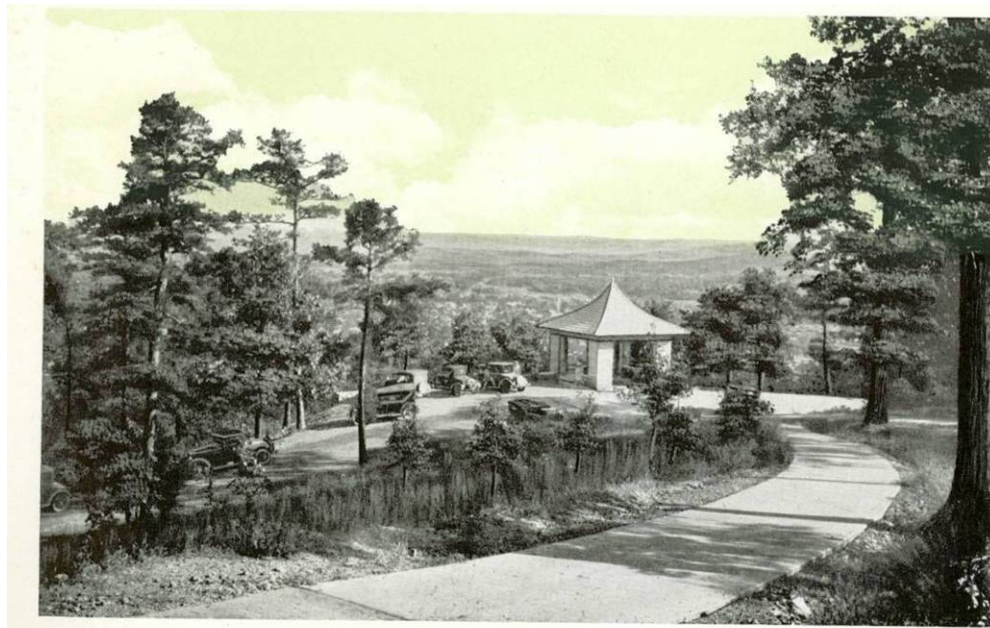


Figure 2-150: Hot Springs Mountain Observation Tower, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819734)



Figure 2-151: Hot Springs Mountain Tower Pump House, ca. 1915 (source: HOSP 1713)



THE SUMMIT OF HOT SPRINGS MOUNTAIN

Figure 2-152: Pagoda Shelter at the Summit of Hot Springs Mountain, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 181974)



Figure 2-153: A trail on Hot Springs Mountain, 1915 (source: HOSP 1978)



Figure 2-154: Hot Springs Mountain Road photograph by Jens Jensen, 1918 (copyright The Morton Arboretum, hot_springs-6)



HOT SPRINGS MOUNTAIN DRIVE.

Figure 2-155: Hot Springs Mountain Drive, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819722)

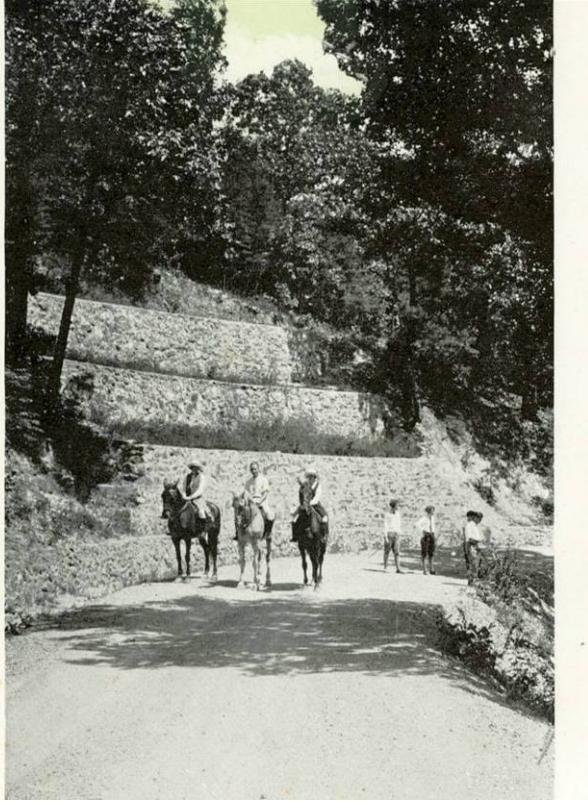


Figure 2-156: West Mountain Drive, ca. 1927-28 (source: Booklet titled "Picturesque Hot Springs National Park, Arkansas" published by E. L. Glass of Hot Springs, HOSP 1819728)

Happy Hollow/Fountain Street, Landscape Characteristics, 1912-1930

The area around Fountain Street was known as Happy Hollow during this period. A brochure describing “Indian Trails” in the park includes an illustration of Stephen Mather at the park with the “famous” Happy Hollow in the background. The buildings that were located in Happy Hollow at this time were of log construction. In September 1915, 3,400 linear feet of rubble stone retaining wall (two-foot high by eighteen inches thick) with 4,000 linear feet of three-foot wide gutter was constructed in Happy Hollow along Fountain Street.¹⁴⁰

In 1924 a new trail was constructed between the Magnesia Spring in Happy Hollow and the Hot Springs Observation Tower. A trail from Happy Hollow Road (Fountain Street) to the back of the new Arlington Hotel was constructed in May, along with branch trails. In 1927 Fountain Street was paved.

Improvements to the landscape around the assistant superintendent’s residence on Fountain Street included the construction of a concrete service road (60’ long by 8’ wide) behind the park barn in 1925 and the transformation of the barn into a garage and shop in 1926. An addition was made to the greenhouse in 1925 and three terraces were built on the adjacent slope to provide areas for plant propagation.

Whittington Park (Whittington Lake Reserve), Landscape Characteristics, 1912-1930

In 1913 several projects involved improvements to Whittington Park. Stone retaining walls were built along the creek banks, grading and implementation of lawn was conducted and various species of vegetation were planted in the park.¹⁴¹ Problems with drainage must have continued. In 1914 a four foot wide by thirty-five foot long culvert was installed in the park and attached to the city sewer system; and in May of 1915, 200 linear feet of 18” drain tile was installed in the park to alleviate surface drainage problems.¹⁴²

In 1920 a rock wall was constructed in front of the cold water spring on Whittington Avenue, opposite the entrance to the park.¹⁴³ In 1928 the High Point Trail (now called the Mountain Top Trail) across West Mountain was completed. The trail provides a route for pedestrians and horses from the Prospect entrance of West Mountain to the Whittington Avenue Entrance. The main change to this area during this period was the removal of the bandstand in 1932.

¹⁴⁰ Hot Springs National Park Superintendent’s Monthly Report, 4 October 1915.

¹⁴¹ Hot Springs National Park Superintendent’s Monthly Report, January 1913 and February 1913.

¹⁴² Hot Springs National Park Superintendent’s Monthly Report, 2 June 1914 and 10 June 1915.

¹⁴³ Hot Springs National Park Superintendent’s Monthly Report, 5 August 1920.

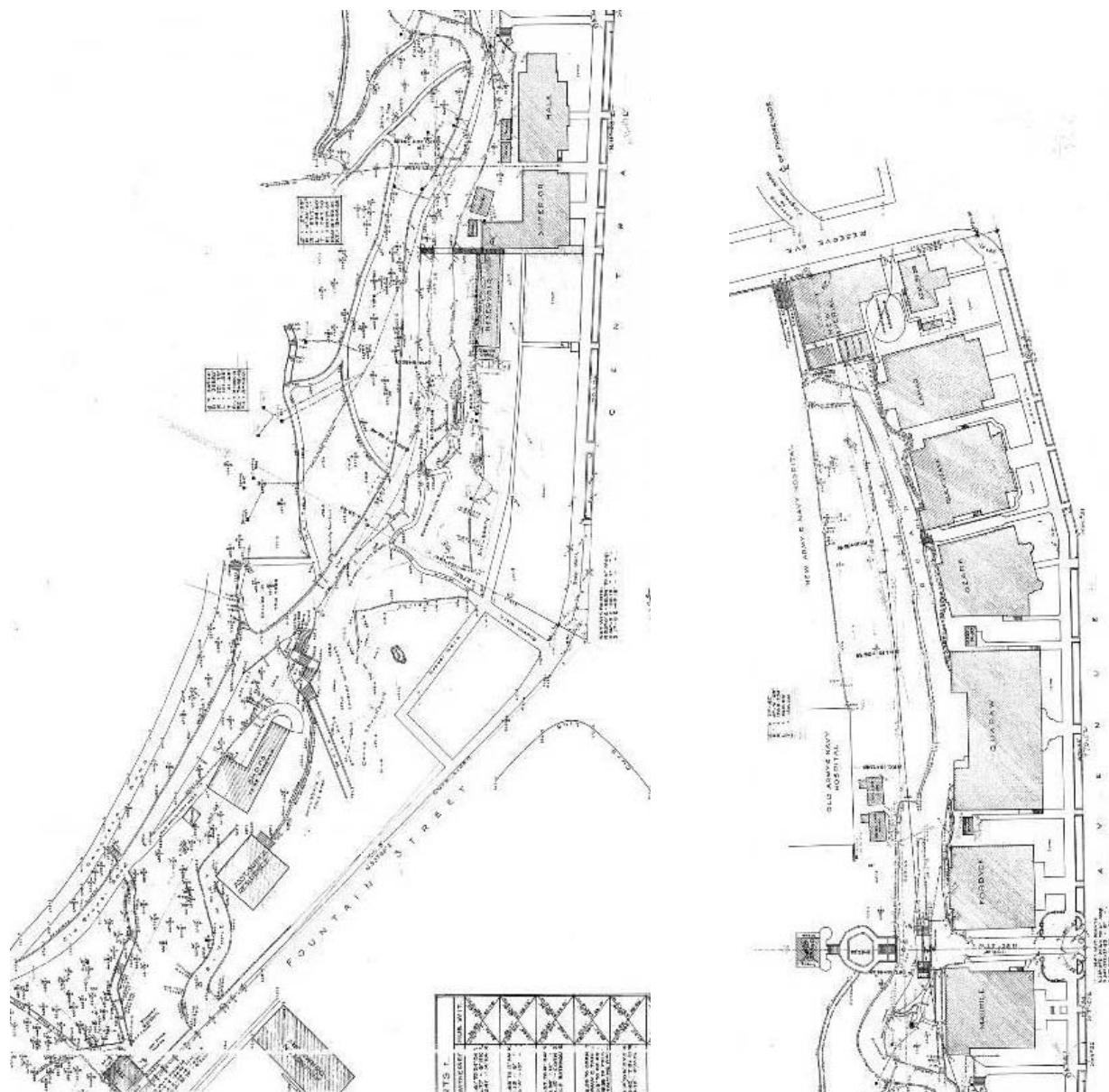


Figure 2-157: Survey with notations, ca. 1924-1930, Survey field work by J.G. Cross, drawn by McDaniel (source: Denver Service Center 128-6008A, card scanner 2958005 page 1)

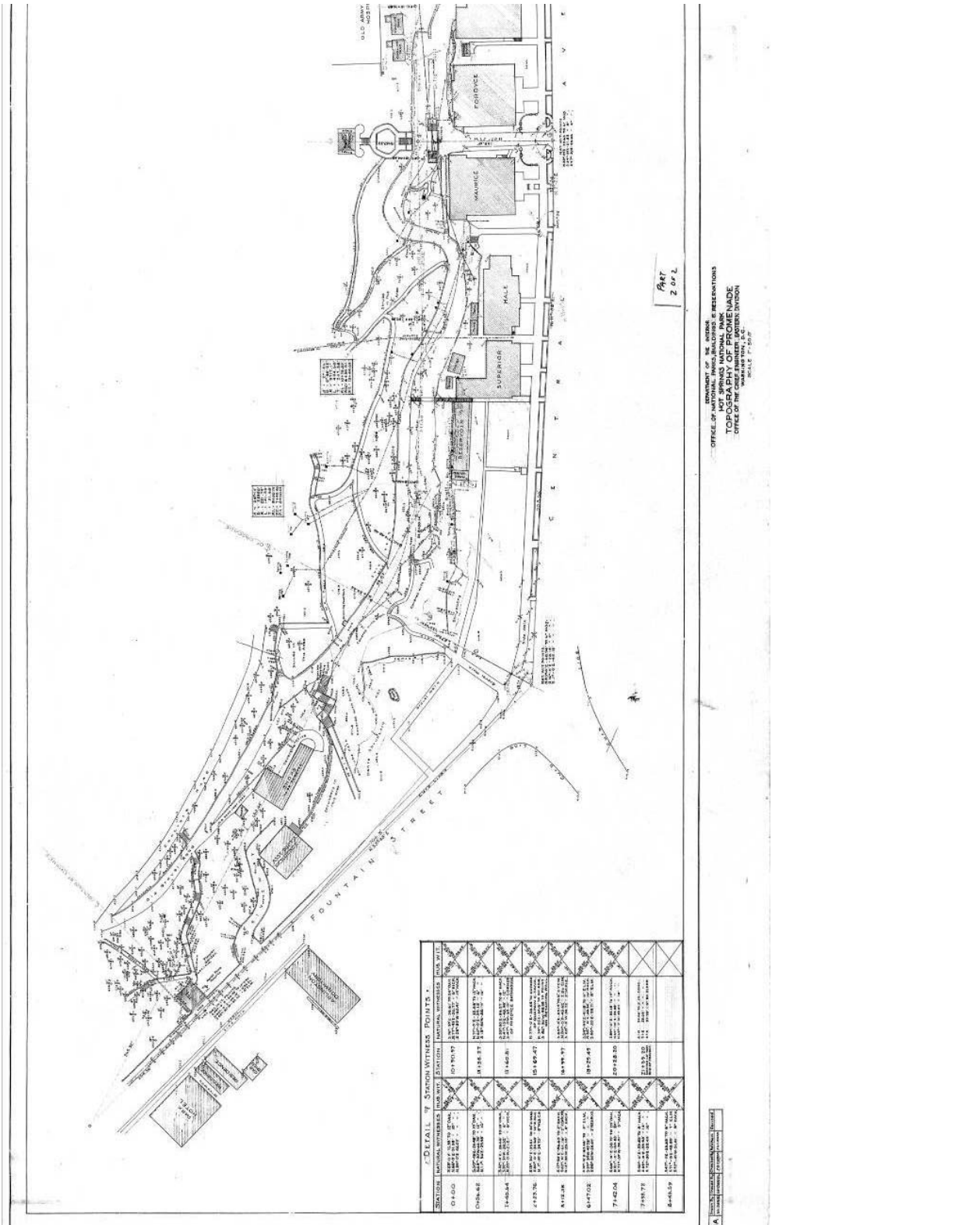


Figure 2-158: Survey with notations, ca. 1924-1930, Survey field work by J.G. Cross, drawn by McDaniel (source: Denver Service Center 128-6008A, card scanner 2958005 page 2)

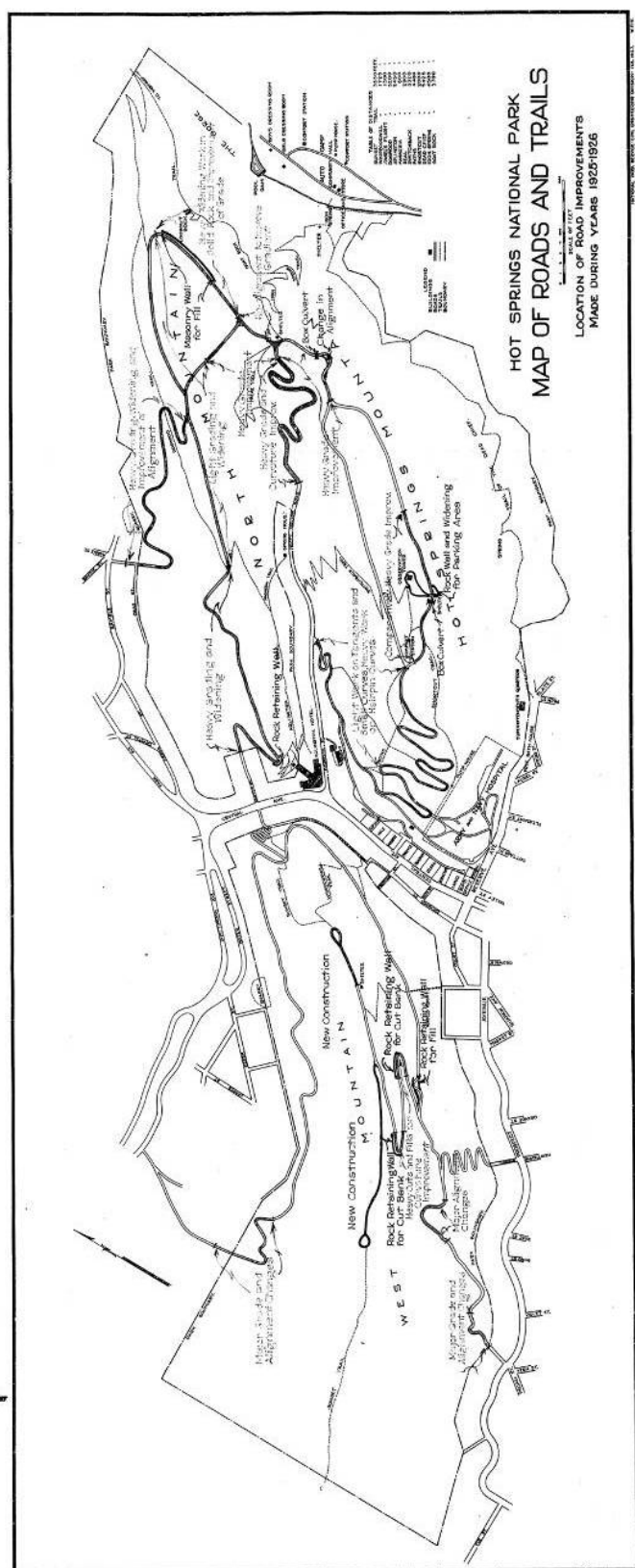


Figure 2-159: 1925 roads and trails 128-60569

10-174
(May 1929)

Hot Springs National Park

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PERIOD ENDED July 31, 1926

DAY LABOR — CONTRACT

CONSTRUCTION UNIT COST REPORT

ACCOUNT NO. 501 - 502 - 503 - 994

PROJECT Road Improvements

CONTRACT NO. _____ DATE OF APPROVAL _____

CONTRACT COMPLETION DATE _____

CONSTRUCTION COST UNITS		ANALYSIS OF COSTS				QUANTITIES		TOTAL ESTIMATED				
Name	Type	Work Done This Period	Station to Station	Percent Complete	Labor	Material & Supplies	Indirect Charges	Totals This Period	Totals to Date	Unit Costs	Quantity	Cost
HOT SPRINGS MOUNTAIN ROADS												
201.1 Engineering								770.40				
201.2 Construction								15850.20				
201.3 Graveling								1593.88				
201.4 Miscellaneous, Graveling, Graveling & Improvements												
NORTH MOUNTAIN ROADS												
202.1 Engineering								515.72				
202.2 Construction, Force Acct.								11608.62				
202.3 Graveling Force Acct.								1502.39				
202.4 Miscellaneous, Graveling, Graveling and Improvements												
WEST MOUNTAIN ROADS												
203.1 Engineering								650.71				
203.2 Construction, Force Acct.								15589.17				
203.3 Graveling Force Acct.								1308.79				
203.4 Miscellaneous, Graveling, Graveling and Improvements												
NEW CONSTRUCTION, WEST MOUNTAIN ROAD												
204.1 Engineering								283.86				
204.2 Construction, Force Acct.								117.89				
204.3 Clearing & Light Grading												
Storehouse												
Construction Cost Total												
Construction Engineering (Field Headquarters)												
Survey (Field Headquarters)												
Total Cost of Project to Date												
Less Retained Percentage (Contract)												
Expenditures to Date												
Estimated Cost Engineering (Estimate)												
Estimated Total Cost												

REMARKS: Gravel Surfacing 30 to 40 depth
Hot Springs Mountain - 9450 ft. Surfaced - 20 ft. width
North Mountain 1050 " " " " 10,000 ft. Surfaced 16" wide
West Mountain 15500 " " " " 16-20 " "

See attached map for location of improvements.

* Contract payments will include the Retained Percentage

RESIDENT ENGINEER
SUPERINTENDENT

SHEET 2 OF 2 125/62563

Figure 2-160: 1926 Cost Estimate for improvements to roads and trails (source: 128-60560)

Following Pages

Figure 2-161: Study Area, Period of Change Plan, 1912-1930

Figure 2-162: Reservation Front, Period of Change Plan, 1912-1930

Legend

- Hot Springs Creek
- Road
- Building
- Mountain Roads
- Mountain Trails
- Railroad
- Trolley

Project Study Area (Present-Day Park Land, Paths and Roads)Location of Reservation FrontWhittington ParkEventual Location of Gulpha GorgeArmy and Navy Hospital Complex

Sources

Hot Springs National Park Superintendent's Monthly Reports.

Map of Roads and Trails, DSC 128-60569, 1925.

Map of Roads and Trails, DSC 128-514, 1927.

Notes

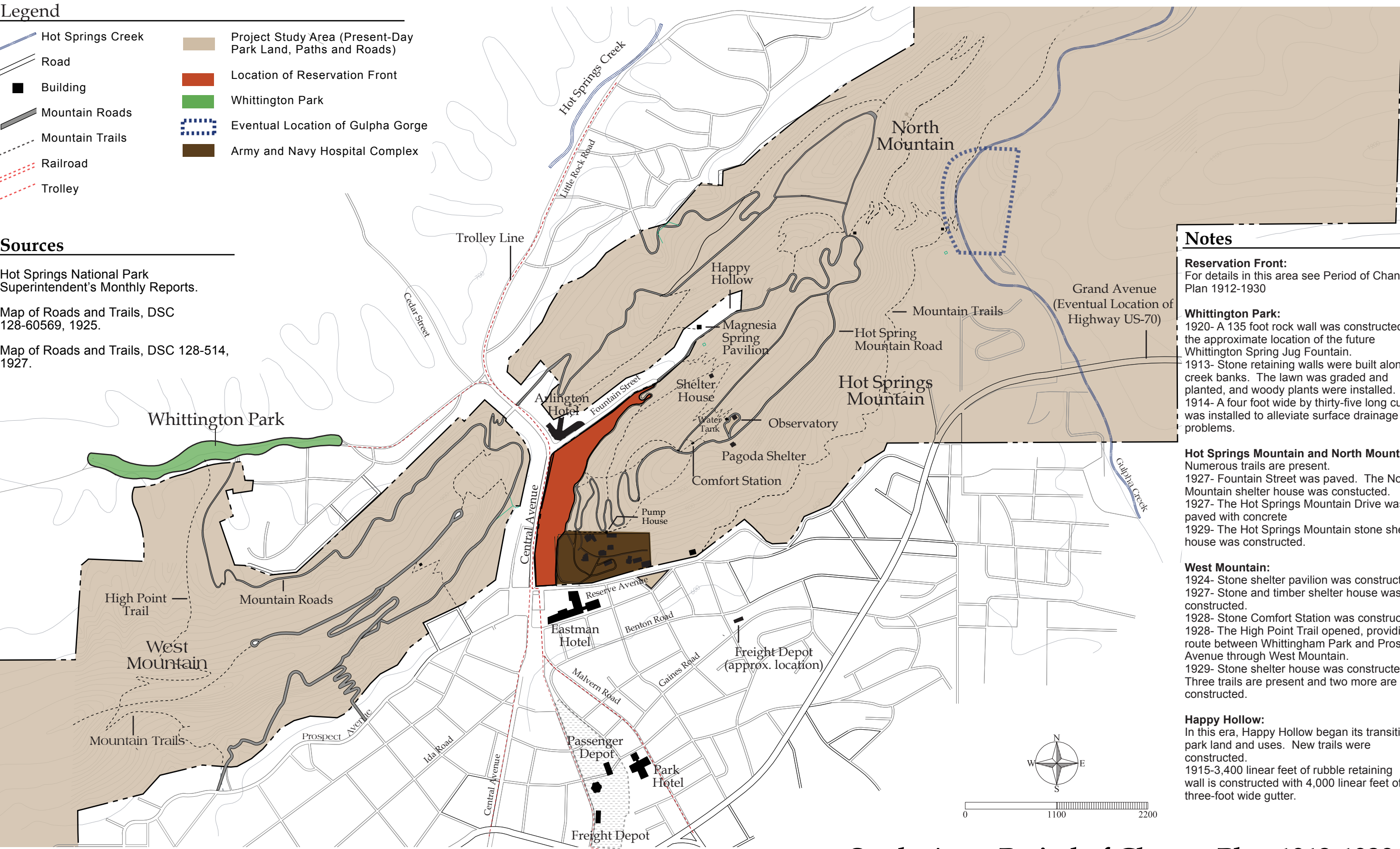
Reservation Front:
For details in this area see Period of Change Plan 1912-1930

Whittington Park:
1920- A 135 foot rock wall was constructed at the approximate location of the future Whittington Spring Jug Fountain.
1913- Stone retaining walls were built along the creek banks. The lawn was graded and planted, and woody plants were installed.
1914- A four foot wide by thirty-five long culvert was installed to alleviate surface drainage problems.

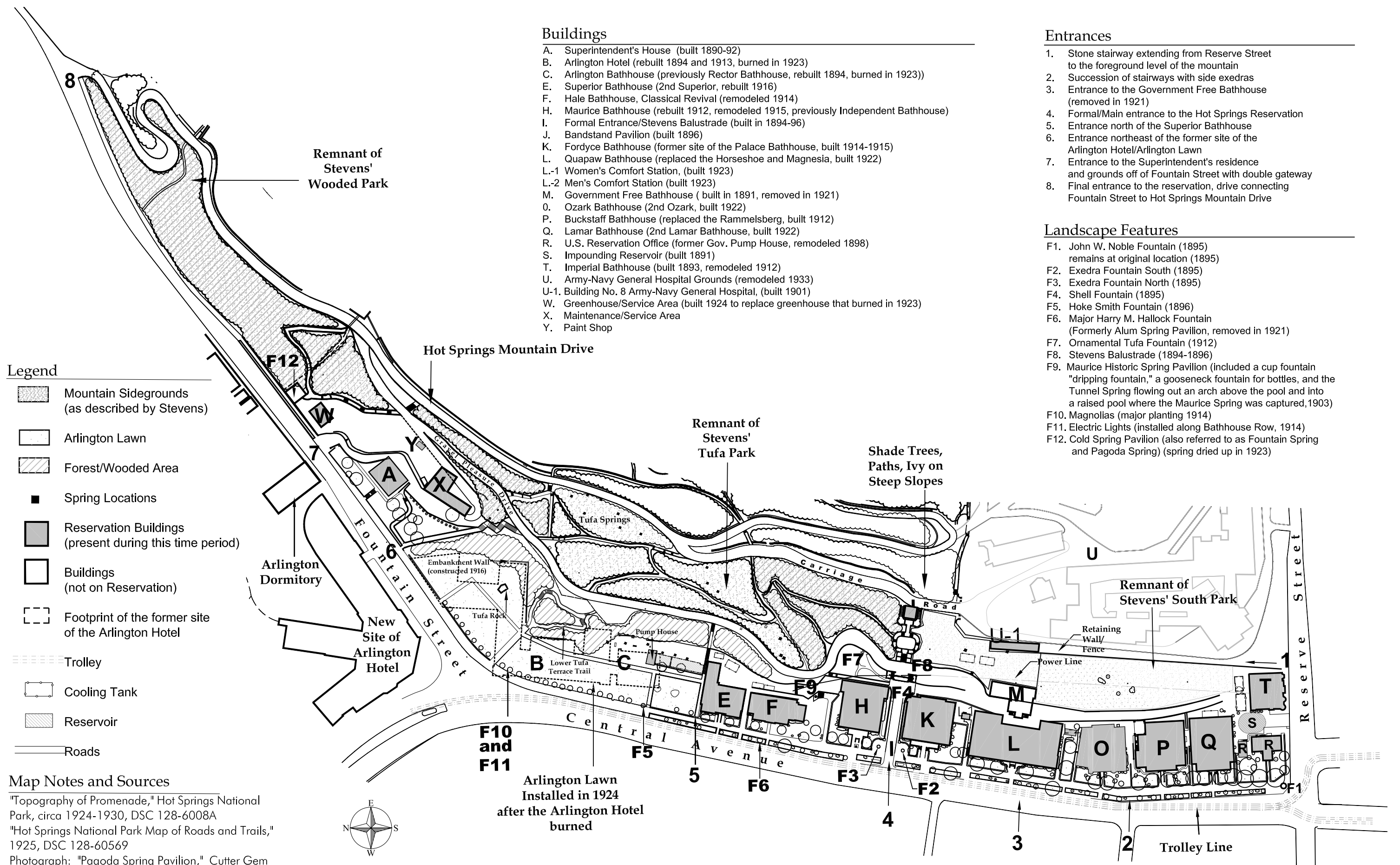
Hot Springs Mountain and North Mountain:
Numerous trails are present.
1927- Fountain Street was paved. The North Mountain shelter house was constructed.
1927- The Hot Springs Mountain Drive was paved with concrete
1929- The Hot Springs Mountain stone shelter house was constructed.

West Mountain:
1924- Stone shelter pavilion was constructed.
1927- Stone and timber shelter house was constructed.
1928- Stone Comfort Station was constructed.
1928- The High Point Trail opened, providing a route between Whittingham Park and Prospect Avenue through West Mountain.
1929- Stone shelter house was constructed. Three trails are present and two more are constructed.

Happy Hollow:
In this era, Happy Hollow began its transition to park land and uses. New trails were constructed.
1915-3,400 linear feet of rubble retaining wall is constructed with 4,000 linear feet of a three-foot wide gutter.



Study Area, Period of Change Plan 1912-1930



Reservation Front, Period of Change Plan, 1912-1930

Hot Springs National Park

Depression-era Landscape Projects, 1931-1940

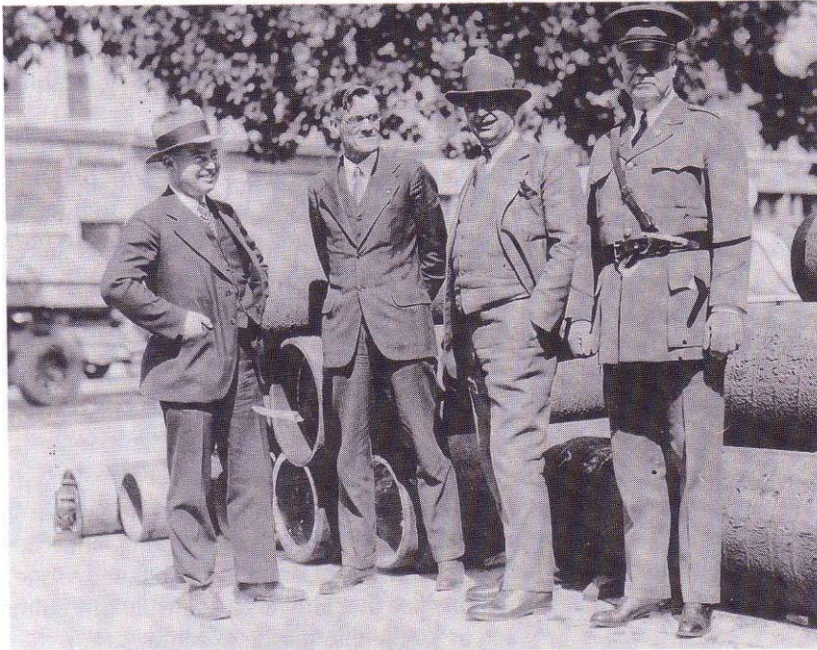


Figure 2-163: NPS chief landscape architect Thomas Vint, far left, at a construction site in Hot Springs National Park, 1931, (source: Carr, 1998, 192, Courtesy National Park Service Historic Photographic Collections, Harpers Ferry Center). The men pictured are likely standing at a location along Bathhouse Row, with the business district of downtown Hot Springs in the background. Second from the right is Assistant Director Arno Cammerer. Dr. George L. Collins, park superintendent, is between Vint and Cammerer.

During this period, the now well established National Park Service “Landscape Division” design office in San Francisco was headed by landscape architect Thomas Vint. The landscape division and the engineering division, headed by Frank A. Kittredge, were equals under the umbrella of the “Field Headquarters.” These offices influenced several major projects at Hot Springs including: the original design of the Grand Promenade; the design of a unified collection, cooling and distribution system for the hot spring water; and the replacement of the administration building. Although the projects were not all implemented during this period, their designs affected the development of the park landscape and were all eventually completed.

The execution of some of these projects, as well as others, utilized Public Works Administration (PWA) funds and labor. In May 1933, a Civilian Conservation Corps (CCC) camp, NP-1, was established at Hot Springs National Park.¹⁴⁴ The camp was located on rented

¹⁴⁴ Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History*, 183 and Wirth, *Parks, Politics and the People*, 149. CCC camps NP-1 (occupied during period 1 and part of period 2 from 1 June 1933 to 31 March 1934) and NP-2 (occupied during periods 14, 15, and 16

private land. The CCC crew worked at the park for six months, and then was replaced with local labor through the Civil Works Administrations (CWA). The CCC and CWA crews implemented improvements at Gulpha Gorge Campground (see Appendix A: Gulpha Gorge Campground Culutral Landscapes Inventory). In 1935, Camp Garraday was built by the Federal Transient Bureau adjacent to the Gulpha Gorge Campground.

In 1939, a CCC work camp opened at Lake Hamilton. One half of the camp resources were allocated to improvements for Hot Springs National Park while the rest went toward Game and Fish commission projects. At Hot Springs the crew improved mountain roads and trails, landscaped the creek in Whittington Park, and prepared and stored materials.¹⁴⁵

Although not located within the park boundary, the construction of the Army and Navy Hospital became a major visual element behind and above the southern end of Bathhouse Row. The hospital opened in October of 1933. The large, prominent building is situated on a hill to the east of Bathhouse Row in the vicinity of the South Park. The massive scale of the structure has a strong visual effect on the southern portion of the Reservation Front.

Study Area, Landscape Characteristics, 1931-1940

The CCC and CWA crews worked on trail maintenance, construction of a ridge trail connecting West and Sugar Loaf Mountains (a portion of the Sunset Trail), erosion control, forestry activities, and excavation for the Grand Promenade behind Bathhouse Row. Public Works funds were used for several projects at Gulpha Gorge Campground including excavation for a swimming pool and dam, construction of a wall along the creek bank, and laying out the camp sites. Other projects were funded by PWA funds including the construction of utility buildings on Whittington Avenue in 1933/1934 (now the Maintenance Complex), construction of an administration building, reconstruction of West Mountain roads, and the start of the formal Promenade. A sewage disposal system for the city was also authorized with the Federal government responsible for 27.5% of the total cost through a PWA allotment.¹⁴⁶

Bathhouse Row, Landscape Characteristics, 1931-1940

In 1938 the trolley tracks on Central Avenue were removed. The canopy trees along Bathhouse Row were maturing – their larger size and now double line of trees defined the three-dimensional space of the linear corridor. Hedges and short walls also helped to define the landscape as a series of formal spaces. In October 1936 a hedge replaced the stone wall from the north entrance pylon to the Maurice Bathhouse lawn (the matching wall in front of Fordyce Bathhouse had already been removed at an unknown date). In 1939 the site around the Hale Bathhouse was landscaped.

Changes to buildings and structures during this period included the construction of an administration building in 1936, the demolition of the Imperial Bathhouse in 1937 to make way

from 1 October 1939 to 31 March 1941) were located at Hot Springs National Park. Their exact locations are not clear.

¹⁴⁵ Patrow, *Hot Springs National Park Superintendent's Annual Report, 1940*.

¹⁴⁶ Allen, *Hot Springs National Park Superintendent's Monthly Reports, June through December, 1933*.

for the southern entrance to the Grand Promenade, and renovations to the Hale Bathhouse and landscape. Although not located on the National Park Service property, additions to the Army and Navy Hospital Complex impacted Bathhouse Row, due to the large scale of the hospital and the spatial relationship between the complex and Bathhouse Row. The massive scale of the main hospital building, and the dominating presence of the entire complex on a rise directly above the southern end of Bathhouse Row, gave the complex a high level of visibility in the valley.

Changes to small scale features also affected the appearance of Bathhouse Row during this period. In 1932 a jug fountain was installed at the Reserve Street curb marking the southern entrance to Bathhouse Row. In June 1933 the overhead utility lines along Bathhouse Row were removed and either buried or concealed on lower portions of buildings. A display fountain was installed in front of the new Administration Building in 1936.



Figure 2-164: Superior Bathhouse, ca. 1934 (source: Hot Springs National Park)



Figure 2-165: Formal Entrance and Maurice Bathhouse, 1934 (source: Hot Springs National Park)



Figure 2-166: Formal Entrance and Maurice Bathhouse, 1938 (source: Hot Springs National Park)



Figure 2-167: Ozark Bathhouse on Bathhouse Row, ca. 1934 (source: Hot Springs National Park)



Figure 2-168: Lamar Bathhouse at Bathhouse Row, ca. 1938 (source: Hot Springs National Park)



Figure 2-169: Ozark Bathhouse at Bathhouse Row, ca. 1942-1949 (source: Hot Springs National Park)

Formal Entrance / Stevens Balustrade, Landscape Characteristics, 1931-1940

No major changes were made to the Formal Entrance/Stevens Balustrade during this period.

Arlington Lawn, Landscape Characteristics, 1931-1940

The area above and north of Arlington Lawn changed with the removal of several buildings during this period. Buildings removed included the park greenhouse, maintenance shops, and paint shop. The deletion of the buildings opened views between the Wooded Park, the Arlington Hotel, and Arlington Lawn. In addition, the area became available for increased outdoor recreation near Bathhouse Row. In 1933 the greenhouse was replaced with horseshoe pitching courts, and a small garden was also added nearby.

Mountain Sidegrounds / Grand Promenade, Landscape Characteristics, 1931-1940

The Grand Promenade was designed by the National Park Service in the early 1930s. Implementation began in 1933, when the southern-most portion was constructed. This was added to with a small brick plaza in 1937. The proposed alignment (see Figure 4-7) of the Grand Promenade generally followed the Bathhouse Supply Road / Pleasure Drive along the eastern side of the bathhouses from Reserve Street north to a location east of the Arlington Lawn. From there, it curved slightly before continuing to the northeast. The design included a wide brick paved path with a dynamic geometric pattern utilizing both red and cream colored bricks. The design included the linear corridor and four main nodes. On the south, a small plaza at Reserve Street served to provide a presence for Stevens entrance one, in the absence of the Imperial Bathhouse. At the Formal Entrance / Stevens Balustrade, the design indicated that the promenade should make four ninety-degree turns to accommodate an alignment similar to the then-existing Bathhouse Supply Road / Pleasure Drive. The most dramatic feature was intended for the Tufa Park in the area immediately to the east of Arlington Lawn. For this location two alternative designs were developed for an elaborate formal entrance including stairways, landings, railings, and a hardscape water cascade. The final node was located to the east of the then-existing Pagoda Pavilion. It was a simple circular area at the intersection of the Grand Promenade and a sidewalk from Fountain Street (see Figures 4-13 through 4-16, these figures will be moved to Chapter II for the final report).

The implementation of the Grand Promenade project caused some controversy. The then-present driveway along the route had a gravel surface and was used for strolling and as a pleasure drive, as well as a supply road for the bathhouses. Local opposition arose from those concerned with vehicular traffic conflicts on Central Avenue—the only road providing a direct route through the valley. Rather than a pedestrian corridor, it was felt that implementing a bypass for vehicular traffic in the area east of Bathhouse Row, or even possibly a parking lot, would help to alleviate congestion on Central Avenue. This concept would have severely impacted Bathhouse Row and the mountain sideground parks and was rejected. Plans were developed and adopted for a Grand Promenade as a pedestrian oriented recreational corridor.

Progress on the development of the promenade was slow. The grading for the first section of the Grand Promenade was completed in July 1935 and the Stevens Spring fountain was removed. A temporary pedestrian entrance at the southern end of the promenade was completed in August 1937. In 1938 a gravel walkway was built over the graded portion of the Grand Promenade route. Funding to complete the project was not obtained until 1956.

In 1936 a new administration building was finally constructed for the park, after many years of advocacy for the structure. Previously, the headquarters had been located in the superintendent's residence on Fountain Street and more recently in the converted pump house. The Imperial Bathhouse on Reserve Street was removed in 1937 to provide room for the southern entrance to the Grand Promenade. During 1931, a thermal display pool was made from two small hot springs. This feature is known today as the Display Spring. It is located behind the Maurice Bathhouse (see Period of Change Plan, 1931-1940).¹⁴⁷

¹⁴⁷ Allen, *Hot Springs National Park Superintendent's Annual Report*, 1932, 15.

Hot Springs, North, & West Mountains, Landscape Characteristics, 1931-1940

The roads and trails, shelters, observatory, and other features on Hot Springs, North, and West Mountains were popular visitor amenities and received maintenance during this period. From 1935 through 1940 West Mountain road was reconstructed, realigned, widened, and paved. The grading and construction proved problematic, and recurring slides drew out the construction for several years. The road was finally opened in 1940.

The Pagoda Shelter on Hot Springs Mountain was scheduled to be removed during this period. In 1937 Superintendent Libbey received permission to remove the structure due to its ongoing graffiti problems. It was deemed an “eyesore.” The structure, however, was never removed.¹⁴⁸

¹⁴⁸ Shugart, *History of the Pagoda Shelter*, Pavilions:1894-1937.2 Hot Springs National Park archives.

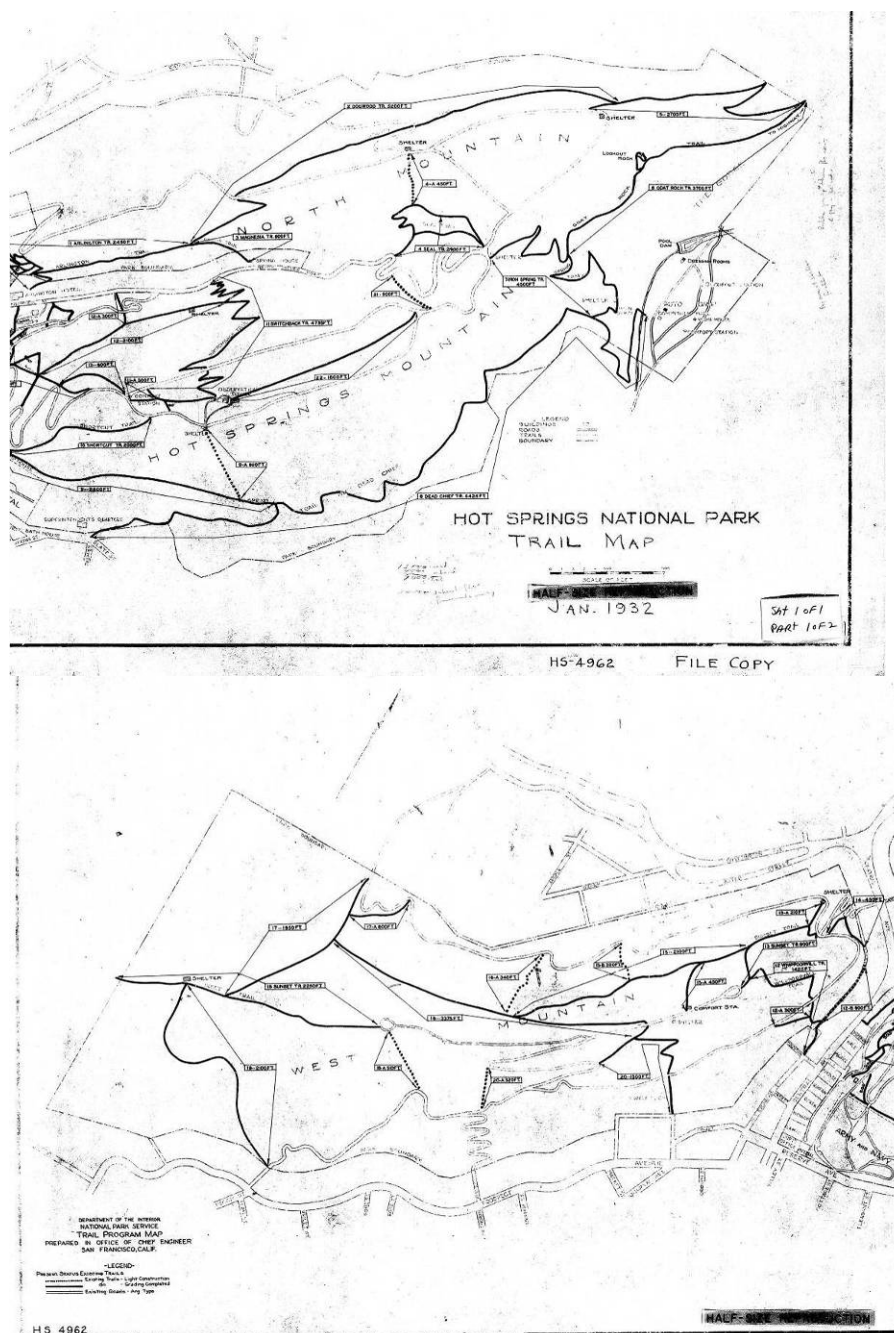


Figure 2-170: 1932 Trails (2 parts), HS 4962

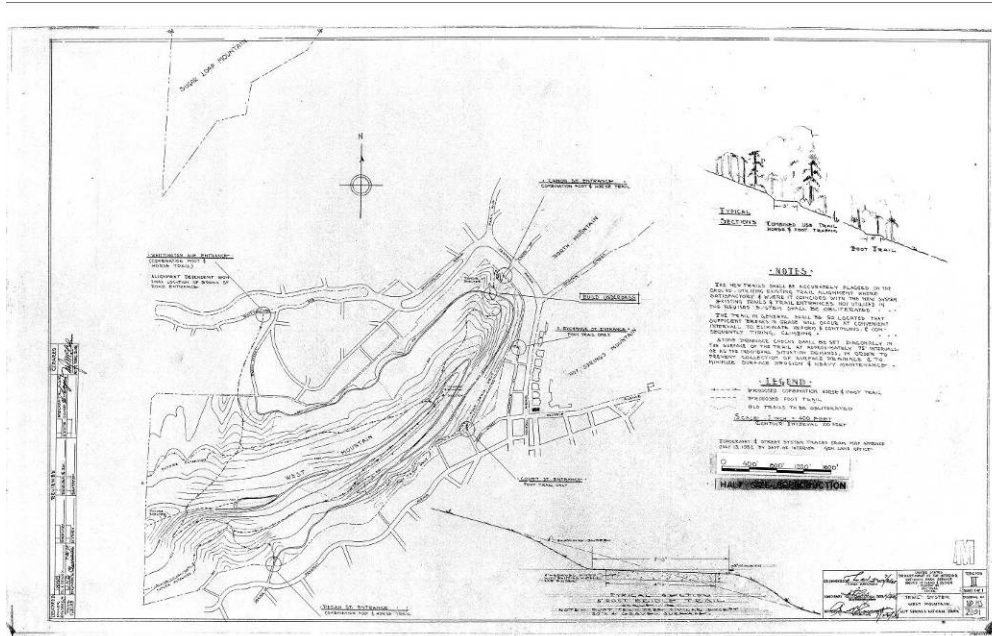


Figure 2-171: West Mountain Roads and Trails, 1938 (source: DSC 128-2051)



Figure 2-172: Hot Springs Mountain Roads, Tower, Formal Entrance, and Army and Navy Hospital Complex, between 1932 and 1935 (source: HOSP 2210)



Figure 2-173: Canon Street, Central Avenue to West Mountain, tinted photograph postcard view, date (HOSP 3271)



Figure 2-174: Horse drawn carriage on Hot Springs Mountain Road, ca. 1930s (source: HOSP 1408)



Figure 2-175: Hot Springs Mountain Drive, ca. 1930s (source: HOSP 1406) Note guardrail and bicyclist on right side of road shoulder.



Figure 2-176: Dogwood Trail, North Mountain, ca. 1930s (source: Hot Springs National Park)

Happy Hollow, Landscape Characteristics, 1931-1940

Documentation of Happy Hollow is very limited for this period. It appears that the former entertainment activities and businesses were fading away. It is not clear if the area

continued to provide housing for residents filling service jobs within the valley. The highly active and developed community of the earlier periods was being replaced with a landscaped park with trails. The Magnesia Spring Pavilion (also called the Pagoda Pavilion) was present on the eastern side of Fountain Street by the end of the period, providing a shaded resting spot for visitors to sip spring water.

Whittington Park, Landscape Characteristics, 1931-1940

During the winter of 1932 the largest of the Whittington Park bandstands was removed.¹⁴⁹ From 1933 to 1935, the park Maintenance Complex near Whittington Park was developed. In 1933 the Whittington Spring was discovered. In 1934 a concrete jug fountain was built at the sidewalk edge to provide access to the cold spring water in front of the maintenance building on Whittington Avenue. In 1938 the trolley tracks on Whittington Avenue and the overhead utility lines were removed.

¹⁴⁹ Allen, *Hot Springs National Park Superintendent's Monthly Report*, November 1932.

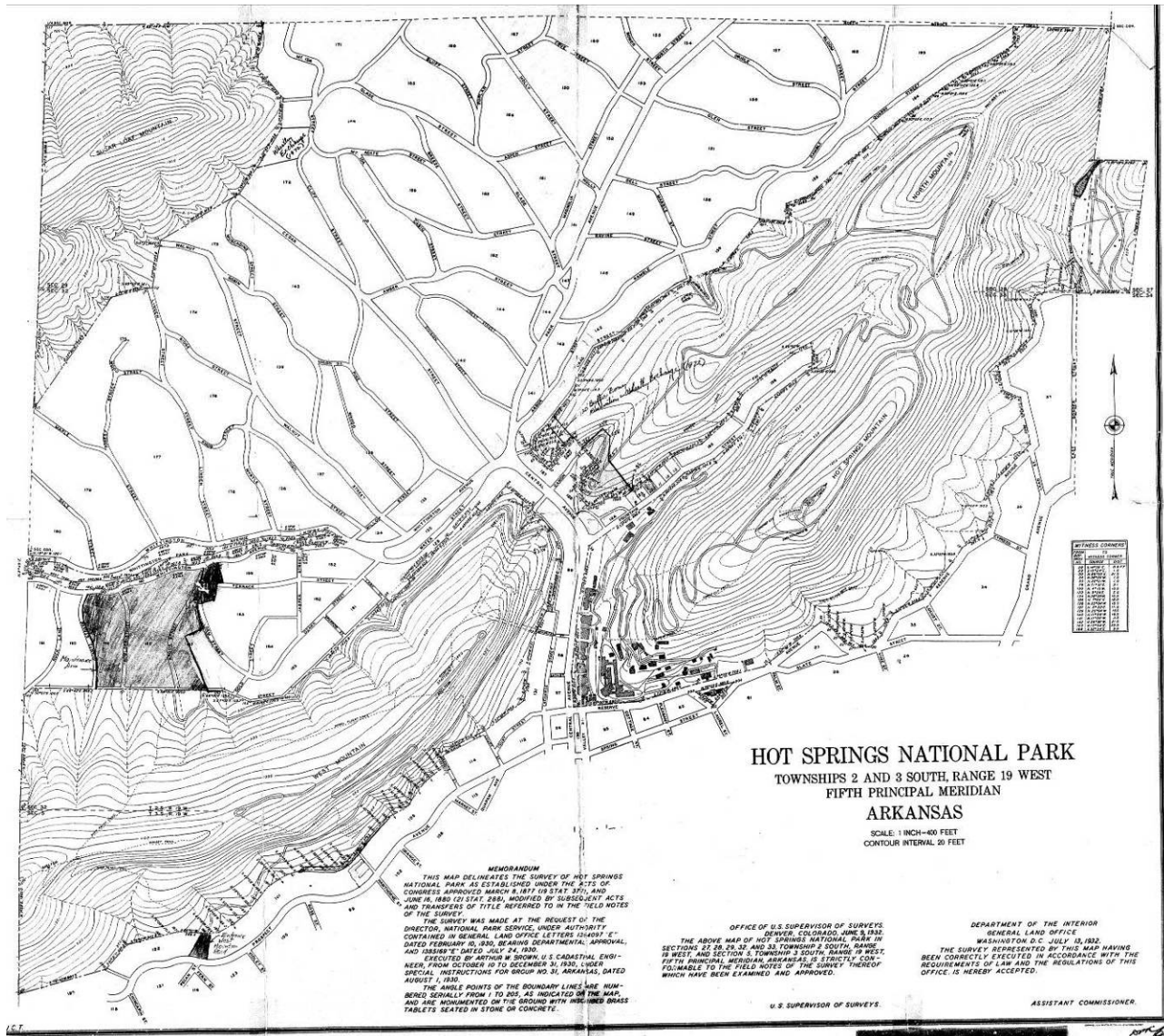


Figure 2-177: Survey of Hot Springs National Park, 1932 (source: Denver Service Center Technical Information Center 128-25910)

January 2010

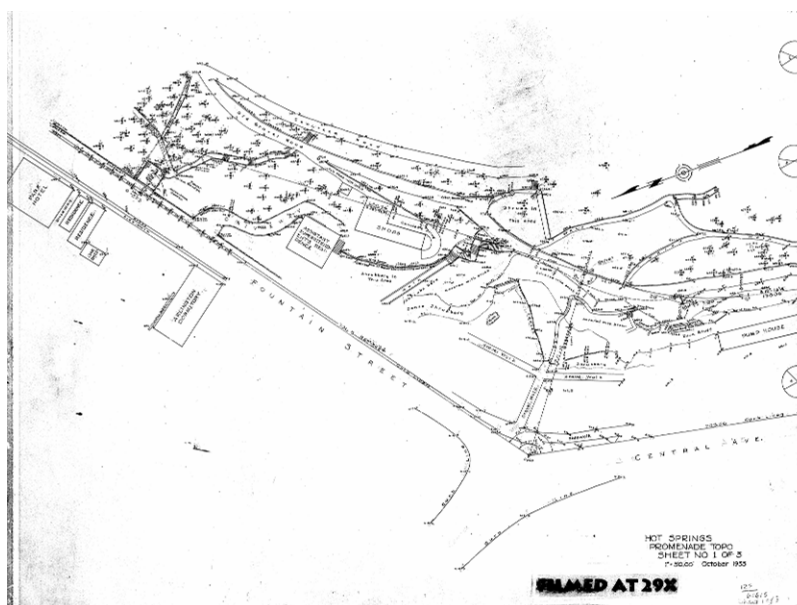
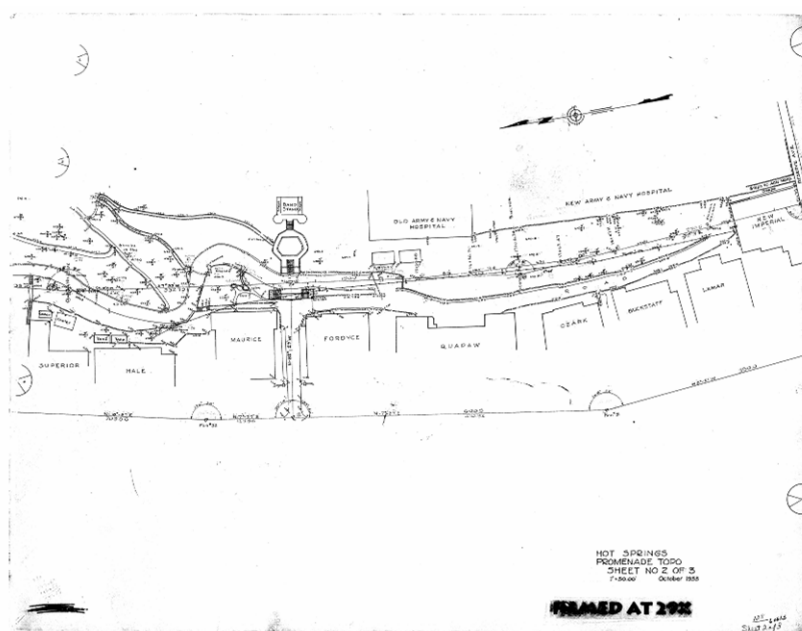


Figure 2-179: Existing Conditions, Mountain Sidegrounds / Grand Promenade, 1933



The next two pages include:

Figure 2-180: Study Area, Period of Change Plan, 1931-1940

And

Figure 2-181: Reservation Front, Period of Change Plan, 1931-1940

Legend

- Hot Springs Creek
- Road
- Approximate Building Location
- Mountain Roads
- Mountain Trails
- Railroad
- Trolley

Project Study Area (Present-Day Park Land)Reservation FrontWhittington ParkGulpha GorgeArmy and Navy Hospital Complex

Sources:

Hot Springs National Park Superintendent's Monthly Reports. Map of Roads and Trails, DSC 128-60569, 1925.

Map of Roads and Trails, DSC 128-514, 1927.

Survey of Hot Springs National Park, 1932, DCS 128-25910.

Notes

Reservation Front:
For details in this area see Period of Change Plan 1931-1940

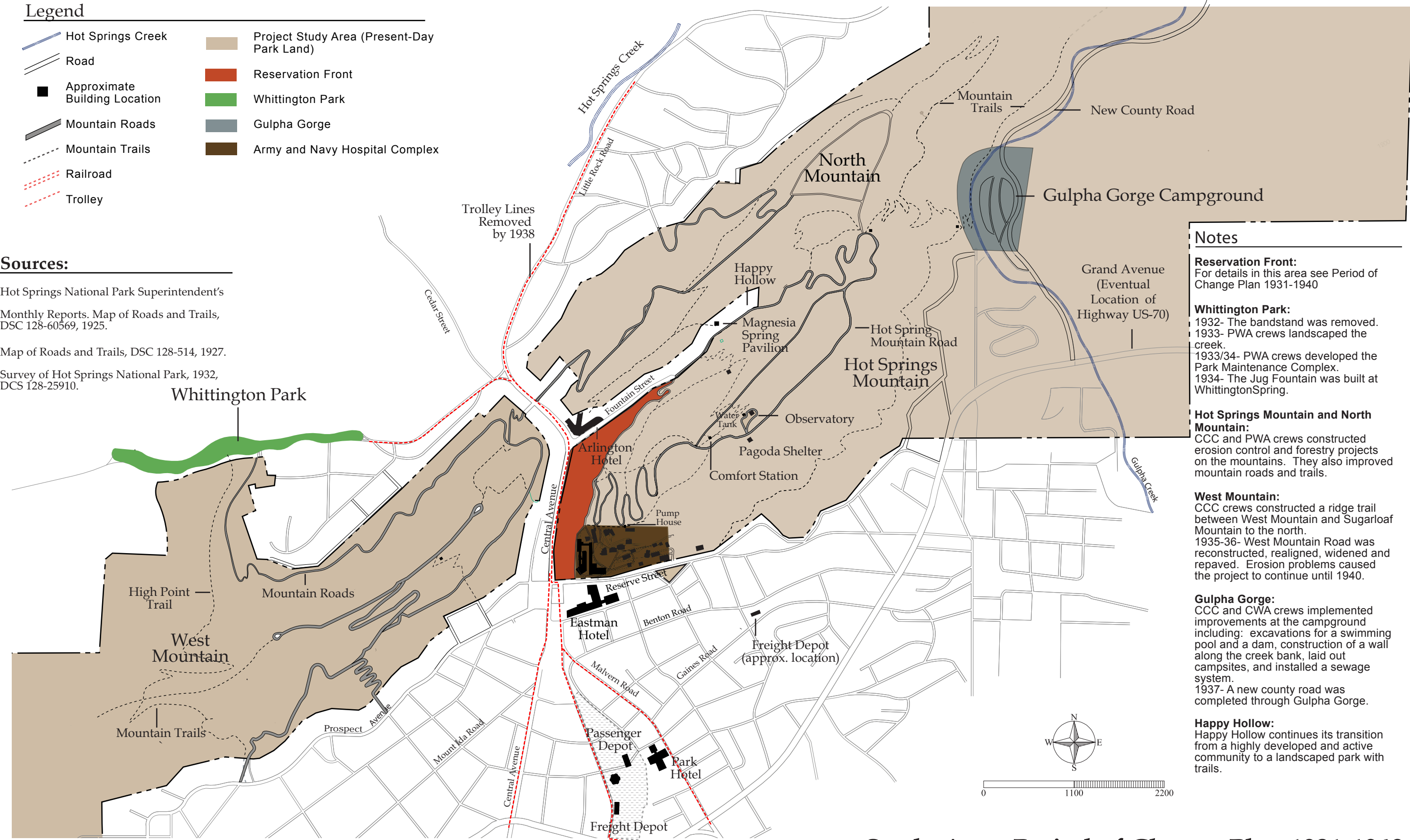
Whittington Park:
1932- The bandstand was removed.
1933- PWA crews landscaped the creek.
1933/34- PWA crews developed the Park Maintenance Complex.
1934- The Jug Fountain was built at WhittingtonSpring.

Hot Springs Mountain and North Mountain:
CCC and PWA crews constructed erosion control and forestry projects on the mountains. They also improved mountain roads and trails.

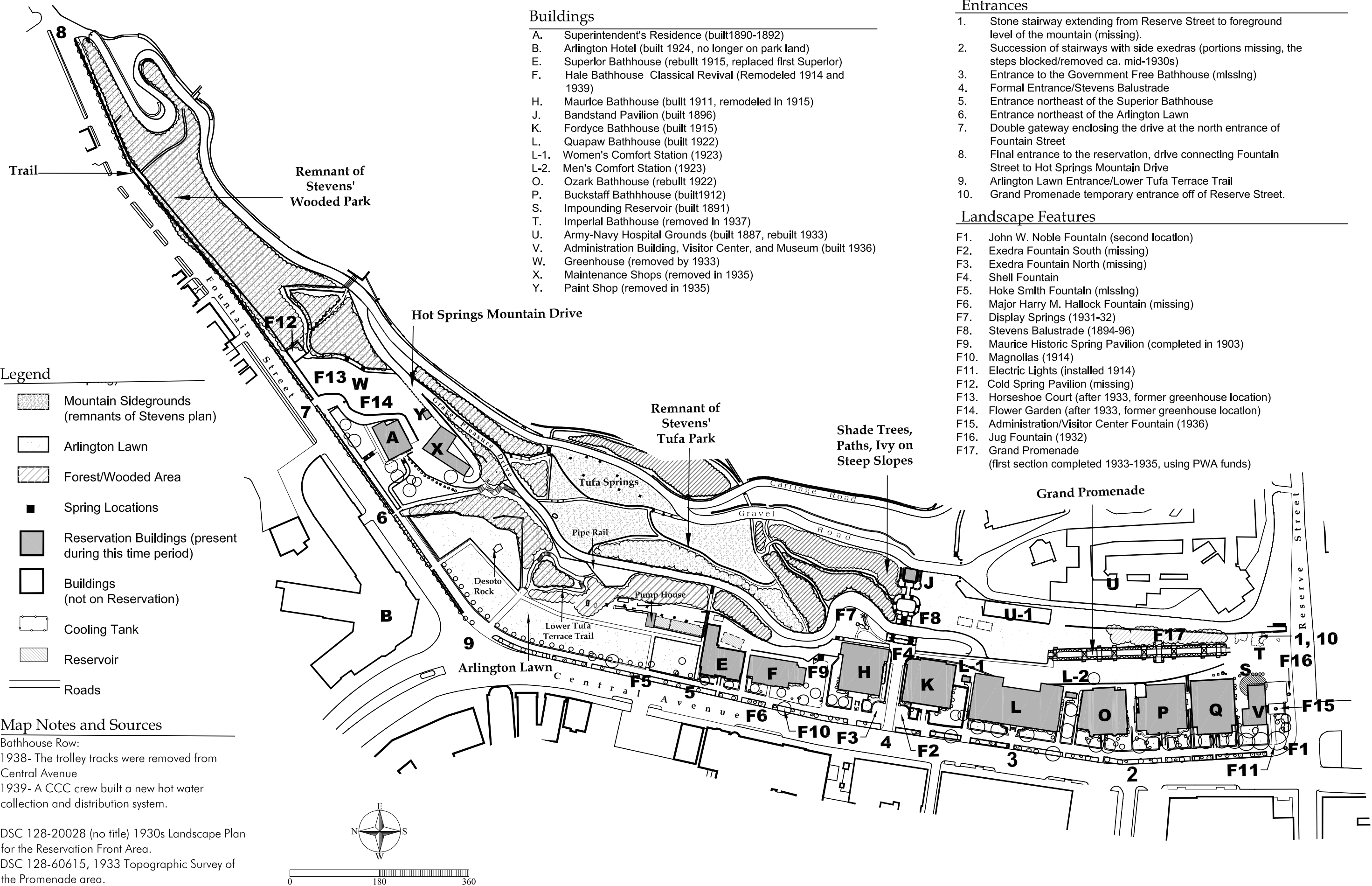
West Mountain:
CCC crews constructed a ridge trail between West Mountain and Sugarloaf Mountain to the north.
1935-36- West Mountain Road was reconstructed, realigned, widened and repaved. Erosion problems caused the project to continue until 1940.

Gulpha Gorge:
CCC and CWA crews implemented improvements at the campground including: excavations for a swimming pool and a dam, construction of a wall along the creek bank, laid out campsites, and installed a sewage system.
1937- A new county road was completed through Gulpha Gorge.

Happy Hollow:
Happy Hollow continues its transition from a highly developed and active community to a landscaped park with trails.



Study Area, Period of Change Plan 1931-1940



Master Planning, WWII, and Mission 66, 1941-1972

World War II Impacts on Hot Springs

This period represents a high point of the bathing industry at Hot Springs, as well as the beginning of its decline. Although a shortage of medical staff and other employees and supplies impacted the bathing industry during World War II, facilities in Hot Springs continued to improve. During the war wounded and sick soldiers were brought to Hot Springs for treatment. In 1942 the military took over the enormous Eastman Hotel to help accommodate the overflowing Army and Navy Hospital across the street.

In 1944 Hot Springs was selected as a redistribution center for soldiers returning from overseas. From September 1944 through December 1945, over 32,000 returning soldiers spent time in Hot Springs. With 2,500 officers, enlisted men, army nurses, and WAACs a month spending 14 days each in Hot Springs, their use of the local amenities was widespread. Arlington Lawn was selected as the site for numerous ceremonies conducted to present medals and mark patriotic occasions.¹⁵⁰ A bandstand was constructed at Arlington Lawn in 1944. In addition, the Formal Entrance/Stevens Balustrade was utilized for military concerts. After all of this activity, it must have seemed strange when the military activities ended with the demolition of the Eastman in 1946. The removal of the huge Eastman complex, which previously served as an anchor at the southern end of Bathhouse Row, changed the character of this area.¹⁵¹

Despite the withdrawal of large numbers of military personnel, Hot Springs thrived for a short time after the war. Hotels were reconverted for civilian use and in 1946 a new record was set for the number of people taking baths. The country was changing and a number of forces led to the decline of the bathing industry. The development of the field of scientific medicine, and in particular of modern antibiotics during the war, diminished the use of the thermal waters for medical purposes. Also, the leisure practices of post war Americans were changing. As the work lives of Americans shifted, and women in the work force became more commonplace, long restful vacations characterized by the 19th century spa life were no longer possible. In addition, as more Americans could afford to buy automobiles, and more highways were in place throughout the country, vacations became excursions to multiple places, in contrast to the former practice of visiting single destinations. Finally, a wider variety of recreational activities were gaining popularity and the practice of social promenading became outdated. All of these factors worked against the Hot Springs bathing industry, and after 1946 visitation to the bathhouses began a gradual decline.¹⁵²

Beginning in 1950 and continuing for the rest of the period, significant changes occurred at Arlington Lawn including the construction of a central cooling system for the spring water supplied to the bathhouses (1950), the removal of the old superintendent's residence (1958), and the design and construction of the Arlington Lawn landscape (1958-1974). From 1956 through

¹⁵⁰ Paige and Harrison, 100.

¹⁵¹ Ibid., 97-99.

¹⁵² Ibid., 101-102.

1958 the Grand Promenade was extended, landscaped, and lights were added. The Mountain Sidegrounds adjacent to the Grand Promenade were also landscaped and the plants in the area became a focus of interpretation. The Ramble Street entrance to North Mountain was closed, and the Hot Springs Mountain Observation Tower was renovated in 1953 and removed in 1971. The National Park Service acquired Happy Hollow Spring and built a fountain to provide spring water for visitors. A development plan for Whittington Park was prepared by the NPS in 1941 proposing a wide array of active recreation and a plant nursery in the park.

The continued decline of the bathing industry in Hot Springs led to the closing of several bathing establishments in the city, and on Bathhouse Row. In 1962 the Fordyce Bathhouse was the first to close. During the 1970s the Maurice, Ozark, and Hale bathhouses all closed permanently.

1940s Master Planning Efforts at Hot Springs

In 1942 the National Park Service undertook an effort to develop master plans for all of the parks. These were meant to guide the parks into their next phase of development and use—and to attempt to ensure their appeal to the public. Vint's office applied their newly developed design principles of rustic architecture and landscape design to the issues related to the parks throughout the country. Although some of the Master Plans were implemented, funding was greatly reduced during the war and many of the plans were never put in place.

The plan developed for Hot Springs reflected an increasing emphasis on the use of the overall park landscape for recreational activities. As part of the master planning effort, roads, trails, shelters, and other amenities located on the park's mountain lands were scheduled for improvements and additions.

Mission 66 at Hot Springs National Park

In 1956 the National Park Service Mission 66 program was enacted in commemoration of the 50th anniversary of the National Park Service Organic Act. The program enjoyed the support of Congress and President Eisenhower, enabling funding of large scale facilities. The 1942 Master Plans were revisited, only to find that in many cases changes that had taken place since their development made new plans necessary. The new designs were developed with modern methods and the picturesque prototypes that had characterized park design in the 1920s and 1930s were rejected.¹⁵³ In the words of National Park historian Linda McClelland, “Although adherence to principles of naturalism such as avoiding straight lines and right angles in all aspects of design continued, the character of park structures, roads, and trails changed without the craftsmanship, primitive tools, training, and carefully worked out specifications that had been such important aspects during the New Deal.”¹⁵⁴ The design of spaces and structures were specific to the parks, but no longer individually designed to be in harmony with the site. A major goal of the Mission 66 program was to provide visitors with easy access to primary park resources.

¹⁵³ McClelland, 464.

¹⁵⁴ Ibid., 452-453.

At Hot Springs, Mission 66 efforts mainly affected the campground at Gulpha Gorge, the Grand Promenade, and the new observatory on Hot Springs Mountain. Another significant part of the Mission 66 program at Hot Springs was the adaptation of the Government Free Bathhouse into the Physical Medicine Center in 1958. After Libbey died, the structure became the Libbey Memorial PMC. Conrad Wirth spoke at the dedication in 1960. The changes are summarized in the landscape characteristics sections for each landscape component.

Study Area, Landscape Characteristics, 1941-1972

In the early 1940s a Master Plan was prepared for the park by the National Park Service Landscape Division. The plan reflects the greater emphasis being placed on the use of the outdoor environment to provide amenities and health-related activities at the park. The existing and proposed roads and trails on Hot Springs, West, North, and Sugar Loaf mountains combined to make an extensive system for related outdoor recreational activities.

The Prospect and Whittington entrances to West Mountain Drive were completed in 1941. In 1942 ornamental brick pavement was completed along the Grand Promenade from the south entrance to the ramp at the Formal Entrance. Riprap was installed in Whittington Creek in 1943 and the last pavilion was removed from Whittington Park in 1945.

Bathhouse Row, Landscape Characteristics, 1941-1972

Alterations to the water distribution and storage system for the park, based on earlier designs prepared by the office of Thomas Vint, were undertaken during this period. The distribution system included three "spring groups" and three main underground laterals for collecting and transporting water from the springs. Each spring group consisted of water from several natural hot springs that was captured and combined and then stored in reservoirs until needed. In addition, a high pressure reservoir was located on the side of Hot Springs Mountain.

In 1942 the Ozark Bathhouse was improved with additions. A Civil War memorial drinking fountain, the Pioneer Fountain, was built north of the Superior Bathhouse in 1943. A plaque was mounted on the pedestal of the fountain. After the fountain was removed, ca. 1990, the plaque was relocated a few yards south of the site of the fountain on a tufa boulder. In 1945 the Noble Fountain was moved from the corner of Reserve Street and Central Avenue to the front of the Administration Building. In 1957 it was moved again to its present site at the Reserve Street entrance to the Grand Promenade.

The jug fountain near the front of the Administration Building was rebuilt in 1948. In 1956 a new jug fountain was completed in front of the Administration Building. The 1956 fountain is present today.

The vegetation along Bathhouse Row was altered when Hollies were planted to replace elms in 1949. Nine elms and five magnolias were damaged by work related to gas leaks. Also in 1949, a retaining wall at a parking lot on Exchange Street at the base of West Mountain failed causing a landslide that extended fifty feet into the National Park. The Pioneer Fountain was removed ca. 1990.

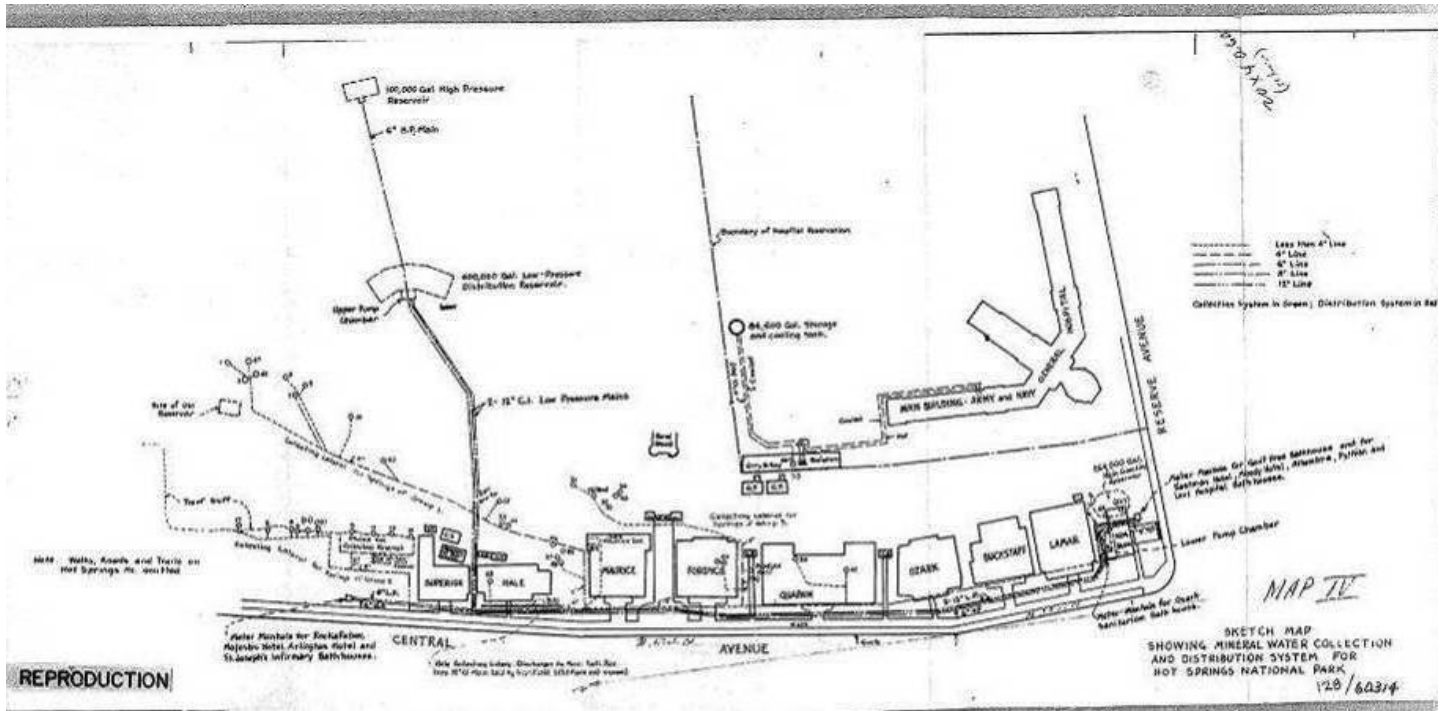


Figure 2-183: Plan of the Thermal Water Distribution System, after 1935 (source: HOSP 4590, DSC 128-60314) The system included three main laterals for collecting water from the springs, which were are indicated as Spring Groups one, two, and three. Reservoirs held the water until needed. In addition, a high pressure reservoir was located on the side of Hot springs Mountain.

Formal Entrance (Stevens Balustrade), Landscape Characteristics, 1941-1972

In 1948 the bandstand was repaired. In 1959 a major change occurred when the concrete vehicular driveway between the Fordyce and Maurice bathhouses was replaced with a concrete walk. With this change, the “main entrance” to the park was no longer a vehicular entrance to a pleasure drive, but a pedestrian route to the Grand Promenade and the mountain trails.

Arlington Lawn, Landscape Characteristics, 1941-1972

A bandstand was constructed on Arlington Lawn in 1944. In 1949 the construction began on the central spring water cooling system that was designed in the 1930s by National Park Service staff in Vint's office.

Completion of the central cooling system for the bathhouses in 1950 led to the removal of the cooling towers near the bathhouses. In 1951 the bandstand in Arlington Lawn was in disrepair and was removed. In 1955 a cold water well was drilled in the lawn for use in the heat exchange unit. In 1962 an air cooling unit for the heat exchanger system was completed on the north side of the building complex.

In 1958 the old superintendent's residence on Fountain Street was demolished and the site was landscaped (construction drawing for grading and demolition dated 1958, DSC 128-3023).

Mountain Sidegrounds / Grand Promenade, Landscape Characteristics, 1941-1972

Progress was made on the construction of the Grand Promenade in 1942 when the brick pavers were installed from the south entrance to the ramp from the Formal Entrance. Three hundred and seventy linear feet of pavement was installed. At the end of the year a drinking fountain was placed at the Reserve Street entrance of the Grand Promenade.

In 1956 construction on the brickwork for the Grand Promenade extension began. In 1957 a planting plan was prepared for the Grand Promenade (set HS3014) and in 1958 plants and lighting for the promenade were implemented. Around 1957 a brochure was printed for visitors titled "Hot Springs Mountain Nature Walk Guide Book." The pamphlet provides detailed information about plants present along the Grand Promenade and Mountain Sidegrounds. *add a summary of the plant list. In 1964, two comfort stations were constructed on the Grand Promenade.

Happy Hollow, Landscape Characteristics, 1941-1972

In 1959 the National Park Service exchanged 5.3 acres of park land behind the Arlington Hotel for 4.75 acres in Happy Hollow including the spring. Following the land exchange, a new fountain, the "Happy Hollow Spring," was constructed with native stone veneer providing spring water for visitors.¹⁵⁵

Hot Springs, North, and West Mountains, Landscape Characteristics, 1941-1972

The Prospect and Whittington entrances to West Mountain drive were completed and inspected in November 1941. In 1945 a shelter house was removed from North Mountain. The water system at the Pagoda Shelter was upgraded and the drinking fountain was eventually removed. In 1953 the Hot Springs Mountain Observation Tower was renovated and

¹⁵⁵ Shugart, 2005. Hot Springs National Park archives.

restrooms were installed. By 1969 the tower had deteriorated and become hazardous. In 1971 the tower was removed from the site.¹⁵⁶ Toward the end of this period the Ramble Street entrance to the North Mountain Loop Road was closed.

Whittington Park, Landscape Characteristics, 1941-1972

Riprap was installed in Whittington Creek in 1943 to improve the aesthetics of the park. In 1945 the last pavilion was removed from the park. The National Park Service developed a plan for adding active recreation facilities at Whittington Park in 1951. The plan also included a plant nursery, badminton courts, a public use building, croquet courts, shuffleboard courts, horseshoe courts, tables for checkers and dominoes, a bowling green, public auditorium and parking. The design included covering the creek with a concrete slab in some areas, and channeling it in others.¹⁵⁷ In 1958 construction drawings were prepared for the West Mountain Access Road at Whittington Park.¹⁵⁸

¹⁵⁶ Shugart, "Hot Springs Mountain Tower Summary," unpublished report, Hot Springs National Park archives.

¹⁵⁷ National Park Service, Denver Service Center, *drawing number DSC 128-2108*.

¹⁵⁸ National Park Service, Denver Service Center, *drawing number DSC 128-3039A*.

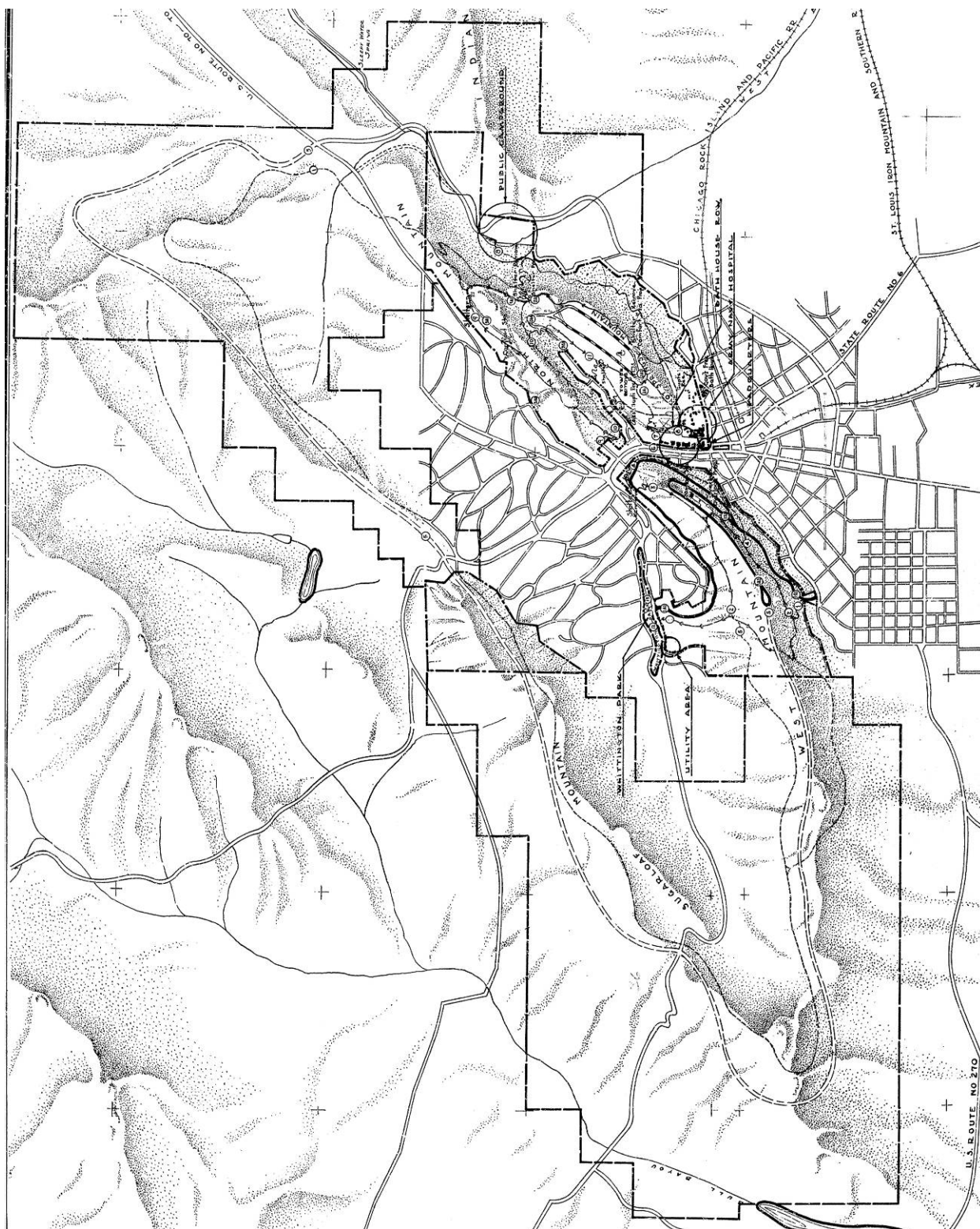


Figure 2-184: Portion of 1942 Master Plan for Hot Springs National Park (source: DSC/TIC 128-2100A 1942)



Figure 2-185: Bathhouse Row, Ozark Bathhouse, ca. 1940 (source: Hot Springs National Park, Ozark1940s1)



Figure 2-186: Ozark landscape, post 1942 (source: Hot Springs National Park, ozarklawnpost1942)



Figure 2-187: Bathhouse Row, Quapaw, ca. 1940 (source: Hot Springs National Park, Quapawca1940)



Figure 2-188: Concert at the Formal Entrance, March 23, 1944 (source: HOSP 1603)



Figure 2-189: Arlington Lawn, September 4, 1943 (source: HOSP 1538)



Figure 2-190: Arlington Lawn, ca. 1940s/1950s (source: HOSP 10022) Note: Telephone poles and lines, light poles and fixtures, fence above Arlington Lawn.



Figure 2-191: Arlington Lawn, ca. 1940s/1950s (source: 10025/grant25)

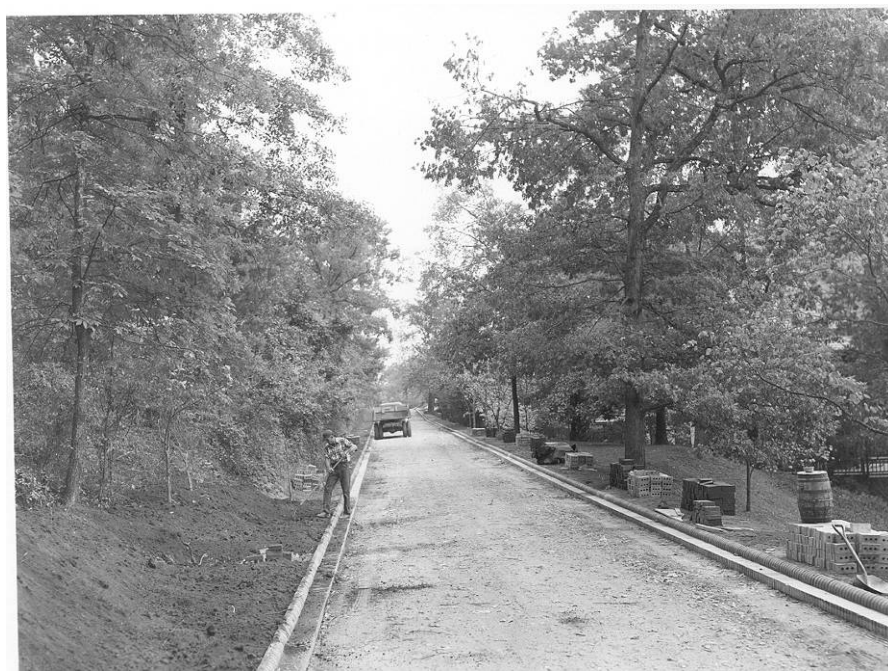


Figure 2-192: Construction of brick pavement at Grand Promenade, ca. 1940s (source: HOSP 10786)



Figure 2-193: Grand Promenade before gravel (foreground) and brick paving (background), ca. 1940s (?) (source: Hot Springs National Park, grant24)



Figure 2-194: Vegetation at Grand Promenade near Formal Entrance, ca. 1940s (source: HOSP 10788)



Figure 2-195: Bathhouse Row from above looking southeast, ca. 1950s (source: HOSP 1442)

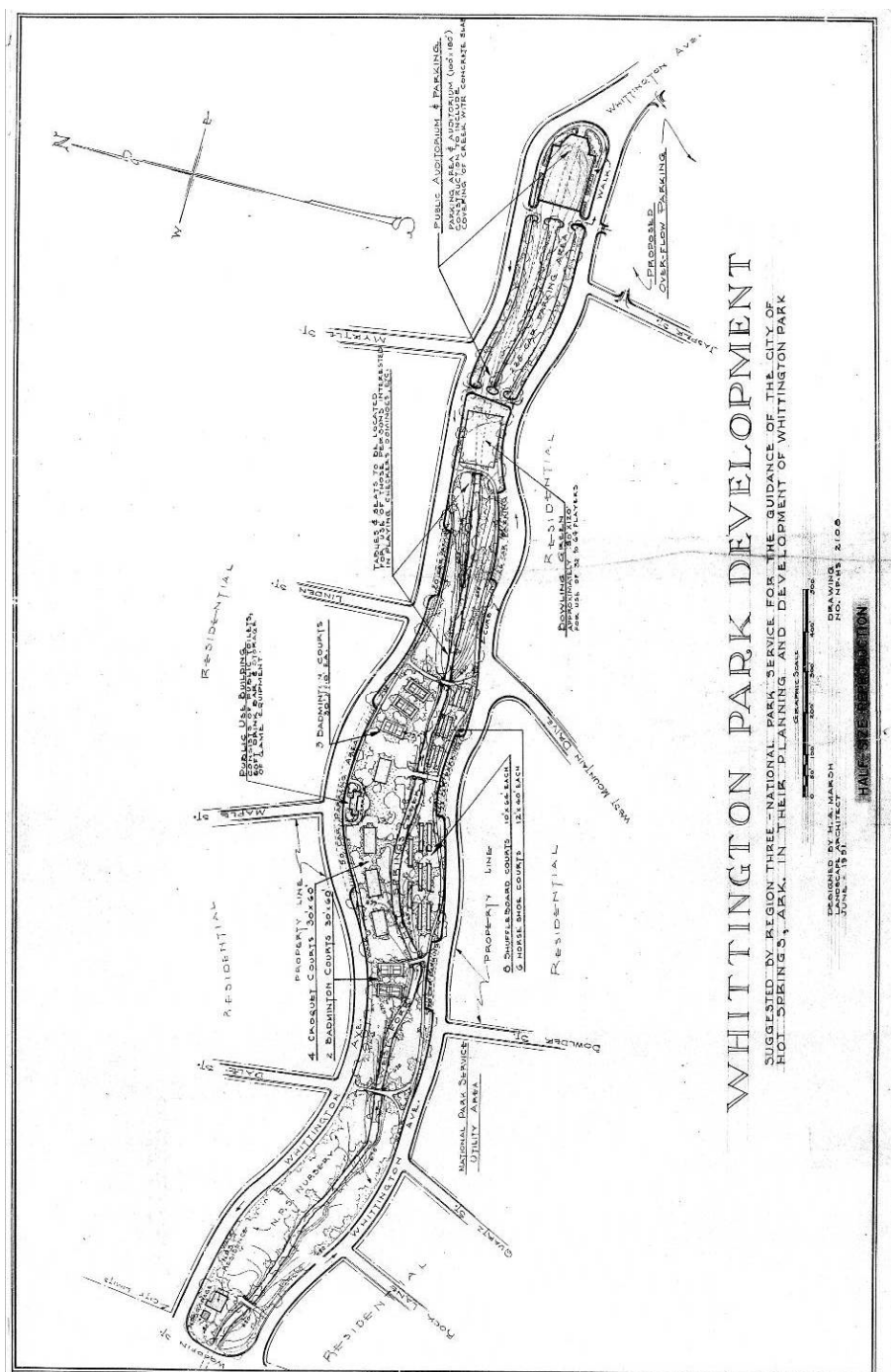
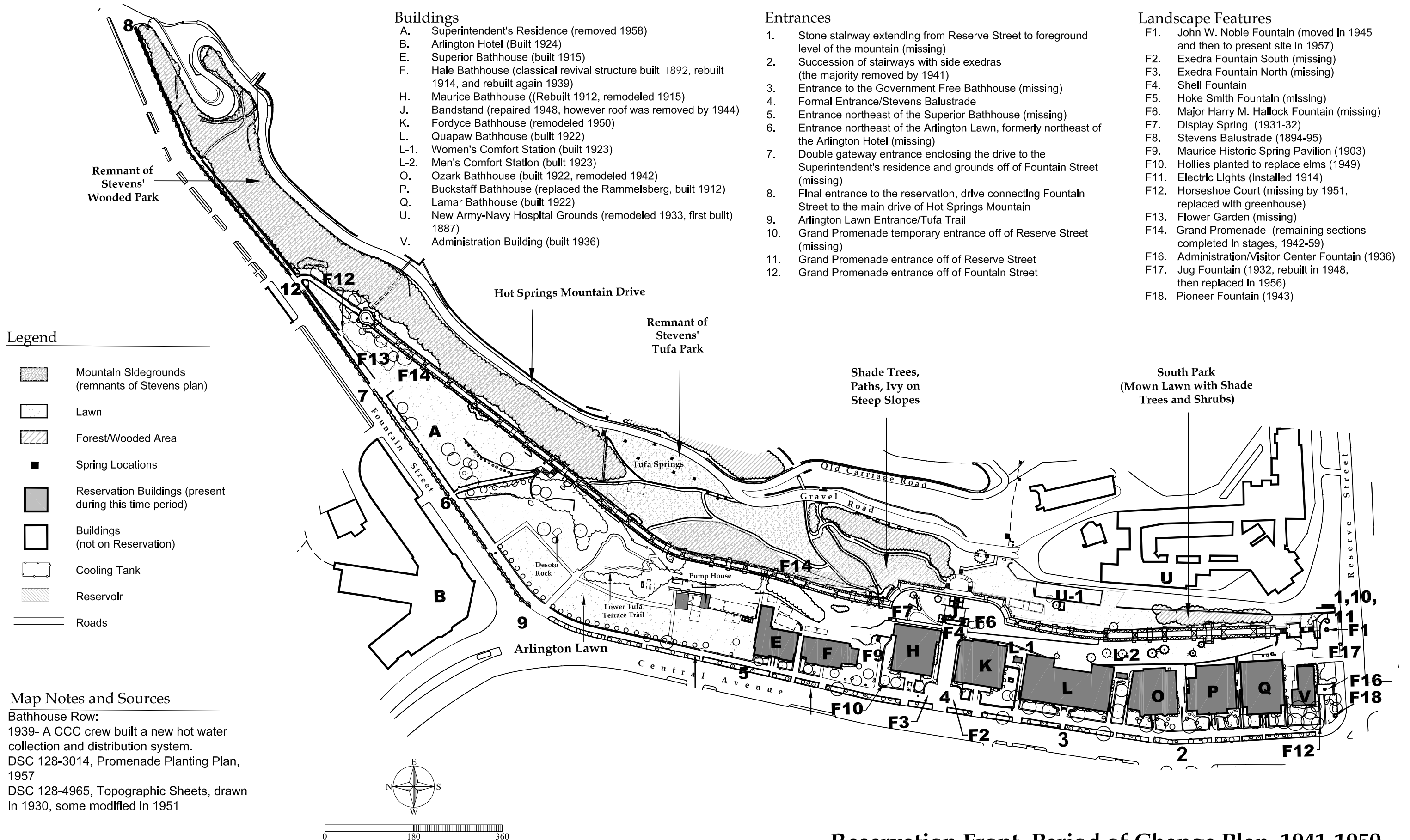


Figure 2-196: Proposed Design for Whittington Park, 1951 (source: Denver Service Center, 123-2108)

Facing page: Figure 2-197: Reservation Front Period of Change 1942-1959



Redefining Visitor Use of the Landscape, 1973-2006

In 1974 Bathhouse Row was listed as a National Register Historic District. Concurrently, in 1973-1974, a set of plans were prepared for the park and downtown Hot Springs that included major development proposals that would significantly alter the character of the area. Although the plans were not implemented, they illustrate a dichotomy in ideas for preserving or developing the area. The young field of historic preservation, and the National Register of Historic Places, were not yet well understood by the planners, designers, and managers who were making decisions regarding the future of the park. In retrospect, it seems clear that the identification of the property as an important historic site should have led to plans that respected the historic integrity of the resources. However, early in the period, alterations were made without the guidance of the Secretary of the Interior's standards.

By the early 1980s, many of the bathhouses had closed and more were near closing. National Park Service administrators became concerned about the deterioration of the bathhouses and other vacant structures within the park. Their concern increased when the Quapaw/Health Services, Inc., and the Superior closed in 1983 and the Lamar Bathhouse followed, closing in 1985. After 1985, the Buckstaff was the only bathhouse still operating on Bathhouse Row. A movement toward adaptive reuse of the buildings began and a primary focus for the park has been on rehabilitating the bathhouses on Bathhouse Row and finding appropriate uses for the buildings. As new uses for the buildings were being considered, the need for documentation of the buildings was apparent. The Historic American Buildings Survey undertook the task of documenting the historic architectural and functional features of the park. During 1984 and 1985 Department of the Interior photographer Jack E. Boucher photographed the interiors and exteriors of the buildings. In addition, measured drawings were prepared by Michael Peters, Gregory McCall and Daniel Wininski.¹⁵⁹

In 1987 Bathhouse Row, the Formal Entrance, and a portion of the Grand Promenade were designated parts of a National Historic Landmark District. In the same year, plans to update the utilities for Bathhouse Row were approved. The Fordyce Bathhouse was renovated and opened as the Hot Springs National Park Visitor Center in 1989. In 1989 a *Landscape Management Plan* for Bathhouse Row and Arlington Lawn was completed and the recommendations were implemented. These included the addition of fluted concrete walls in the lawn park along Bathhouse Row, the addition of an entrance signs at the north and south ends of the Magnolia Promenade, changes to the fountains at the Formal Entrance, and alterations to the sidewalks and thermal water cascade and pools at Arlington Lawn.

Changes also occurred within the mountain areas of the park. Several land acquisitions led to a total of 4,465.04 acres within the park boundaries by 1977. The current Hot Springs Mountain Observation Tower was completed in 1983. The Grand Promenade was designated a National Recreational Trail in 1982. In 2001 the National Park Service renovated the trail by adding mortar to the previously dry-laid brick pavement. The majority of the other historic landscapes within the park are being maintained with only minor changes made as necessary to

¹⁵⁹ Shugart, *Introduction to HABS documents for Hot Springs National Park*, 1985.

make repairs. The Gulpha Gorge Campground continues to function as a year-round camping facility.

Whittington Park is maintained by the park and utilized by local residents. It is identified on park maps as part of the National Park and the Division of Interpretation is presently considering new waysides for the Whittington trail.

Study Area, Landscape Characteristics, 1973-2006

Heightened awareness of historic landscapes and improved guidelines and processes for evaluating the significance of these resources have led to the National Park Service funding for a *Cultural Landscape Report* for the park. In 1986 the National Park Service completed a *General Management Plan and Development Concept Plan* for the park. The document directed the cultural resources management program as to focus on Bathhouse Row. This led to the rehabilitation of the Fordyce Bathhouse as the park's visitor center, offering other vacant bathhouses for private rehabilitation and adaptive reuse under the Historic Properties Leasing Act, developing and managing Bathhouse Row as a historic landscape, initiating research and documentation of the other cultural features in the park, and improving interpretation of the thermal spring waters, their public use, and the development of the Hot Springs Spa ethic. The plan also emphasized aspects of natural resource management including: investigation and protection of the recharge area of the thermal springs, evaluation of the thermal water use and distribution system, improvement of vegetation management and restoration of disturbed areas, research and documentation of the park's natural resources, and improvement of trails and hiking opportunities. The Spring Renovation project began in 1979 and resulted in some appearance changes for the collection boxes.

Bathhouse Row, Landscape Characteristics, 1973-2006

In 1978 the creek arch was repaired by Childs Fabricating Company. In 1979 a design was prepared for design changes to be made at the Maurice Spring and the Grand Promenade in the vicinity of the spring. In 1987 plans for renovations to utilities on Bathhouse Row were approved and implemented. In 1989 the Fordyce Bathhouse opened as the Visitor Center for Hot Springs National Park.

Formal Entrance (Stevens Balustrade), Landscape Characteristics, 1973-2006

During this period the Formal Entrance included turf terraces with rows of pruned holly hedges lining either side of the concrete walkway between the Fordyce and Maurice bathhouses. The lawns in front of each of the bathhouses extended to the Bathhouse Row promenade, in front of the eagle-sculpture topped stone entrance columns. In ca. 1990, the fluted concrete fountains were added in the former locations of the exedra fountains. In 2003 a project to alter the masonry around the Stevens Balustrade was initiated. The project was halted due to its potential to impact the historic resources. The Pear trees were removed from the beds beside the Fordyce and Maurice bathhouses in ca.2002-2003, and the planters were converted to flowerbeds in 2003.

Arlington Lawn, Landscape Characteristics, 1973-2006

As design and construction documents were prepared and implemented resulting in changes to the topography, sidewalks, trails, signs, and other features at Arlington Lawn in 1973. In December of 1982 the thermal water cascade, a major part of the Arlington Lawn design plan, was completed. In 1989 a *Landscape Management Plan* for Bathhouse Row and Arlington Lawn was completed and the recommendations were implemented. In ca. 1990, the thermal water cascade base was changed, the entrance sign was added, and the gazebo was installed. Ornamental and chain link fences were added during this period.

Grand Promenade (Mountain Sidegrounds), Landscape Characteristics, 1973-2006

In 1977 an extensive ramp system was designed to provide universally accessible access to the Grand Promenade at the Reserve Street Entrance. The design was never implemented.

In 2001 a major re-construction of the Grand Promenade was conducted. The project included reconstruction of the brick pavement with mortar in place of the previous dry-laid application. While this treatment may have made the surface more durable for certain types of use, it changed the appearance and character of the promenade. The color and texture of the mortar reflects light differently than the previous treatment creating a more modern feeling and character. Also during this time period, both metal decorative fencing and regular chain link fencing was added to the Grand Promenade. Wayside signs were added in the 1990s. A large amount of vegetation was removed from the Grand Promenade in 2001 after an ice storm damaged woody vegetation. The removal has left the area more open than it was previously. Two comfort stations were removed from the Grand Promenade in 2006.

Hot Springs, North, and West Mountains, Landscape Characteristics, 1973-2006

In 1974 plans were made to close the road between the North Mountain Loop Road and Ramble Street and to improve the road alignments and utilities at Hot Springs Mountain.¹⁶⁰ In the late 1980s another project was prepared to address rehabilitating the roads, parking and overlooks at North Mountain. Several trail shelters were removed during this period. The West Mountain restrooms were removed. Trails were added in the 1990s.

Whittington Park, Landscape Characteristics, 1973-2006

A physical fitness trail was added to the Whittington Park in 1980. It receives heavy use by the local residents. The bridges over Whittington Creek remain as well as lush vegetation including mature canopy trees. The park map identifies Whittington Avenue, Whittington Spring, and the park maintenance facility, but does not include a label or other information about Whittington Park. The park web site and visitor center provide a very informative summary of the history of Whittington Park.¹⁶¹

¹⁶⁰ National Park Service, Denver Service Center, drawing number 128-60648.

¹⁶¹ *The Heyday of Whittington Park*, park brochure.

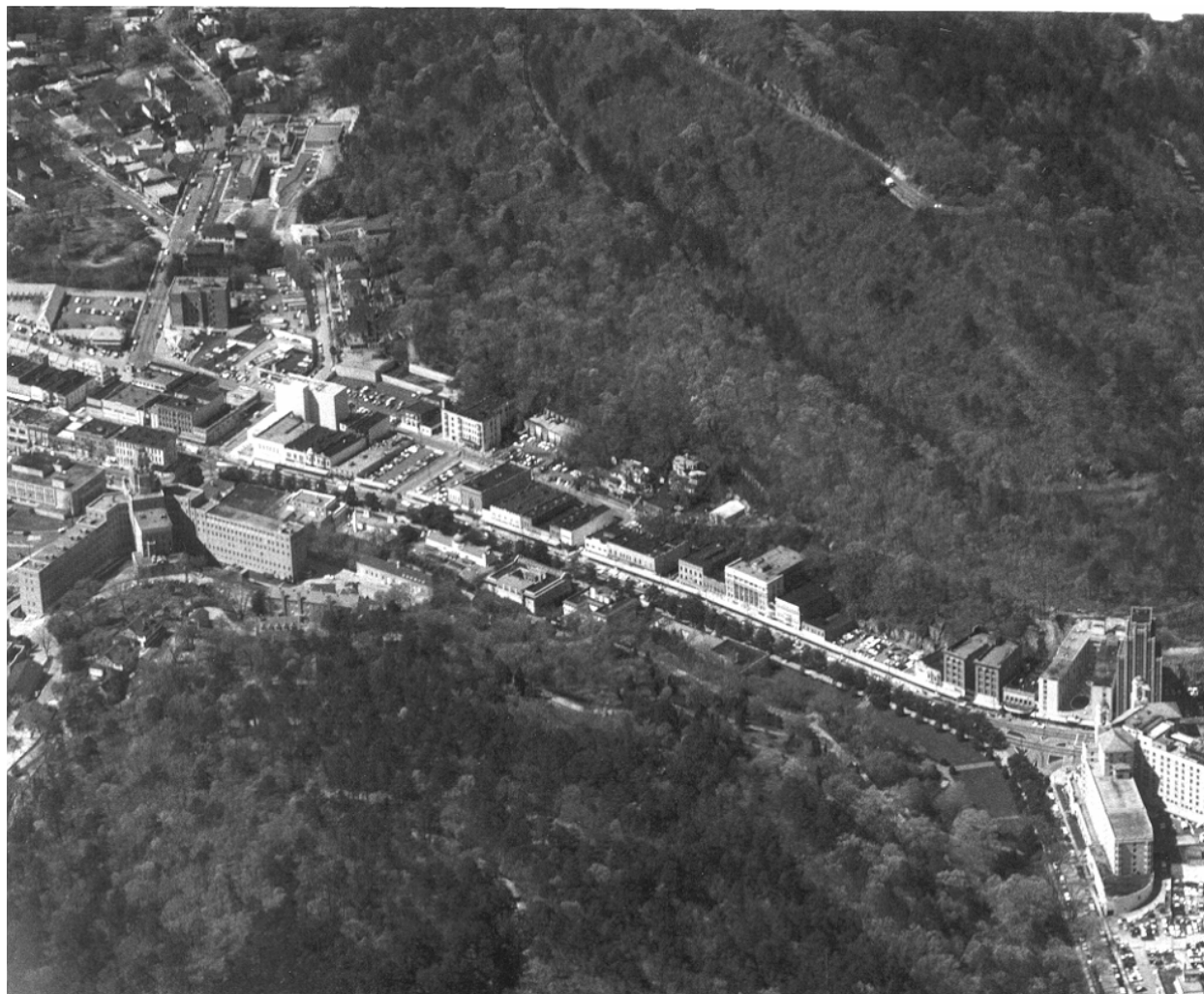


Figure 2-198: Aerial View of Reservation Front, 1988 (source: Hot Springs National Park)



Figure 2-199: Hale Bathhouse, 1984 (source: HABS044)



Figure 2-200: Buckstaff Bathhouse, 1984 (source: HABS007)



Figure 2-201: Lamar Bathhouse, 1984 (source: HABS058)



Figure 2-202: Maurice Bathhouse landscape, 1984 (source: HABS075)



Figure 2-203: Maurice Bathhouse at Formal Entrance, 1984 (source: HABS073)



Figure 2-204: Maurice Historic Spring Area, 1984 (source: HABS098)



Figure 2-205: Maurice Historic Spring Area, 1984 (source: HABS097)



Figure 2-206: Formal Entrance, 1984 (source: HABS146)



Figure 2-207: Formal Entrance, 1984 (source: HABS 148)

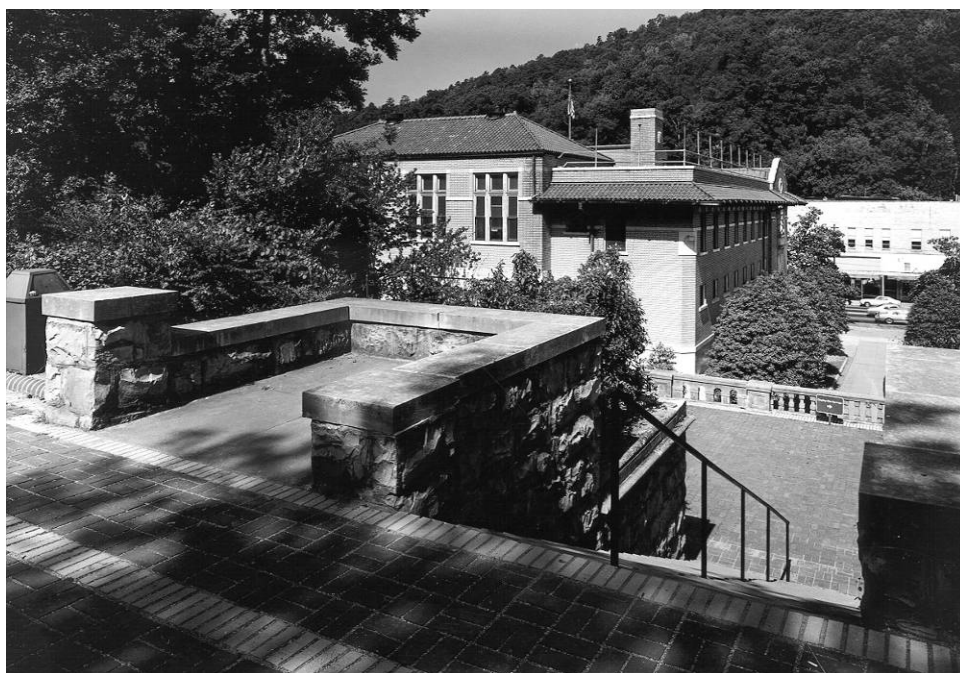


Figure 2-208: Formal Entrance, 1984 (source: HABS152)

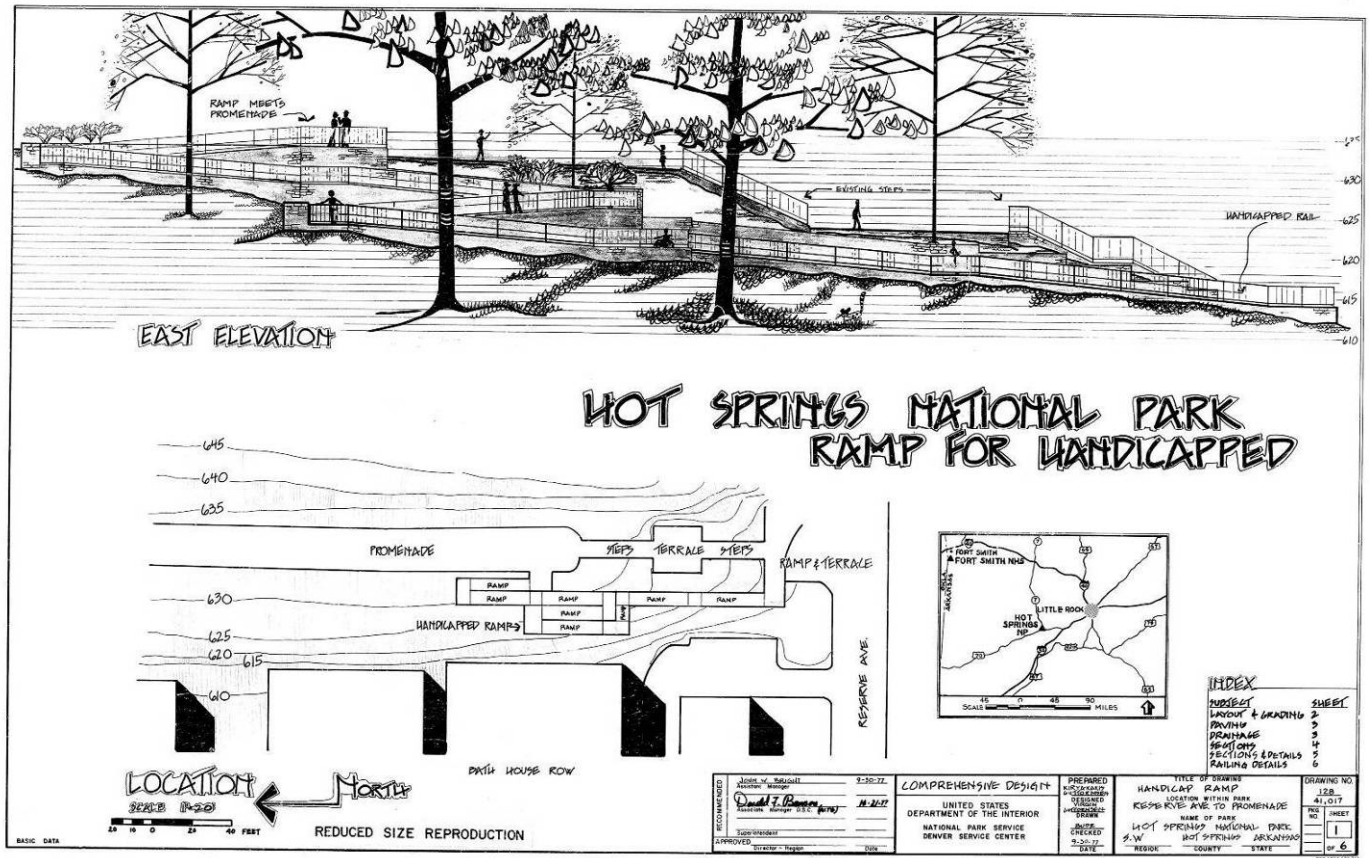


Figure 2-209: Proposed Accessible route to the Grand Promenade, design prepared 1977
(source: National Park Service, DSC128-41017)



Figure 2-210: Grand Promenade, 1984 (source: HABS154)



Figure 2-211: Grand Promenade, 1984 (source: HABS153)

Chapter III Existing Conditions / Affected Environment

Chapter III: Existing Conditions / Affected Environment

Introduction

The historic landscape of Hot Springs National Park contains extensive heritage resources related to the development and use of the natural hot springs for therapeutic and recreational pursuits. A site survey was conducted in June 2005 to record the existing conditions of the structures, vegetation, and cultural landscape features within six major areas of the park including Bathhouse Row, the Grand Promenade, the Formal Entrance (Stevens Balustrade), Arlington Lawn, Hot Springs Mountain (including North Mountain), and West Mountain. A second survey was performed to inventory existing conditions at Whittington Park in June 2006. Existing Conditions Plans are illustrated on sheets LR 3 through LR 17. This report includes an assessment of existing cultural landscape characteristics relevant to the historic landscape including environmental context, land use, spatial organization, topography, vegetation, circulation, buildings, and small-scale features. Landscape characteristics include tangible and intangible aspects of a landscape from the historic periods; these aspects individually and collectively give a landscape its historic character and aid in the understanding of its cultural importance.

The cultural landscape features within the park are included in one of nine component landscapes, seven of which are addressed as part of the current project (see LR1):

Component Landscape A: Bathhouse Row

Component Landscape B: Grand Promenade and Mountain Sidegrounds

Component Landscape C: Formal Entrance (Stevens Balustrade)

Component Landscape D: Arlington Lawn

Component Landscape E: Hot Springs Mountain and North Mountain

Component Landscape F: West Mountain

Component Landscape G: Whittington Park

Component Landscape H: Gulpha Gorge Campground
(existing conditions documented in Appendix A)

Component Landscape I: Fordyce-Ricks Historic District (not part of the current report)

Although the current project did not include an inventory of existing conditions for Gulpha Gorge Campground or the Fordyce-Ricks Estate, these areas contain potentially significant resources. Gulpha Gorge Campground has been addressed by the Cultural Landscapes Inventory through the Midwest Regional Office of the National Park Service.

Descriptions of existing buildings and small scale features of the cultural landscape and their conditions are provided in Tables 2-14. Conditions evaluations were made based during field investigations in June 2005 and utilized the following criteria:¹

- **GOOD** - The features of the landscape need no intervention; only minor or routine maintenance is needed.
- **FAIR** - Some deterioration, decline, or damage is noticeable; the feature may require immediate intervention; if intervention is deferred, the feature will require extensive attention in 3-5 years.
- **POOR** - Deterioration, decline, or damage is serious; the feature is seriously deteriorated or damaged, or presents a hazardous condition; due to the level of deterioration, damage, or danger the feature requires extensive and immediate attention.

Selected condition evaluations have been updated as requested by the National Park Service, due to changes made after June 2005.

Environmental Context and Natural System

Hot Springs National Park is situated on the southeastern edge of the Ouachita Mountains. This formation forms the major topographic relief in the surrounding region of southern Missouri and northern Arkansas. During the late Paleozoic period, geological forces created inland seabed sediments. Erosion subsequently formed the present ridge and valley landscape. Novaculite rock outcrops cap the narrow steep ridges of the mountains. The finely grained structure of the novaculite is known for its superior quality as a natural whetstone.²

The hot springs are the primary natural resource of the park. The hot springs are the product of a process that takes over 4,000 years. Geothermally heated water rises through faults in the Hot Springs sandstone formation and emerges from thermal springs. The natural landscape, setting and flow of the springs have been altered in order to conserve the production of uncontaminated hot water for public use. The park's mountain lands, which comprise the main watershed feeding the springs, are also managed to protect the hydrologic system that feeds the springs.³

Park lands are grouped by their relation to the springs' function as either within the discharge zone or within the recharge zone.⁴

The discharge zone is a narrow strip about ¼ mile long at the foot of Hot Springs Mountain where the thermal water emerges from fractures in the underlying sandstone formation. This area has been the focus of man's use and intensive development over the years and is now the site of Bathhouse Row and

¹ Page, *Cultural Landscapes Inventory Professional Procedures Guide*, 62.

² United States Department of the Interior, National Park Service, *General Management Plan and Development Concept Plan, Hot Springs National Park*, June 1986, 55-59.

³ *Ibid.*, 4.

⁴ *Ibid.*, 59.

downtown Hot Springs. The springs themselves are largely concealed from visitors today except for three display springs along the row. The rest of the springs were capped long ago to prevent contamination, and the springwater is diverted into the park's extensive thermal water distribution system.

The recharge zone includes the highly permeable Bigfork chert formation and the Arkansas novaculite formation. The largest outcrops of these formations generally occur on the mountain sideslopes and narrow ridges above 700 feet in elevation.⁵

The outcrops extend into the valleys drained by Hot Springs and Gulpha Creeks and well beyond the park boundary to the north and east. Approximately twenty percent of the recharge zone is within the present park boundary, encompassing much of the mountain lands within the park.

The park boundary is irregularly shaped, including the mountain side slopes, upper terrain, Bathhouse Row, Arlington Lawn, and Whittington Park (see figure 3-1). The remaining level areas are privately owned developed portions of the city of Hot Springs. The project study area includes the portions of the park that contain cultural landscapes (see figure 3-1).

⁵ Ibid. The 50-75% figure may need revision as the GMP is twenty years old.

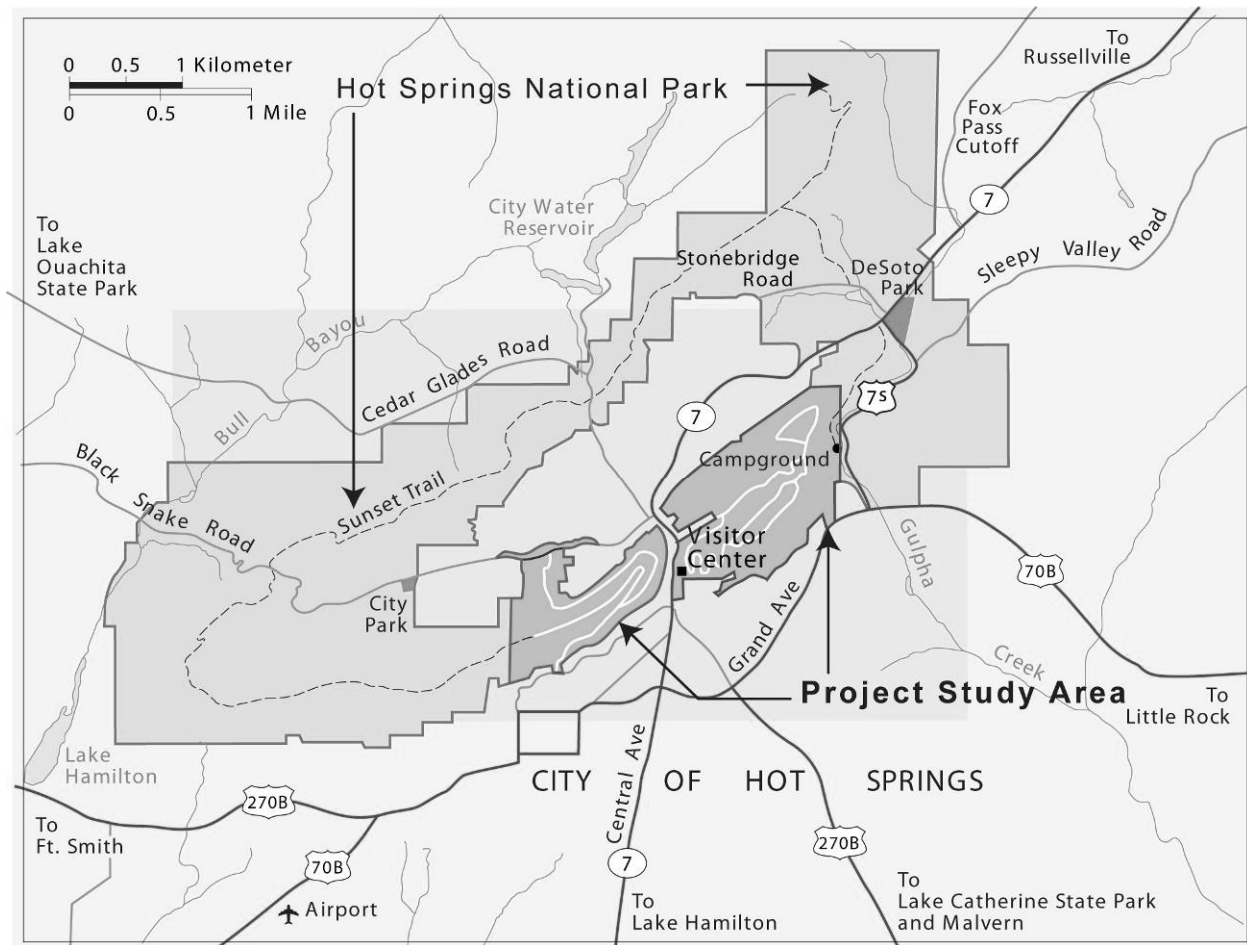


Figure 3-1: Hot Springs National Park Boundary, Project Study Area, and Vicinity (source: modified from NPS web site vicinity map)

Cultural Resources/Cultural Landscapes

Land Use

Land Use: Study Area

The study area lies completely within the boundaries of Hot Springs National Park and is managed to preserve the thermal springs and provide interpretive and recreational opportunities. In addition, a leasing program for historic bathhouses on Bathhouse Row is currently underway. This program will provide opportunities for commercial use of the buildings through lease agreements between the National Park Service and private businesses. Adjacent properties consist of a mix of private and public operations, many of which are housed in historic structures. There are also a number of contemporary developments along Central Avenue that include a bank, city visitor center, parking garage, and urban plaza.

Land Use Component Landscape A: Bathhouse Row

Bathhouse Row is a National Historic Landmark (designated 1987) and is the heart of Hot Springs National Park. It is the site of the original bathhouse buildings and the park's Visitor Center and is the most active area of Hot Springs National Park. Visitor amenities include benches, drinking fountains, restrooms, trash receptacles and lights. Interpretive signs and brochures are provided for self-guided experiences, and ranger-guided tours are scheduled. Bathhouse Row also serves as the eastern edge of the core business district of downtown Hot Springs Arkansas. The Park Visitor Center (in the Fordyce Bathhouse) and the Buckstaff Bathhouse provide uses that complement the retail businesses that exist directly across from Bathhouse Row on Central Avenue. The Buckstaff Bathhouse continues to function as a bathhouse. Adaptive uses for the other bathhouses are expected to expand in the near future as the National Park Service negotiates lease agreements with private businesses.

The southernmost building along Bathhouse Row, at the intersection of Reserve Street and Central Avenue, has served as the National Park Service Administration Building since it was constructed in 1936. The Administration Building was also the park Visitor Center/Museum until mid-1989, when the Fordyce Bathhouse reopened. Bathhouse Row is a designed historic landscape that is managed as a cultural resource.

Land Use, Component Landscape B: Grand Promenade and Mountain Sidegrounds

The Grand Promenade serves as an urban plaza and an area for passive recreation. In addition, it is a pedestrian circulation corridor that provides connections between Reserve Street, Fountain Street, and a number of access points to Bathhouse Row, the Formal Entrance/Stevens Balustrade, and the trails on Hot Springs Mountain. Visitor amenities along the Grand Promenade include a drinking fountain, benches, lights, and trash receptacles. Interpretive waysides and brochures are provided for self-directed experiences, and ranger-guided tours are scheduled. The Grand Promenade is a designed historic landscape that is managed as a cultural resource.

Land Use, Component Landscape C: Formal Entrance (Stevens Balustrade)

Original plans for the development of Hot Springs National Park, beginning as early as the 1890s; indicate that several entrances were envisioned to connect Hot Springs Mountain with Bathhouse Row and the park's perimeter. The Formal Entrance was originally identified as the main entrance (entrance four as noted in Stevens' reports) and was intended to provide both vehicular and pedestrian access. The Formal Entrance is located between the Maurice and Fordyce Bathhouses and today serves as the primary pedestrian entry from Bathhouse Row to the Grand Promenade. The Formal Entrance (Stevens Balustrade) is a designed historic landscape that is managed as a cultural resource.

Land Use, Component Landscape D: Arlington Lawn

The Arlington Lawn serves as an urban park and plaza that is utilized for formal and informal individual and group activities. The area provides pedestrian circulation routes between Fountain Street, the Grand Promenade, and Central Avenue. The hot water cascade provides opportunities for visitors to view the spring water in an outdoor environment. The platform adjacent to the hot water cascade is used for weddings, presentations, and other gatherings. Several signs provide information regarding the history of the property. The Arlington Lawn is a designed historic landscape that is managed as a cultural resource.

Land Use, Component Landscape E: Hot Springs Mountain and North Mountain

Hot Springs and North Mountains serve as portions of the hydrologic conservation area within the park boundary that is meant to preserve the hot spring water in an uncontaminated state. In addition, the mountains are used for leisure and recreational purposes. The mountains are wooded and include a system of pleasure drives, overlooks, hiking trails, trail shelters, and erosion control structures including headwalls, gutters, retaining walls, and other features. An observation tower is situated atop the high point of Hot Springs Mountain, providing opportunities to visitors to access long reaching views of the regional landscape.

Land Use, Component Landscape F: West Mountain

West Mountain is located west of Bathhouse Row and downtown Hot Springs and is used for leisure and recreational purposes. The mountain is wooded and includes a system of pleasure drives, overlooks, hiking trails, trail shelters, and associated features including stone walls, gutters, and drainage channels. Two vehicular access points connect West Mountain with the city of Hot Springs along the park drive - West Mountain Drive. West Mountain Drive connects to West Mountain Summit Drive, a scenic road that takes visitors to the summit of West Mountain. Overlooks provide broad vistas of the city of Hot Springs and the surrounding area.

Land Use, Component Landscape G: Whittington Park

Whittington Park serves as a passive park and the entrance to West Mountain. It is northwest of downtown Hot Springs and Central Avenue, and across the street from the

National Park Service park maintenance facilities. Whittington Creek runs through the center of the park, flowing from west to east. Storm water from adjacent residential neighborhoods (of the city of Hot Springs) flows into Whittington Creek, through culverts and storm inlets that puncture the channel walls. The primary park amenities are soft surface walking paths, pedestrian bridges, benches and mature vegetation.

Spatial Organization

Spatial Organization, Study Area

The boundary of Hot Springs National Park is irregular in shape, as it includes the highlands and side-slopes of four mountains (West, Sugarloaf, North, and Hot Springs) and excludes an area of private land in low areas that is surrounded by park property (see figure 3-1). The core developed area of the park is located in a narrow north-south strip that abuts private property along Central Avenue in downtown Hot Springs. Hot Springs Mountain, North Mountain and West Mountain flank the most intensely developed portions of the park including Bathhouse Row, the Grand Promenade, and Arlington Lawn.

Spatial Organization, Component Landscape A: Bathhouse Row

Bathhouse Row is situated along Central Avenue in downtown Hot Springs, Arkansas, composing the eastern edge of the central business district. The primary features of Bathhouse Row are its historically significant buildings and a linear pedestrian promenade known as the Magnolia Promenade that extends from Reserve Street to Fountain Street. Bathhouse Row was historically designed as an “architectural park” where buildings and landscapes would unite into one cohesive space. The buildings are two and three story structures that are situated along a generous and consistent building setback of approximately 50 feet from Central Avenue. Across Central Avenue, buildings of predominantly three stories compose the western edge of the central business district and also follow a consistent building setback of approximately 15 feet from Central Avenue, considerably closer to the street edge than Bathhouse Row.

Eight of Bathhouse Row’s primary buildings face Central Avenue, as do all of the commercial buildings across Central Avenue. The southernmost building, located at the intersection of Reserve Street and Central Avenue, is the only building that does not face Central Avenue. This is the National Park Service Administration Building, and its entry faces Reserve Street. The building is accessed along a terrace, of which the centerpiece is the Administration Fountain. Just south of the building entry is a jug fountain.

Bathhouse Row’s Magnolia Promenade is a unique composition of plantings, a broad linear walk and a front lawn at each bathhouse. Beginning at Central Avenue, the promenade consists of a ‘lawn park’ immediately adjacent to the street edge that includes a linear row of Southern Magnolias, a concrete walk, a low holly hedge with a row of pedestrian lights, and a lawn at the front yard of each bathhouse. The Formal Entrance (Stevens Balustrade) punctuates the approximate center of Bathhouse Row with its columns, exedra fountains and terrace, defining the primary pedestrian connection to the Grand Promenade/Mountain

Sidegrounds and Hot Springs Mountain. Two smaller buildings that serve as park comfort stations are tucked between bathhouses, as is the Maurice Historic Spring that is immediately south of the Hale Bathhouse. Small scale features along Bathhouse Row include park identification and interpretive signs, thermal spring boxes, wood benches and miscellaneous plaques.

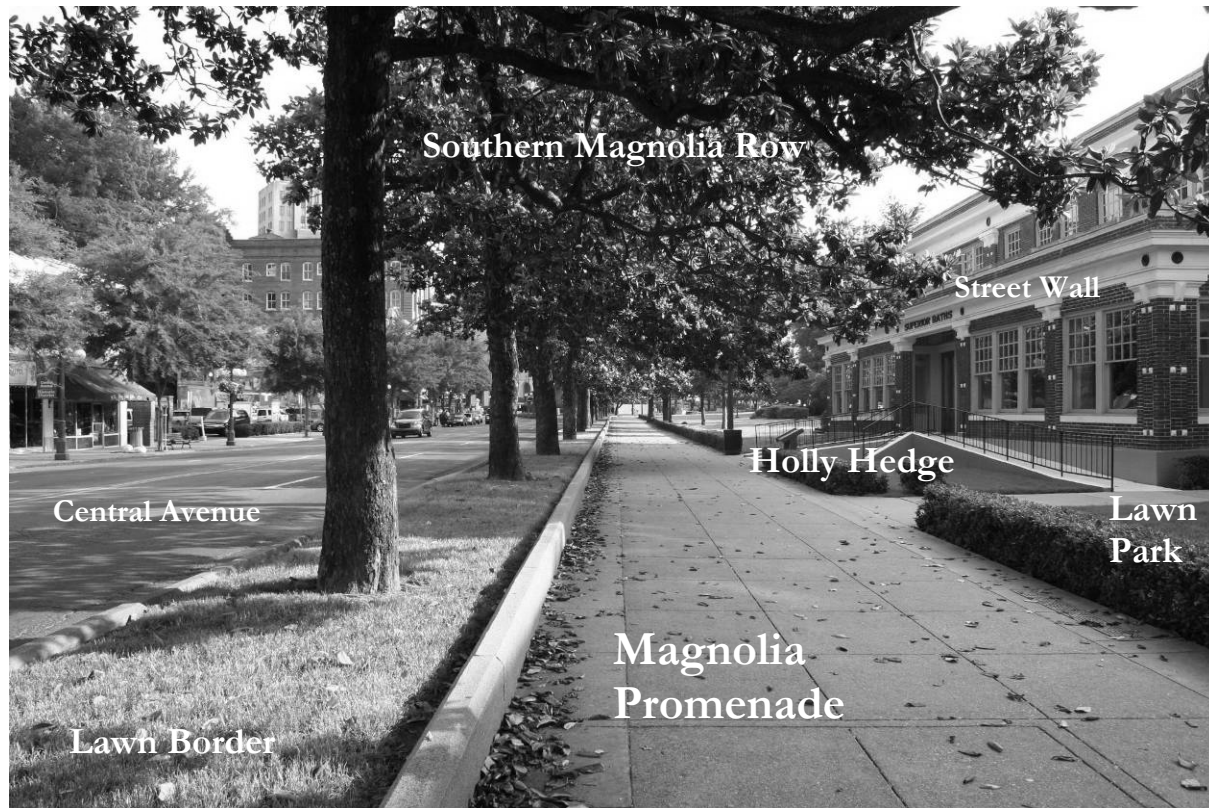


Figure 3-2: Bathhouse Row Spatial Organization

Spatial Organization, Component Landscape B: Grand Promenade and Mountain Sidegrounds

The Grand Promenade parallels the eastern perimeter of Bathhouse Row and Arlington Lawn. Similar to Bathhouse Row, the Grand Promenade is a linear space that is oriented north to south. The space is organized along a linear ornamental brick route that curves gently to accommodate changes in alignment. The brick pavement is set in a formal geometric pattern that includes both herringbone and basketweave arrangements. Elements along the route—including bench pads, seating areas, plazas, the Formal Entrance (Stevens Balustrade), and a display spring—occur at intervals that create a rhythm of small spaces along the linear corridor. The area between the paved promenade and Hot Springs Mountain Road is referred to in this report as the “Mountain Sidegrounds.” The term was originally utilized by Robert R. Stevens, Officer in Charge of Hot Springs Reservation improvements from 1892 through 1894, in his annual reports regarding the early design of the overall park. He described four “parks” within the Mountain Sidegrounds area that were to reflect a range of characteristics along the base of

the mountain behind Bathhouse Row.⁶ The parks include the South Park, Foreground Park, Tufa Park, and Wooded Park. The general locations of the parks in relation to the existing conditions are illustrated in Figure 3-3.

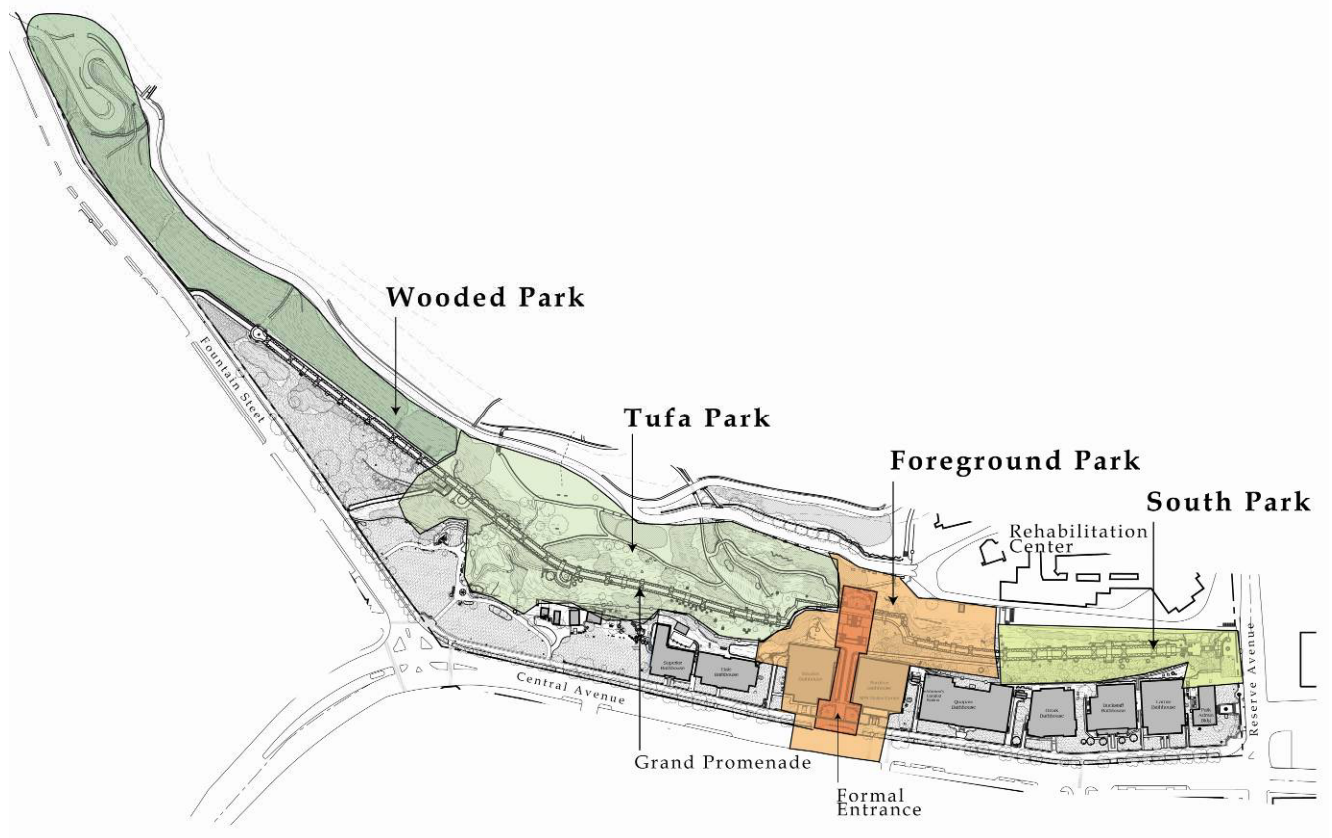


Figure 3- 3: Spatial Organization of the Mountain Sidegrounds as described by Stevens' Report, overlaid with the existing conditions.

In considering the current condition of the area between the Grand Promenade and Hot Springs Mountain Road, Stevens' organization and terminology for the four parks can assist in describing the landscape. The South Park is the area to the east of Bathhouse Row, west of the Rehabilitation Center and lying between Reserve Street and the point where the ramp from the Formal Entrance meets the Grand Promenade (historically this park ended at the southern side of the Government Free Bathhouse). The Foreground Park lies between the South Park and the Tufa Park, and includes the Formal Entrance. The Tufa Park begins on the northern side of the Foreground Park and includes the area with curving trails and the upper springs (now enclosed in spring boxes). The Tufa Park extends past the Hot Water Cascade Display Spring and just north of the steps that lead down from the Grand Promenade toward Fountain Street. The Wooded Park extends from the northern edge of the Tufa Park to Fountain Street on the eastern side of the Grand Promenade.⁷

⁶ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements*, 30 June 1893, 30 June 1894 and 15 September 1895.

⁷ The two comfort stations on the Grand Promenade were removed in 2005.

Spatial Organization, Component Landscape C: Formal Entrance (Stevens Balustrade)

The Formal Entrance is the primary designed landscape space that serves as the focal point of Bathhouse Row, both visually and functionally. It provides the primary connection between the Grand Promenade and ultimately Hot Springs Mountain (known originally as the Foreground Park). It is composed of a succession of six distinct spaces, arranged symmetrically along a central axis that begins at Central Avenue and extends to the Old Carriage Road (the original Army Navy road). The six spaces include: 1) the entry at Central Avenue that is a terrace defined by the two limestone columns, each topped with a bronze eagle; 2) the sloped walk between the Maurice and Fordyce Bathhouse; 3) the 1895 Stevens Balustrade; 4) the connection with the Grand Promenade; 5) the staircase between the Grand Promenade and the Old Carriage Road; and 6) the site where the Pavilion once stood, which is the highest point along the Formal Entrance (see figures 3-4 and 3-5). The six spaces step upwards toward Hot Springs Mountain in response to the natural terrain. Although the Formal Entrance (Stevens Balustrade) is considered one overall landscape feature, each of the six spaces retains its individual character.

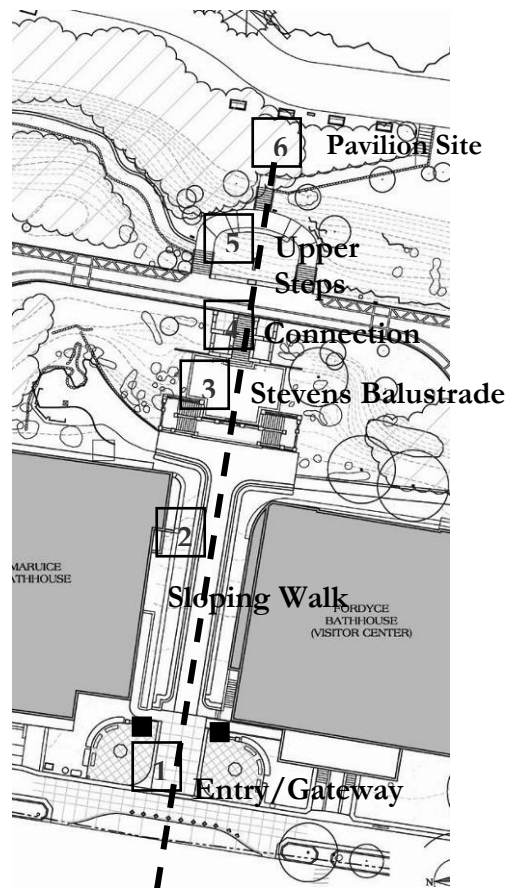


Figure 3- 4: Formal Entrance Spatial Organization

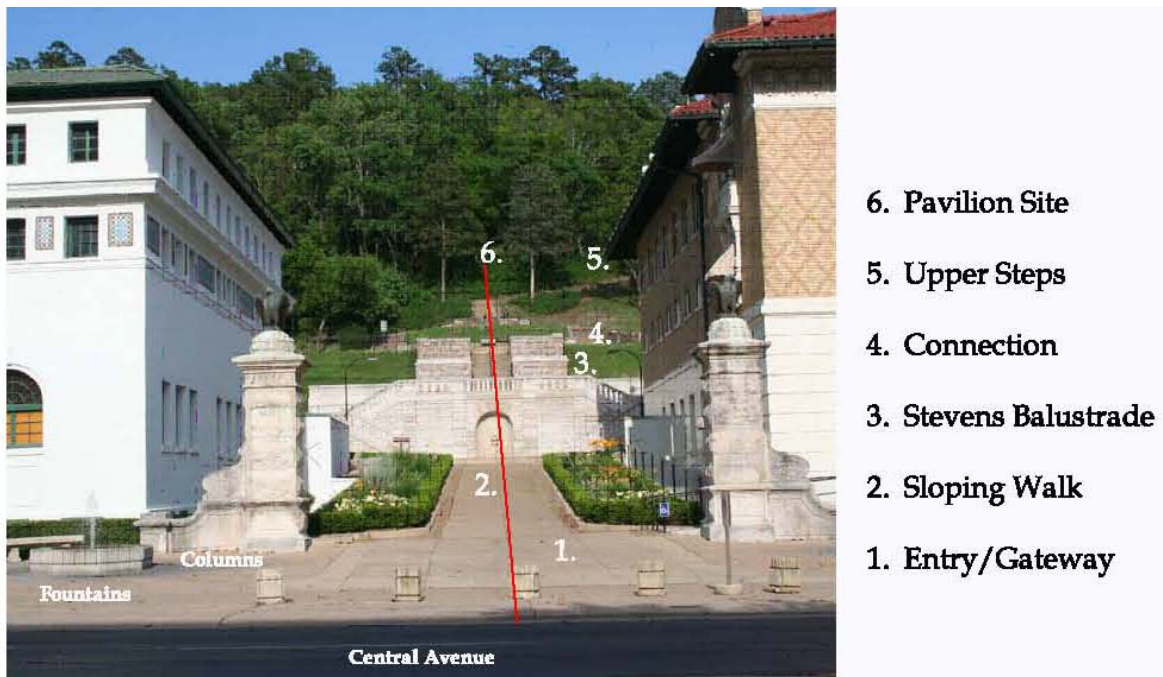


Figure 3-5: Formal Entrance Spatial Organization

Spatial Organization, Component Landscape D: Arlington Lawn

The Arlington Lawn extends from the north end of Bathhouse Row along Central Avenue then curves and continues along Fountain Street to the northern end of the Grand Promenade. Adjacent to Bathhouse Row, the Arlington Lawn serves as an extension of the 'lawn park,' including a row of Southern Magnolias, concrete walk, hedge row with pedestrian lights and lawn. Immediately north of the Superior Bathhouse, the lawn widens and the steep terrain between this lower area and the upper level of the Grand Promenade becomes visible. The broad lawn extends for the majority of the Arlington Lawn landscape, with features interspersed as described.

A service area for the park lies between the lawn located to the north of the Superior Bathhouse and the Hot Water Cascade. The service area includes several buildings and structures (the sweeper building, air conditioning fans, cool water exchanger building and pump building) as well as parking for maintenance vehicles and maintenance work areas. It is backed up to the steep slope and screened with vegetation. The Hot Water Cascade is tucked into the hill between the Hot Water Cascade Display Spring along the Grand Promenade and the pools at Arlington Lawn. The area surrounding the Cascade provides ample opportunity for small and medium sized gatherings.

Two curved concrete sidewalks arc around the lawn near the intersection of Central Avenue and Fountain Street. These sidewalks define the broad lawns within the core of the Arlington Lawn and provide pedestrian connections between Bathhouse Row and the Hot Water Cascade, seating area with stage, and DeSoto Rock. A contemporary gazebo is located at the intersection of the sidewalks.

The northeastern edge of the core area of Arlington Lawn is defined by a stone rubble retaining wall that extends from Fountain Street to a location near the DeSoto Rock. Beyond the wall the landscape is less formal, containing masses of shrubs and large canopy trees. The space gradually tapers to form a roughly-triangular shape as it meets the northern end of the Grand Promenade.

Small scale features within the Arlington Lawn include park identification and interpretive signs, thermal spring boxes, wood benches, a concrete park identifier sign, irrigation spigots, plaques, trash receptacles, and individual plants.



Figure 3- 6: Spatial Organization, Arlington Lawn

Spatial Organization, Component Landscape E: Hot Springs and North Mountains

The Grand Promenade is situated on the lower west slope of Hot Springs Mountain. The mountain slopes steeply up from the Grand Promenade to a high point and upper ridge that curves in a u-shape to join North Mountain which extends to the north then bends back to the west behind the Arlington Hotel. Fountain Street lies in a narrow dead-end valley that extends into the central portion of the 'u.' The scenic drive that traverses the mountain begins just east of the northern end of the Grand Promenade and winds steeply up the western side of the slope. The remainder of the road is comprised of two loops around the two high points, and a steep descent road that merges into Fountain Street at the Jug Fountain. The side slopes of the mountain are densely wooded, and hiking trails traverse them at varying levels of difficulty.

Spatial Organization, Component Landscape F: West Mountain

West Mountain is situated west of Bathhouse Row, beginning immediately west of the central business district of downtown Hot Springs. West Mountain slopes steeply up from the downtown to a ridgeline that extends west to southwest. The scenic drive, West Mountain Drive, begins at Whittington Park where it traverses up the north side of West Mountain then bends to the west, connecting to West Mountain Summit Drive that continues to traverse the slope until it reaches the summit. West Mountain Drive continues to the southwest where it connects to the city of Hot Springs via Prospect Avenue. The side slopes of the mountain are densely wooded, and a trail system of five hiking trails traverses the mountain at varying degrees of difficulty. Pedestrian access to West Mountain is provided by trails with access points at; the Mountain Top Trail at Prospect Avenue (adjacent to the South vehicular entrance), the Mountain Top Trail at Whittington Avenue (adjacent to the North vehicular entrance), the Oak Trail at the North end of Exchange Street, and the Canyon Trail adjacent to the parking garage on Central Avenue. The trail system is also accessed from various points on the mountain.

Spatial Organization, Component Landscape G: Whittington Park

Whittington Park is a linear park, arranged along a center axis oriented east-west, and composed of three segments. The park's form is defined by the curvilinear shape of Whittington Avenue, which surrounds the park on all sides. Two vehicular roads cross the park at West Mountain Drive and just west of Myrtle Street, creating the three park segments. Whittington Creek follows the park's central axis and is flanked on either side by similarly scaled open spaces of lawns and mature trees.

Topography

Topography, Study Area

Hot Springs National Park is in the Zigzag Mountains, a portion of the Ouachita Mountain system. The mountains are composed of a series of narrow steep ridges that are characterized by novaculite rock outcrops.⁸ Topography has had a major influence on the organization of the landscape at Hot Springs National Park. The hot springs are created as geothermally heated water emerges to the surface. The "discharge zone" is about one-quarter mile long at the western base of Hot Springs Mountain in a narrow valley between Hot Springs and West Mountains. Today the springs are capped to protect the water from contamination. The presence of the springs led to the establishment of the Hot Springs Reservation, the Hot Springs National Park, and the development of the surrounding area.

The steep mountains within the park provide opportunities for exercise, recreation, and views of the surrounding area. The main developed areas of the park reside in the level valleys between the mountain slopes.⁹

⁸ NPS website for Hot Springs National Park
<http://www.nps.gov/hosp/pphtml/subnaturalfeatures14.html>

⁹ General Management Plan and Development Concept Plan, Hot Springs National Park, 59.

Topography, Component Landscape A: Bathhouse Row

Bathhouse Row is a relatively level area, situated along Central Avenue in downtown Hot Springs in the valley between Hot Springs Mountain and West Mountain, and along the original bed of Hot Springs Creek. The creek still runs underneath Bathhouse Row in a large arch tunnel, as it has since 1884. Bathhouse Row slopes slightly to the south, following the topography of Central Avenue. The first floor of its buildings are situated slightly higher than the Magnolia Promenade (rising from six inches to four feet above the promenade), providing a distinctive presence that also necessitates steps and ramps to access building entries. On the back or eastern side, the steep topography of Hot Springs Mountain meets Bathhouse Row where tall stone retaining walls define a strong linear edge. Bathhouse Row is within the 100-year-floodplain and could be inundated by five to six feet of water during a 100-year flood event.¹⁰

Topography, Component Landscape B:

Grand Promenade and Mountain Sidegrounds

The Grand Promenade is raised between fifteen and thirty feet above the ground level of Bathhouse Row and the Arlington Lawn. A series of retaining walls (some built into the back wall of bathhouse structures) create a vertical wall between the Grand Promenade and the areas below. The promenade itself is relatively level. The Mountain Sidegrounds (located between the Grand Promenade and Hot Springs Mountain Road and the Rehabilitation Center) slope up away from the promenade. The slope is gentle in the South Park area, due to the series of retaining walls that define the eastern edge of this space. The Foreground Park and Tufa Park include moderately steep slopes, with paths and drainage channels traversing through the areas. The Wooded Park slopes severely at the eastern edge of the promenade and some erosion problems exist.

Topography, Component Landscape C: Formal Entrance (Stevens Balustrade)

The Formal Entrance steps upward along an east-west orientation responding to the natural topography of Hot Springs Mountain and rises to an elevation between thirty to forty feet above Central Avenue. The Formal Entrance begins with a relatively level entry/gateway at Bathhouse Row. Between the Maurice and Fordyce Bathhouse, the Formal Entrance continues uphill along a sloping walk that rises approximately six feet to the Stevens Balustrade. The Stevens Balustrade is terraced into the hillside through the use of steps, walls and a mid-point landing/terrace. At the top of the Stevens Balustrade, the Formal Entrance meets the Grand Promenade which is relatively level. From this point, the Formal Entrance continues up the hillside along a series of steps to an original road that accessed the Army-Navy gate. This is the highest point along the Formal Entrance and the site where the Pavilion originally stood. The site of the Pavilion slopes to the west, overlooking the Formal Entrance (Stevens Balustrade) toward Central Avenue. The eastern edge of the Pavilion site meets the level area of the Old Carriage Road.

¹⁰ Ibid, 34.

Topography, Component Landscape D: Arlington Lawn

Arlington Lawn is relatively flat and lies at a similar level as Bathhouse Row. The eastern edge of the space is defined by a steep hill that is stabilized by retaining walls and fence mesh in several locations. The topography near the Hot Water Cascade and the Lower Tufa Terrace Trail is steep and exposed tufa outcrops help to create a unique, somewhat rustic character. The northern portion of this landscape, beyond the Fountain Street retaining wall consists of a slope that is steepest near Arlington Lawn and gradually becomes more gentle near the Fountain Street entrance to the Grand Promenade. This portion of the landscape was historically the site of the Superintendent's residence and maintenance facilities, today it functions as an extension of Arlington Lawn.

Topography, Component Landscape E: Hot Springs Mountain and North Mountain

The steep slopes of Hot Springs Mountain and North Mountain are wooded and provide recreational opportunities. Scenic roads on both mountains provide opportunities for visitors to enjoy the scenic views and environment. Trails provide various lengths and levels of difficulty for users who seek exercise and fresh air. The summit elevation is approximately 1120 feet.

Topography, Component Landscape F: West Mountain

West Mountain is steeply sloped and heavily wooded with several streams and ravines. West Mountain rises in elevation from downtown Hot Springs to the mountain summit, with an elevation change of approximately 450 feet to the mountain summit. The summit elevation is approximately 1100 feet.

Topography, Component Landscape G: Whittington Park

Whittington Park gently slopes from west to east. A bench (flat topography) follows the edge of Whittington Avenue along most of the north and south sides. A fairly gentle slope extends from Whittington Avenue down to the top of the channel walls along Whittington Creek. At Whittington Creek, the grade drops dramatically to the channel bottom.

Vegetation

Vegetation, Study Area

Native vegetation in the region is within a transition zone of pine/oak forests, between the upland hardwood forests characteristic of the Ozark Plateau to the north and west and the southern shortleaf pine associations of the Gulf Coastal Plain to the south. The park lies within the USDA plant hardiness zone 7b. The rocky mountain slopes and creek valleys encompassed within the park boundaries support dense forest cover of mixed stands of oak and hickory interspersed with shortleaf pine on the more exposed slopes and ridgetops. The forest understory contains flowering shrubs, wildflowers, a rare local chinquapin species (Castanea ozarkensis) and occasionally the rare Graves spleenwort (Asplenium gravesei). The park includes the state's finest stand of shortleaf pine (Pinus echinata), a 150-acre stand on the north slope of Sugarloaf Mountain.¹¹

A study conducted during the summer of 2003 along roads and trails within Hot Spring National Park found 20 non-native/exotic plant species having varying degrees of invasiveness (Becker, 2004). Japanese honeysuckle (Lonicera japonica) and common privet (Ligustrum sinense) were the most frequently encountered species, and had the greatest amount of aerial cover along roadways and trails. These and other non-native invasive plants have reduced the biodiversity of various otherwise natural habitats throughout the park, and their control as well as restoration of habitats will require considerable effort and expense.

Vegetation, Component Landscape A: Bathhouse Row

Bathhouse Row is defined by its linear row of regularly spaced Southern Magnolias (Magnolia grandiflora) that follow Central Avenue. Known as Magnolia Row, the trees are the outermost component of Bathhouse Row's Magnolia Promenade that consists of a "lawn park" at the edge of Central Avenue, a broad walk, and a low hedge and lawn that create the front lawns of the bathhouse buildings. The Southern Magnolias are set in a linear arrangement in the turf lawn that is defined on both sides by a raised concrete curb. Low, formal hedges of manicured Chinese Holly (Ilex cornuta) define the eastern edge of the walk, and low-growing turf grass creates the lawn of each building. There is also a scattering of other specimen trees in and around the bathhouses, including American Holly (Ilex opaca). Low shrubs are planted at the foundations of some buildings.

As a result of a long history of human activity, the intentional planting of non-native plant species, and of other disturbances to the area, undeveloped areas bordering Bathhouse Row have become overgrown with invasive exotics. This is particularly noticeable on portions of the Oak Trail along Bathhouse Row and behind the Levi Hospital. A dense impenetrable tangle of exotic vines and shrubs has displaced the original native flora. Non-native invasive plant species in this area include wisteria (Wisteria floribunda), English ivy (Hedera helix), periwinkle (Vinca major), Japanese honeysuckle (Lonicera japonica), nandina (Nandina domestica), common privet (Ligustrum sinense), and evergreen magnolia (Magnolia grandiflora) (Becker, 2004).

¹¹ *Ibid.*, 60.

Table 3-1: Vegetation, Bathhouse Row

<i>Landscape Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Holly hedge	3-7	The holly hedge (<i>Ilex cornuta</i>) lines the linear walk and adjacent Bathhouse sidewalks, delineating the turf lawn in the front and side yards of the Bathhouses.	Good/Fair Sections of the hedge are missing.
Magnolia Promenade/ Southern Magnolias	3-8	Southern Magnolia (<i>Magnolia grandiflora</i>) trees are planted along the raised curb in a turf grass lawn along Central Avenue. Some are more than 50 years old, and some newer plantings of the same species have been planted as in-fill trees.	Good Further evaluation by an arborist recommended.
Lawn	3-9	Turf grass lawns at the front and sides of the Bathhouses, extend to the holly hedge.	Good Some thin and damaged spots in intermittent locations.
Holly trees	3-10	Holly trees (<i>Ilex opaca</i>) are planted in some of the lawns in front of the Bathhouses.	Good



Figure 3- 7: Holly hedge (MBD, 060705-79)



Figure 3- 8: Magnolia Promenade - Southern Magnolias (MBD, 060905-0545)



Figure 3- 9: Lawn (MBD, 060805-0296)



Figure 3- 10: Holly Trees (MBD, 060705-34)

Vegetation, Component Landscape B: Grand Promenade and Mountain Sidegrounds

Descriptions of vegetation related to the Grand Promenade and Mountain Sidegrounds is presented in sequence from the southern end of the Grand Promenade to the northern end.

Southern end of Grand Promenade and South Park

At the far southern end of the Grand Promenade, the area surrounding the Noble Fountain includes a simple hedge of holly, 3' wide by 4' high that follows the curved retaining wall. The hedge is in good condition. Another holly hedge at the western edge of the plaza above the Noble Fountain is discontinuous and in poor condition. The eastern side of the Grand Promenade in this area includes a dense groundcover of honeysuckle vine, periwinkle, and ivy in some places and turf, weeds, or bare dirt in others. The midstory and canopy contains nandina, a holly hedge, a hackberry, and a tulip tree. The hedge is in poor condition and the rest of the plants are in fair condition. The vines are climbing the hackberry trunk. From this area extending to the north the vegetation on both sides of the Grand Promenade is sparsely spaced, including leggy trees (pin cherry, hackberry, elm, cedar, oak, magnolia, redbud), occasional shrubs (holly and nandina) near seating areas, and turf, weeds, or bare ground.



Figure 3- 11: Vegetation at southern end of Grand Promenade (QEA, DSC01722)



Figure 3- 12: Southern end of the Grand Promenade looking north (QEA, DSC01771, June 2005)

Middle Area of Grand Promenade, Foreground Park, and Tufa Park

The vegetation surrounding the Formal Entrance is described in the narrative addressing Landscape Component C. On the western side of the Grand Promenade, directly above the Display Spring are mixed trees and shrubs including nandina, honeysuckle, prunus, hackberry, pin cherry, and other species. North of that is turf with intermittent plants including a few small redbuds, a line of leggy junipers, and a clump of short nandina. There are two small Chinese elms located in planters within the Grand Promenade pavement. They are both severely stunted and in poor condition. Brick plaza #2 contains a small maple tree in fair condition and is edged by a hedge and three hollies pruned into globes. They are in good condition.

On the eastern side of the Grand Promenade the Foreground Park contains turf and clusters of shade trees, scattered evergreens and pruned shrubs. The vegetation, topography, trails and drainage structures combine to make a scenic spot that acts as a transition zone between the Grand Promenade and the trails above Hot Springs Mountain Drive.

Directly north of the Foreground Park, the Tufa Park is made up of sloped turf areas sprinkled with scattered spring boxes, benches, trees, and pruned shrubs. The irregular arrangement of the plants is oddly matched with the severely pruned shrubs. The woody plants in this area are in fair to poor condition. They appear neither naturalistic nor formally designed and their placement seems spotty and haphazard.



Figure 3- 13: Chinese elms in the Grand Promenade facing south (QEA, DSC01872, June 2005)



Figure 3- 14: Vegetation on east side of Grand Promenade north of the Formal Entrance (QEA, DSC01841, June 2005)



Figure 3- 15: Vegetation at the Tufa Park (QEA, DSC01860, June 2005)

Near the Hot Water Cascade Display Spring

On the eastern side of the Grand Promenade, brick seating area #3 is situated immediately south of the Hot Water Cascade Display Spring. The site is surrounded by plants that appear to have once been arranged in a formal design however, they now are in fair to poor condition and have a ragged appearance. Plants include redbud, magnolia, cedar, and nandina. The sparse and leggy condition of the plants has led to an erosion problem that needs to be addressed. Surrounding the Hot Water Cascade Display Spring on the north and eastern sides is a dense clump of woody plants that are being overrun by kudzu and ivy.

Directly across the Grand Promenade from this spot, brick plaza #3 is edged with a retaining wall and sparse, leggy trees. Kudzu and ivy are prevalent and other species are mostly absent. The ground is eroding.



Figure 3- 16: Vegetation near the Hot Water Cascade Display Spring (QEA, DSC01888, June 2005)

North of Hot Water Cascade Display Spring and the Wooded Park

On the western side of the Grand Promenade, brick plaza #4 is enclosed by dense vegetation. The center of the plaza has a planting area with sparse grass and weeds, and a pine tree that is in fair condition. The tree has suckers at its base and appears to have been damaged by a trimmer. North of this area the Grand Promenade has a pleasant shaded character. The western side slopes down away from the promenade and is fairly open lawn. There are deciduous trees of varying age, form and size, spaced somewhat regularly in fifteen to twenty foot intervals throughout the area. These include redbud, flowering dogwood, white oak, and sycamore. The majority of these plants appear to be in good condition however the redbud appear to be declining and one exceptional white oak (near the curved retaining wall) has been damaged and needs to be pruned. Toward the northern end of the promenade there are large dense patches of English ivy. Woody plants within the ivy patches are in fair to poor condition as the ivy is growing up their trunks and the trees (mainly red oak) appear to be declining. A cedar is in fair condition but may be declining due to too much shade. These areas also include tree stumps, weeds, seedlings and some suckering shrubs. A four foot by four foot holly hedge outlines the western side of brick plaza #5. The hollies are very leggy and sparse.

The eastern side of the promenade in this area (beginning across from brick plaza #4 and extending to Fountain Street) slopes up away from the walkway and contains dense vegetation. The groundcover is thickly coated with English ivy that is also growing up and over many of the other plants. The woody plants include white oak, elm, tulip tree, cedar, sweet gum, maple, and holly. The ivy is impacting all of the woody plants.



Figure 3- 17: Vegetation along Grand Promenade north of the Hot Water Cascade Display Spring (QEA, DSC01945, June 2005)



Figure 3- 18: Holly hedge at brick plaza #5 (QEA, DSC01973, June 2005)

Vegetation, Component Landscape C: Formal Entrance (Stevens Balustrade)

With the exception of the upper steps and the original Pavilion site, the Formal Entrance (Stevens Balustrade) is largely devoid of overstory plantings and has minimal areas of shrubs and flowers. Low formal planters of primarily small shrubs and flowering perennials line the sloping walk between the Maurice and Fordyce Bathhouses. Terraced lawns extend outward from the Stevens Balustrade. The trees and understory shrubs of Hot Springs Mountain becomes the primary vegetation along the steps above the Grand Promenade. The steps above the Grand Promenade lead to a dense massing of *Vinca* (*Vinca major*) that covers the hillside; generally obscuring the area where the pavilion once stood. Beyond this point the forested vegetation of Hot Springs Mountain covers the slope.

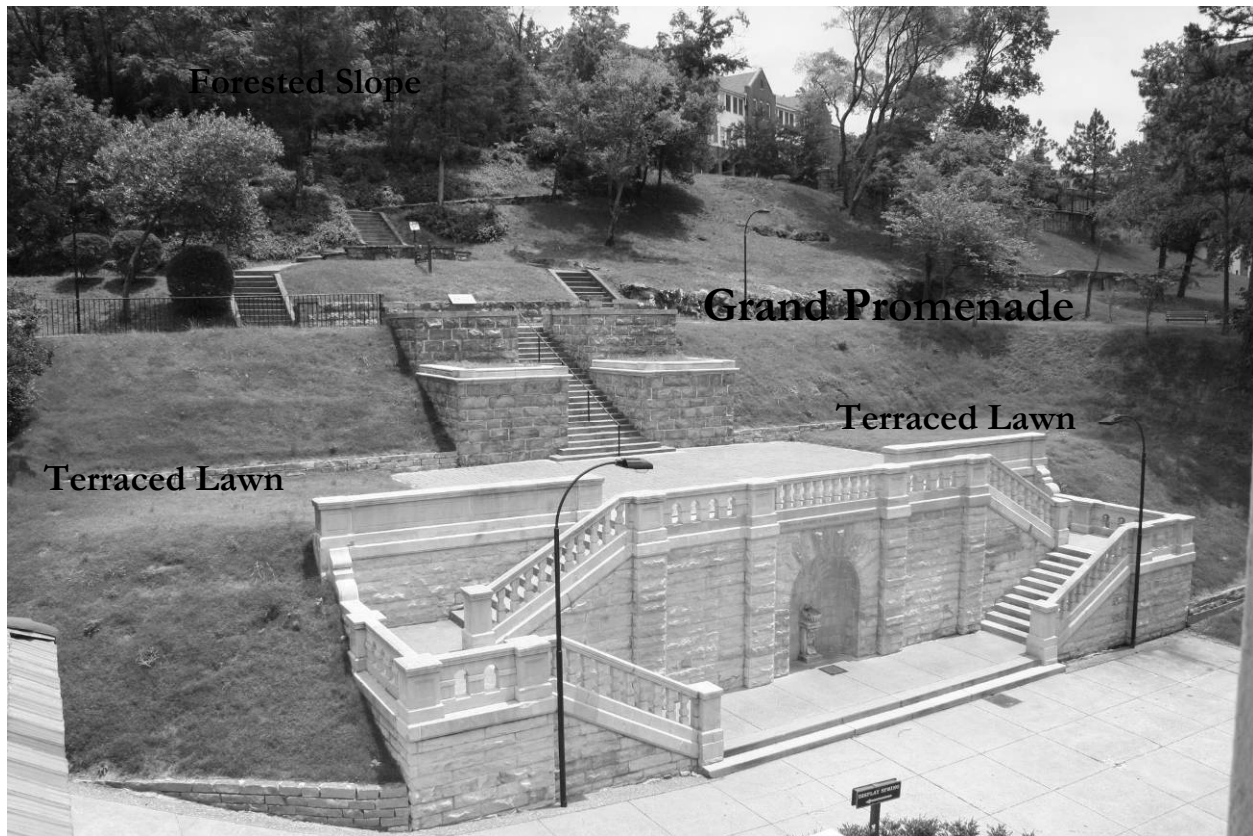


Figure 3- 19: Vegetation, Formal Entrance

Vegetation, Component Landscape D: Arlington Lawn

The vegetation at Arlington Lawn includes a continuation of the row of Southern Magnolias (*Magnolia grandiflora*) along Central Avenue. Also, the lawn park is extended and widened creating a broad lawn that extends from the sidewalk to the steep slope that separates the lawn from the Grand Promenade. The Arlington Lawn is edged by a formal manicured holly hedge that stands approximately 30" high. Other vegetation includes scattered trees and shrubs that appear to be randomly placed, as well as plants that are used to screen the service area. Vegetation on the slope includes an open woods along the Tufa Terrace Trail, with an understory of English Ivy (*Hedera helix*).

Vegetation in the area of the pools, stage, and DeSoto Rock include lush azaleas, ivy and kudzu on the steep slope and retaining walls, and a grouping of trees and shrubs behind the stage. The northern portion of Arlington Lawn, along Fountain Street, is made up of a large lawn area with canopy trees and scattered shrubs. Two large areas have English Ivy as a dense ground cover. This portion of the landscape was historically the site of the Superintendent's residence and maintenance facilities, today it functions as an extension of Arlington Lawn.



Figure 3- 20: Arlington Lawn facing south toward the Superior Bathhouse (QEA, April 2005, DSC01433)



Figure 3- 21: Sidewalk and Magnolias along Fountain Street (left side of image) and a portion of Arlington Lawn and the park entrance sign. (QEA, April 2005, DSC01440)



Figure 3- 22: DeSoto Rock (mid-left location in image) lawn “stage” and stone seating area, and the Hot Water Cascade Pools (right) (QEA, April 2005, DSC01341)



Figure 3- 23: Area between Fountain Street and Northern portion of the Grand Promenade. This area is now a functional continuation of Arlington Lawn. It once was the grounds of the Superintendent’s residence and associated facilities. (QEA, November 2005, DSC04497)

Vegetation, Component Landscapes E and F: Hot Springs Mountain, North Mountain, and West Mountain

Forested Areas

Vegetation within the mountain lands within the park is mainly forested lands with some human-use areas. The forested lands are made up of vegetation characterized as a transition zone of southern short-leaf pine associations and upland hardwood forest. Vegetation types within the forest vary based on landscape position. Upland hardwoods characterize the ridge-tops and gently sloping areas. A pine-oak-hickory complex is found in dry south-facing slopes near ridge tops. South-southeast facing slopes and lower steep northern slopes include a xeric subtype of oak-hickory-pine. A mixed forest type is characteristic of the creeks, upland waterways, and disturbed mesic environments.¹²

¹² Becker, Cindy E., 2004. *Composition, Distribution, and Abundance of Invasive Exotic Plants at Hot Springs National Park* (Republic, MO: National Park Service, Inventory and Monitoring Program), 2.

The forested areas of the park include a network of maintained and abandoned roads and trails as well as former development sites, cemeteries, and mine sites. The native vegetation at these sites has been altered, providing opportunities for invasive plants. In 2004, a study was conducted that addressed the distribution and abundance of exotic species within the forested areas of Hot Springs National Park. The report documented the presence of the following invasive exotic plants: tree of heaven, nandina, mimosa, Russian olive, common privet, shrubby honeysuckles, Japanese privet, mahonia, bridal wreath spirea, evergreen magnolia, Chinese holly, wisteria, English ivy, Kudzu, Japanese honeysuckle, periwinkle, Johnson grass, sericea lespedeza.¹³

Currently, Japanese honeysuckle and common privet are abundant throughout the forested areas of the park. They are found especially along trails and roads, abandoned man-made features, ravines and creeks, where they are extensive and have replaced a majority of the native flora.

The lowland creeks and ravines contain extensive infestations of Japanese honeysuckle, common privet, evergreen magnolia, nandina, Chinese holly, and wisteria. These plants dominate the disturbed bottomlands within the park and have replaced the unique natural communities that were previously present. Nandina and sericea lespedeza are two exotic species of concern. Nandina is resilient to the most harsh environmental conditions within the park and has invaded areas devoid of other exotic plants. Sericea lespedeza is not currently widely distributed, but its presence is troubling due to its ability to seed prolifically and form dense areas of monoculture impenetrable to most native species.

Human Use Areas

A utility corridor spans from the Hot Springs Mountain Tower to the northwest. In this area the trees are kept cleared and a wide variety of grasses, forbs, and shrubs are present. Other clearings exist at the picnic area, Pagoda Pavilion, Hot Springs Mountain Tower, and at the overlooks to maintain views.

The dense forest of West Mountain has been cleared at road overlooks to maintain views of the city of Hot Springs and the surrounding area. In these areas, primarily mown grasses are present.

Vegetation, Component Landscape G: Whittington Park

Whittington Park is characterized by its mature deciduous and evergreen trees. The wide diversity of tree species has created an arboretum, where many of the mature trees are significant specimens. Most appear to be over fifty years old and are prime examples of the form, habit and character of their species.

The park's mature deciduous trees include groves of Southern Magnolia (*Magnolia grandiflora*), Sycamore (*Platanus occidentalis*), Sweet Gum (*Liquidambar styraciflua*), American Linden (*Tilia americana*), Red Elm (*Ulmus rubra*), White Poplar (*Populus alba*), Tulip Tree (*Liriodendron tulipifera*), White Oak (*Quercus alba*), Northern Red Oak (*Quercus rubra*), Ash

¹³ Ibid., 13-14, 22.

(Fraxinus americana and pennsylvanica), Hackberry (Celtis occidentalis), Blackgum (Nyssa sylvatica), Black Locust (Robinia pseudoacacia), Bigleaf Magnolia (Magnolia macrophylla), Balsam Poplar (Acer negundo), Black Walnut (Populus balsamifera), Black Cherry (Prunus serotina), Hawthorn (Crataegus species), Persimmon (Diospyros virginiana), Chinese Elm (Ulmus parvifolia), Star Magnolia (Magnolia stellata), Swamp White Oak (Quercus bicolor), Sweet Pecan (Carya illinoensis), Hickory (Carya sp.) and Red Maple (Acer rubrum). Mature evergreen trees include China Fir (Cunninghamia lanceolata), American Holly (Ilex opaca), and Shortleaf Pine (Pinus echinata).

Newer deciduous trees are interspersed with mature tree groves and in previously open lawn areas. These include: Pin Oak (Quercus palustris), Shingle Oak (Quercus imbricaria), Chinkapin Oak (Quercus muehlenbergii), Rough-leaved Dogwood (Cornus drummondii), White Mulberry (Morus alba), Eastern Redbud (Cercis canadensis), Bluejack Oak (Quercus incana), Boxelder (Juglans nigra), Crabapple (Malus species), Sugar Maple (Acer saccharum) and Sassafras (Sassafras albidum).

A few shrubs are present in Whittington Park, including: Crape Myrtle (Lagerstroemia indica), Chinese Holly (Ilex cornuta), Juniper (Juniperus sp.), and Arborvitae (Thuja sp.). The park's trees and shrubs are in good condition, with a few trees that suffer from some damage and die back. The ground cover is primarily turf grass, which is sparse in spots due to shade and heavy foot traffic.

Perhaps because Whittington Park largely consists of mowed and maintained lawns with few nature areas, the amount of non-native and invasive plants is relatively low when compared to other areas of Hot Spring National Park. There is no mention of specific invasive species present within Whittington Park during the 2003 surveys.¹⁴

Circulation

Circulation, Component Landscape A: Bathhouse Row

Located along the main street of downtown Hot Springs, Bathhouse Row is a pedestrian corridor adjacent to a busy vehicular thoroughfare. The majority of the pedestrian area is separated from the street by the "lawn park", a curbed planting area of turf grass and trees. Parking is not allowed along the street edge of Bathhouse Row, which is also the eastern edge of Central Avenue. A vehicular drop-off area is located where the Formal Entrance (Stevens Balustrade) meets Bathhouse Row, between the Maurice and Fordyce Bathhouses. The drop-off is a raised concrete area with room for approximately two cars. It also serves as a drive to allow for service and maintenance access. Pedestrian crossings are located at two major intersections - one at Central Avenue and Fountain Street and another at Central Avenue and Reserve Street. Two additional crossings direct pedestrians across Central Avenue to the former Bath Street to provide access to a new parking garage, and across Central Avenue to Mountain Street.

¹⁴ Becker, 2004.

Circulation, Component Landscape B: Grand Promenade and Mountain Sidegrounds

The Grand Promenade is a pedestrian circulation corridor that provides connections between Reserve Street, Fountain Street, and a number of access points to Bathhouse Row, the Formal Entrance (Stevens Balustrade), and the trails on Hot Springs Mountain. Two of the Mountain Sideground parks (Figure 3- 3), the Foreground Park and the Tufa Park, include pedestrian trails that encourage leisurely strolling, exploration, and light exercise. Six paved pedestrian paths are located in the Foreground Park between the Grand Promenade and the Old Carriage Road and Hot Springs Mountain Road. The pavement consists of concrete and exposed aggregate concrete. The edges of the paths include concrete gutters and short rubble stone retaining walls in several areas. The path route layouts appear to be random and they intersect at odd angles. It is likely that they were laid out in response to rock outcrops, vegetation, and other natural features. The paths slope steeply in some areas and steps are located in three places. A small concrete pedestrian bridge provides an easy crossing over the stone drainage channel. These paths are in good condition.

The promenade also serves as a service road for park maintenance vehicles. The vehicles can access the promenade from the sloped concrete walk behind the Fordyce Bathhouse that connects the Formal Entrance to the Grand Promenade (see figure 3- 24). Also, service vehicles can enter the Grand Promenade at the Fountain Street entrance.

The Old Carriage Road is a gravel route that extends from an iron gate at the Rehabilitation Center to the north and intersects with Hot Springs Mountain Road (see figure 3- 25). Along the western edge of the road there are a total of eleven brick bench pads. A deteriorated concrete gutter runs parallel to the eastern side of the road. There is vegetation growing through the gravel in some portions of the road.



Figure 3- 24: Sloped concrete walk between Formal Entrance and Grand Promenade (QE | A, DSC01806)



Figure 3- 25: Old Carriage Road (QEA, June 2005)

Circulation, Component Landscape C: Formal Entrance (Stevens Balustrade)

The Formal Entrance is the primary pedestrian connection to Hot Springs Mountain from Bathhouse Row. The lower portion begins at a vehicular drop-off area at Central Avenue that also provides service access. The pedestrian circulation along the Formal Entrance follows a distinct rhythm that alternates between a central and double access. At the entry/gateway on Central Avenue the pedestrian route is along a center walk, approximately thirteen feet wide, that follows the central axis of the Formal Entrance. At the Stevens Balustrade, the pedestrian circulation is along a series of steps. The route is split into two stairways (along a double set of steps), and returns to a central, singular route at the top of the Balustrade until it reaches the Grand Promenade where it becomes two routes again until it reaches the Pavilion site.

Circulation, Component Landscape D: Arlington Lawn

Pedestrian circulation at Arlington Lawn is provided by a series of sidewalks. A four foot wide sidewalk runs along Fountain Street and widens at Central Avenue to match the sidewalk and terrace along Bathhouse Row (see Bathhouse Row description). An exposed aggregate sidewalk extends from the Fountain Street entrance (by the park entrance sign) to the Gazebo. The width of the sidewalk varies from six-foot four-inches to eight feet.

Secondary sidewalks extend from the main route connecting to the Grand Promenade, Gazebo area, pool/stage/DeSoto Rock area, and Lower Tufa Terrace Trail. Two sidewalks arc around the main lawns at the intersection of Fountain Street and Central Avenue. A concrete sidewalk with curb extends from Fountain Street to the Grand Promenade.

The Lower Tufa Terrace Trail extends from the Arlington Lawn to the Grand Promenade. Much of the S-curved trail is bordered by 3' high black metal rail fence. The trail has a very steep grade and a 3'-6" width. Two lookouts provide a view of the Hot Water Cascade and Thermal Pool. The trail has three stair areas with material varying from stone to concrete. Ten risers are at the base near the Gazebo, seven risers are on the southernmost curve, and eleven risers are near the Grand Promenade. The trail is in fair condition. Graffiti has defaced the trail in numerous places and the surface slope and material is irregular.

Vehicular circulation within Arlington Lawn is limited to park service vehicles that mainly utilize the sidewalks. An exposed aggregate driveway extends from the southern arc sidewalk toward the service area, providing access for trucks and other service vehicles.

Circulation, Component Landscape E: Hot Springs Mountain and North Mountain

An extensive trail system traverses Hot Springs Mountain and North Mountain providing a variety of options of length and difficulty for hikers. These trails include the Peak Trail, Dead Chief Trail, Short Cut Trail, Reserve Trail, Grand Avenue Trail, Honeysuckle Trail, Floral Trail, Dogwood Trail, Arlington Trail, Gulpha Gorge Trail, Goat Rock Trail, and Fountain/Hot Springs Mountain Trail. The trails include multiple features including culverts, stone drainage channels, small bridges with iron railings, and concrete and stone steps (see figures 3-177 and 3-178).

Vehicular circulation on Hot Springs Mountain consists of asphalt roads aligned as one primary one-way route and two secondary loop roads. The one-way route begins near the intersection of Fountain Street and the Grand Promenade. It slopes steeply upward, immediately affording views of massive stone retaining walls and culverts. The road levels off as it runs parallel to the Grand Promenade, then begins a steep, curving ascent up the mountain. As the road ascends the mountain, the steep grade and sharp curves demand a slow speed. The travelers are given an opportunity to enjoy breath taking views of the wooded hillside. The majority of the ascent road is lined with historic stone retaining walls, stone shoulders and stone drainage channels. These features enhance the beauty of the route. The first loop road provides access to the Hot Springs Mountain Tower, and access to the picnic area. The second loop road extends further north, and the overlook near the Goat Rock Trail provides sweeping views of the wooded mountains to the north and west.

Circulation, Component Landscape F: West Mountain

Vehicular circulation on West Mountain consists of two loop roads, both asphalt paved roads, one of which ends in a one-way loop. Two vehicular entrances provide access from the city of Hot Springs to West Mountain Road. The entrance on the South side of the mountain is located at Prospect Avenue, and the second entrance on the North side is located at Whittington Avenue (adjacent to Whittington Park). West Mountain Drive travels South around the base of the mountain and connects to West Mountain Summit Drive culminating at an overlook at the summit. A service drive at West Grand Avenue, not open to the public, provides access to the communication towers (on inholdings).

A soft-surfaced trail system provides pedestrian circulation. Trails traverse West Mountain with a variety of distances and difficulty for hikers, accessing the overlooks and the summit. Trails include West Mountain Trail, Mountain Top Trail, Sunset Trail, Oak Trail, and Canyon Trail, utilizing four access points from the city of Hot Springs, two access points that are adjacent to the vehicular entrances at Whittington Avenue and Prospect Avenue, and two access points at street locations within downtown Hot Springs. The latter include one across from Canyon Court and adjacent to a parking garage and another at Exchange Street. The Exchange Street access is no longer maintained by the park. The Sunset Trail is the longest trail, connecting the summit of West Mountain to Sugarloaf Mountain, which is located North of

West Mountain. The trails are generally narrow routes that follow the natural terrain and include stone water bars, steps, stream crossings, pedestrian cross walks at roads, and benches in select locations. The thick vegetation of the forest and groundcover meet the edges of the trails.

Circulation, Component Landscape G: Whittington Park

Whittington Avenue creates the form and shape of Whittington Park. As a one-way loop around the park, it also serves as the primary vehicular access to the park. Two vehicular roads cross Whittington Park. The westernmost road connects to West Mountain Drive, providing the entrance into West Mountain. The other is located just west of Myrtle Street, and provides a connection between the one-way streets. A soft surface trail loops around the park, crossing Whittington Creek at four points across pedestrian bridges.

Buildings

Table 3-2: Buildings, Component Landscape A: Bathhouse Row

<i>Building</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Park Administration Building	3-26	Yellow stucco building with red tile roof built in 1936 faces Reserve Street.	Good
Lamar Bathhouse	3-27	Masonry/Brick building is a combination of the Classical Revival and Spanish Revival styles built in 1922 and opened in 1923.	Good
Buckstaff Bathhouse	3-28	A privately operating bathhouse building constructed of Brick/Stucco in the Classical Revival built in 1911 and opened in 1912.	Good
Ozark Bathhouse	3-29	Stucco building built in 1922 in the Spanish Revival style.	Good
Men's Comfort Station	3-30	Mission Style brick building with red tile roof built in 1923. Building aligns with the back of the bathhouses and is located between the Quapaw and Ozark Bathhouses.	Good
Quapaw Bathhouse	3-31	Masonry/Stucco building built in 1921 in the Spanish Revival style and opened in 1922.	Good
Women's Comfort Station	3-32	Mission Style brick building with red tile roof built in 1923. White stucco has been added over brick. Building aligns with the back of the bathhouses and is located between the Fordyce and Quapaw bathhouses.	Good
Fordyce Bathhouse/Visitor Center	3-33	Brick building built in 1915 in the Spanish Renaissance Revival style. Located adjacent to the Formal Entrance (Stevens Balustrade), it operates as the Hot Springs National Park Visitor Center.	Good
Maurice Bathhouse	3-34	Brick/Stucco building built in 1911 in the Spanish & Classical Revival styles, and opened in 1912. It was remodeled in 1915.	Good
Hale Bathhouse	3-35	Brick/Stucco building originally built in 1892. The south wing was added in the Classical Revival Style and opened in 1915. In 1939 it was remodeled in Spanish Revival style.	Good
Superior Bathhouse	3-36	Brick building built in 1915 in the Classical Revival style and opened in 1916.	Good



Figure 3- 26: Park Administration Building (MBD, 060705-1)



Figure 3- 27: Lamar Bathhouse (MBD, 060705-2)



Figure 3- 28: Buckstaff Bathhouse (MBD, 060705-4)



Figure 3- 29: Ozark Bathhouse (MBD, 060705-10)



Figure 3- 30: Men's Comfort Station (MBD, 060705-8)



Figure 3- 3-31: Quapaw Bathhouse (MBD, 060705-3)



Figure 3- 3-32: Women's Comfort Station (MBD, 060705-11)



Figure 3- 3-33: Fordyce Bathhouse (MBD, 060705-7)



Figure 3- 3-34: Maurice Bathhouse (MBD, 060705-5)



Figure 3- 3-35: Hale Bathhouse (MBD, 060705-9)



Figure 3- 3- 36: Superior Bathhouse (MBD, 060705-6)

Table 3-3: Buildings, Component Landscape B: Grand Promenade and Mountain Sidegrounds

<i>Buildings</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Utility Building	3-37	Approximately 8'x6' concrete structure built into slope near stone wall on east boundary of Grand Promenade near the Rehabilitation Center. This building covers the old Army-Navy Spring/Well. It is on property that belongs to the Rehabilitation Center, but could be obtained by the park in the future. Constructed c. 1985-86 to cover the spring/well that was formerly accessed from the basement of Building 8 (constructed 1901). Portions of Building 8's east and west walls are still extant.	Fair The spring is seeping through the floor of the building and leaking out.



Figure 3-37: Small Utility Building (QEA, June 3, 2005, DSC01823)

Buildings, Component Landscape C: Formal Entrance (Stevens Balustrade)

There are no extant buildings within this component landscape.

Table 3-4: Buildings, Component Landscape D: Arlington Lawn

<i>Building</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Gazebo	3-38	Eight green painted simple round posts support a brown standing seam octagonal metal roof. The pavement under the structure is ornamental.	Good
Sweeper Building	3-39, 3-40	Metal structure.	Good
Air Conditioning Fans	3-41, 3-42	Large metal structures that contain the fans.	Good
Cool Water Exchanger Building	3-43, 3-44	Metal building.	Good
Pump Building	3-39, 3-40	Metal building.	Good



Figure 3- 38: Gazebo (QEA, November 2005, DSC04465)



Figure 3- 39: Buildings and Fence at Service Area (QEA, November 2005, DSC04451)



Figure 3- 40: Buildings in Service Area screened by vegetation (QEA, November 2005, DSC04445)

Table 3-5: Buildings, Component Landscape E: Hot Springs Mountain and North Mountain

<i>Buildings</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Comfort Station at picnic area	3-41	One story painted concrete block building with asphalt shingle gable roof has bathrooms for men and women.	Good
Pagoda Pavilion	3-42	Painted concrete pavilion with ornamental hip, clay tile roof.	Good
Gulpha Gorge Trail Shelter	3-43	Sandstone shelter with built-in sandstone seats and asphalt shingle gable roof.	Fair Previous mortar repair impacting structure.
Hot Springs Mountain Tower	3-44, 3-45	Steel tower with elevator and observation deck.	Good
Stone Utility building at Hot Springs Mountain Tower	N/A	Sandstone building.	Fair
Trail Shelter	3-46	Sandstone shelter with built-in sandstone seats and asphalt shingle gable roof; at the intersection of Floral and Honeysuckle trails.	Fair Graffiti and mortar impacts.



Figure 3- 41: Comfort Station at Picnic Area (QEA, 6/3/05, Hot Mtn Rd, DSC02086)



Figure 3- 42: Pagoda Pavilion (QEA, 6/3/05, Hot Mtn Rd, DSC02096)



Figure 3- 43: Gulpha Gorge Trail Shelter (QEA, 6/3/05, Hot Mtn Rd, DSC02131)



Figures 3- 44 and 3- 45: Hot Springs Mountain Tower (QEA, 6/3/05, Hot Mtn Rd, DSC02115 and 6505, Trails DSC02291)



Figure 3- 46: Trail Shelter (QEA, Trail Shelter, DSC02298)

Table 3-6: Buildings, Component Landscape F: West Mountain

<i>Buildings</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Stone Shelter on West Mountain	3-47	Sandstone shelter (22'x 15') with wood shingle roof painted NPS brown located at Overlook #2, built-in sandstone bench, and openings with views of the city of Hot Springs.	Fair



Figure 3-47: Stone Shelter on West Mountain (MBD, IMG_0433)

Buildings, Component Landscape G: Whittington Park

There are no extant buildings within this component landscape.

Small Scale Features

Table 3-7: Small Scale Features Component Landscape A: Bathhouse Row

<i>Landscape Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Parking Lot/Service Drive	3-48, 3-49	Broom-finished concrete service drive and five space parking lot, accessed from Reserve Street and located behind building; attached sidewalk with red brick in basket weave pattern; mortared limestone retaining wall ranging in height from twelve inches to four feet.	Good
Basement Stairs at Park Administration Building	3-50	Concrete steps on northeast (back) side of the building, descending to the basement, concrete retaining walls on both sides. One side of wall has a red tile cap and tube steel handrail. Wrought iron guardrail on the other side	Good Some minor cracking and settling.
Concrete Walk at Reserve Street	3-51, 3-52, 3-53,	Twelve foot wide concrete broom-finished walk from entrance of Grand Promenade to corner of Central Avenue and Reserve Street on south side of Park Administration Building. Four feet wide red brick paving in a basket weave pattern is adjacent to curb. Two temporary "No Parking" signs; ADA concrete curb ramps; five parking meters. Portions of the curb, walk and ramp were built in 1989.	Fair Some cracking and displacement
Concrete Retaining Wall	3-54, 3-55	Fluted concrete retaining wall (twenty-four inches tall) built in 1989 is on south and southwest sides of Administration Building. Bottom 16" is smooth finished and top 8" is fluted. Monument sign "Hot Springs National Park, United States Department of Interior National Park Service" faces the intersection. Sign has fluted concrete base and columns, and is wood with white letters and NPS logo.	Good Wall: Some minor chipping and cracking

Jug fountain	3-56	Cast concrete with several spigots to provide drinking water, located between Reserve Street and the Administration Building.	Good Some minor cracking of the concrete
Administration Building Entrance	3-57, 3-58	<p>Terraced entrance with five limestone steps and black square tube steel with brass molding handrail at building; sand finished colored concrete plaza with six inch wide limestone coping running continuous on the sides of plaza. Three limestone steps with black adhesive on the treads, twenty-four inch height limestone retaining wall adjacent to steps connects to the fluted concrete walls.</p> <p>In the center of the plaza is the Administration Fountain made of concrete with a layer of tufa in a granite hexagon shaped basin.</p>	<p>Overall: Good</p> <p>Plaza: Fair Large cracks, chips and failing mortar.</p>
Boulder with NHL Plaque	3-59	Tufa boulder located adjacent to the NPS Park sign with bronze dedication plaque designating Bathhouse Row a National Historic Landmark, 1987.	Good
Flagpole	N/A	Aluminum flag pole on Central Avenue on (west) side of Park Administration Building, surrounded by broom-finished concrete.	Good
Linear walk	3-60, 3-61	Linear walk is primary feature of the Magnolia Promenade (built in 1989) that follows the original alignment. Walk consists of a nine foot wide sand-finished concrete surface with two foot wide broom finished concrete bands on each side, and brass trench drains (eight inches by seven feet long), spaced sixty feet on center.	Good
Raised curb lawn	3-62	<p>Raised curb lawn, renovated in 1989, separates Bathhouse Row from Central Avenue, and is continuous from Reserve Street to Fountain Street with breaks for pedestrians cross walk to connect across Central Avenue.</p> <p>Raised curb consists of exposed aggregate concrete, nine inches tall, and a low planter with Southern Magnolias and a turf lawn.</p>	<p>Good</p> <p>Some cracking, chipping and displacement in sections.</p>

Spring Boxes	3-63	Spring Boxes that access the many springs and originally fed the bathhouses, are scattered intermittently throughout Bathhouse Row in landscape areas. Green boxes are approximately five feet square extending approximately ten inches above grade.	Good
Lamar Bathhouse Entrance	3-64, 3-65	Broom-finished concrete ramp centered on building entrance extends to linear walk. Ramp is flanked on both sides by a short set of concrete stairs, painted grey. White painted concrete walls with black tube steel handrails flank ramp and steps. Planter pots sit on wall ends. Another concrete ramp (ADA) with concrete cheek wall (painted white), black tube steel handrail extends along the building facade to the north.	Good, Some cracking on concrete ramp
Basement Stairs at Lamar Bathhouse	3-66, 3-67	South side: Holly hedges line broom-finished concrete walk leading to basement. At building edge, two sets of broom-finished concrete steps and a landing descend to basement level. Concrete retaining wall, painted white is on south side. North side: Broom-finished concrete walk leads to basement and set of broom-finished concrete steps, concrete retaining wall painted white is on north side, and black steel pipe guardrail.	Fair Failing of the retaining wall Cracking/settling of steps
Concrete Walk between Lamar and Buckstaff Bathhouses	3-68	Broom-finished concrete walk.	Good Some minor cracking Trash and debris
Turf Stone Ramp between Lamar and Buckstaff Bathhouses	3-69	Mortared limestone ramp with turf in the center. Ramp begins at the end of the broom-finished concrete walk and extends over a rock outcrop one third of the way up the mortared stone retaining wall #1.	Good

Rock outcrop South of the Lamar Bathhouse to remnant concrete piers behind Buckstaff Bathhouse	3-70	Native rock outcrop located behind the bathhouses and below the mortared stone retaining wall.	Good
Mortared Stone Retaining Wall #1 South of Lamar Bathhouse, continuing to North side of Buckstaff Bathhouse where Mortared Stone Retaining Wall #2 begins	3-71	Limestone retaining wall with limestone capstone retains the hillside between the back of the bathhouses. Retaining wall varies in height from thirteen to fifteen feet. Mortared stones are irregularly shaped pieces in natural beige tones.	Good
Satellite Dishes behind Lamar Bathhouse	3-72	Two satellite dishes are located above the rock outcrop. One small white, one large black.	Good
Retaining Wall #1	3-71	Mortared stone retaining wall with capstone retains the hillside between the back of the Bathhouses and Grand Promenade. Mortared Stone Retaining Wall #1 begins South of Lamar Bathhouse and continues to North side of Buckstaff Bathhouse where Mortared Stone Retaining Wall #2 begins. The retaining wall varies in height from 3'-15' height. The mortared stones are irregularly shaped pieces in natural beige tones.	Fair Some cracking and displacement
Buckstaff Bathhouse Entrance	3-73	Concrete broom-finished ADA ramp centered on building entrance and extends to the linear walk with two sets of limestone stairs on each side, and concrete cheek walls painted white with brass handrails on top.	Good
Perimeter Concrete Walks	3-74, 3-75	1) Broom-finished concrete walk begins at the linear walk and wraps around south side of building to the stairs on side of building. 2) Broom-finished concrete walk begins at the linear walk and wraps around north side of building to basement stairs at back of building.	Fair Some cracking and heaving

Basement Stairs	3-76	Broom-finished concrete steps on northeast corner of building with concrete retaining wall and steel pipe guardrail on north side of steps.	Fair Deterioration of the concrete
Remnant Concrete Piers behind Buckstaff Bathhouse	3-77, 3-78	Concrete pier remnants from a cooling tank built in the early 1900's. Also there is a remnant base from the original entrance two south exedra wall dating to 1894.	Fair Deterioration of the concrete
Retaining Wall #2 between Buckstaff and Ozark Bathhouses	3-79	Mortared stone retaining wall with limestone capstone retains the hillside between the back of the bathhouses. Height is approximately five to eight feet. Mortared stones are rectangular and square shaped in red and pink tones.	Fair
Ozark Bathhouse Entrance	3-80, 3-81	Four broom-finished concrete steps and walk centered on building entrance with eighteen inch concrete cheek wall on each side, painted white with black steel tube handrail. ADA ramp extends to the northern side, along the front façade.	Good
North side of Ozark Bathhouse	3-81, 3-82	Holly hedge lines broom-finished concrete walk that extends on north side to set of sixteen broom-finished concrete steps that access basement. Concrete retaining wall and black steel pipe guardrail on north side, and black steel pipe handrail. A concrete ramp was installed in 2006.	Poor Deterioration of concrete steps Failing concrete retaining wall
Concrete Walk to Men's Comfort Station	3-83	Broom-finished concrete walk lined by holly hedge on one side connects to linear walk.	Good
Quapaw Bathhouse Entrance	3-84	Central set of four concrete steps with concrete cheek walls painted white and black steel tube handrails centered on building entrance. Two curved concrete ramps flank the steps on both sides with concrete walls, painted white.	Good
Basement Stairs at Quapaw Bathhouse	3-85, 3-86	1) Concrete walk connects the linear walk to Men's Comfort Station and basement stairs on south side of building. Twelve broom finished concrete steps with steel pipe handrail, concrete retaining wall	Fair Cracking and failure of both retaining walls

		<p>painted grey with a black knuckled steel pipe guardrail on top on south and west.</p> <p>2) Concrete walk connects the linear walk to the Women's Comfort Station and basement stairs on north side of building. Thirteen broom finished concrete steps with steel pipe handrail, concrete retaining wall on north and west sides, concrete curb on top of concrete retaining wall painted grey with a black knuckled steel pipe guardrail on top.</p>	
Concrete walk to Women's Comfort Station	3-87	Broom finished concrete walk lined on one side with a holly hedge connects the comfort station to the linear walk.	Good
Wood fence	3-88	Wood fence painted white is located between the bathhouse and comfort station on both sides.	Good
Wood Bench	3-89	Wood bench, six feet long, painted red with steel frame and set on an exposed aggregate bench pad and surrounded by holly hedge, added in 1989. Located along the linear walk, on south side of Comfort Station, and adjacent to building.	Good
Fordyce Bathhouse Entrance	3-90, 3-91	<p>Eight exposed aggregate concrete steps with cut limestone cheek walls and black tube steel handrails centered on building entrance and extending to linear walk. Steps are flanked by two shorter sets of eight limestone steps with adhesive tape on each tread and black steel handrails. These steps are connected to the linear walk by sand finish concrete. ADA broom-finished concrete ramp extends to the north along front building façade. Ramp has limestone cheek walls and black tube steel handrails with spiral ends. Ornamental steel lights sit on two walls.</p>	Good

Visitor Center Sign in front of Fordyce Bathhouse	3-92	Dark brown wood sign on wood posts with the words <i>"Hot Springs National Park Visitors Center, United States Department of Interior, National Park Service"</i> with white letters and NPS logo, faces Central Avenue.	Good
Basement Stairs At Fordyce Bathhouse	3-93	Broom finished concrete steps lead to basement on building's North side, concrete retaining wall with stone capstone and black steel pipe guardrail on top.	Fair Failure of mortar on the capstone and cracks in the retaining wall Deterioration of concrete steps
Display Spring	3-94, 3-95	Display Spring is carved out of the tufa wall behind the Maurice Bathhouse. Situated adjacent to the Formal Entrance, Display Spring is an enclosed terrace with two distinct areas, the spring with a large cave-like opening, a smaller stone opening, and stone channel and the adjacent semi- circular seating area. Rustic stone walls define both openings. Both openings once had doors that were removed circa 1931-1932. The area's characteristic hot springs erupt from both openings, and spill into a series of rustic stone basins and stone channels. A sloping concrete walk with two steps leads to the tufa wall opening. The seating area is a basketweave brick terrace that is edged with an exposed aggregate concrete band that was added in 1989. The concrete band also edges the lower portion of the spring. Heavy vegetation, a mix of introduced and invasive species, cover the hillside and surround the spring. On the bathhouse edge are a few low deciduous shrubs and a few small trees including an Arborvitae. Associated features include three wood benches, interpretive sign and metal trash receptacle.	Fair/Good

Maurice Bathhouse Entrance	3-96, 3-97	<p>Set of three long steps and two shorter broom- finished concrete steps centered on the building entrance. The top two shorter steps are flanked by concrete cheek walls. Steel handrail extends the full length of steps. Central steps flanked by two concrete ramps with cheek walls that extend from the linear walk to building. Ramps do not have handrails.</p> <p>Concrete ADA ramp with black tube steel handrail extends to the north along the front building façade.</p>	<p>Good /Fair</p> <p>Cracking and heaving of concrete ramps and steps</p>
Maurice Historic Spring	3-98, 3-99, 3-100, 3-101, 3-102	<p>Situated within the hillside behind the Maurice Bath House, Maurice Historic Spring is carved out of a tufa wall. It consists of mortared limestone retaining wall (approximately 15 feet tall) with limestone cap; set of eleven limestone steps; an irregularly shaped terrace of scored concrete and a low limestone wall with a limestone cap. Associated features: four foot tall steel picket fence; tubular steel hand rail, painted black.</p> <p>Tunnel Spring No. 27 located under tufa rock outcrop enclosed with steel picket gate, painted black; wood bench; security light with one round globe fixture; steel handrail, fountain set within the limestone wall.</p> <p>The Dripping Spring No. 29, set into the mortared limestone retaining wall, is new distribution system water and drips narrowly into a limestone bowl. Spring is not operational.</p> <p>The jug fountain, located south of the Maurice Historic Spring, was originally fed by Maurice Spring but is now distribution water. Its concrete pedestal (circa 1981-82) is a reproduction of the original, possibly limestone, pedestal.</p>	<p>Good/Fair</p>

		The cold-water drinking fountain near the front sidewalk was added in the 1990's. It is exposed aggregate concrete set on a concrete pad surrounded by the holly hedge.	
Hale Bathhouse Entrance	3-103	Concrete broom-finished walk, centered on the building entrance, connects the building to the linear walk.	Good
Concrete Walk/Steps between Hale and Superior Bathhouses	3-104	Broom-finished concrete extends from the linear walk to the back of the buildings. Broom-finished concrete ramp and landing at side entrance into Superior Bathhouse; black steel tube guardrail around concrete landing; locked wrought iron gate at the end of the walk, limiting access to area behind bathhouses.	Good Some minor cracks and slight heaving
Cooling Tank Remnants Behind the Hale Bathhouse	3-105	Concrete cooling tank remnants built in the early 1900's, including concrete columns and horizontal concrete pieces.	Fair - Deterioration of the concrete
Superior Bathhouse Entrance	3-106, 3-107	Concrete ramp with concrete cheek walls and black wrought iron handrail centered on building entrance. Stairs each consisting of four steps with concrete cheek walls and black wrought iron handrail flank both side of ramp. Concrete ADA ramp with black wrought iron handrail with pickets extends south along the front building façade.	Good
Concrete steps with tufa stone cheek wall	3-108	Curved concrete steps with tufa cheek walls and black tube steel handrails located between and behind the Hale and Superior Bathhouses. Steps that lead to top of arched brick reservoir and abandoned concrete building consists of twelve broom-finished concrete steps and fifteen-inch wide mortared tufa stone cheek walls.	Good Some cracking of the mortar and concrete
Arched Brick Reservoir behind Superior Bathhouse	3-109	Abandoned arched brick reservoir built in the late 1800's. Mostly below ground with the western portion visible.	Poor Brick construction failing

Abandoned Concrete Building behind Superior Bathhouse	3-110	Abandoned concrete building built in the early 1900's. Approximately twenty-six feet long by sixteen feet wide by fifteen inches tall.	Poor Cracking and deterioration
Concrete Channel at Superior Bathhouse	3-111	Concrete channel built in 1993 begins at the southeast corner of building wraps around foundation at the back of the building and ends on the North side where the water daylights. Channel includes two foot wide monolithic concrete channel with six inch high concrete curb on each side.	Good Some minor cracking in sections
Mortared Stone Rubble Wall behind Bathhouses	3-112	Tufa stone mortared retaining wall begins at abandoned concrete building behind Superior Bathhouse and extends North where it ends half way between Superior Bathhouse and the Pump Building in Arlington Lawn.	Fair Deterioration of the mortar
Ornamental Lights poles and fixture	3-113	Original Pedestrian Lights of 1914, each consists of a single steel pole, painted green, with five round globe fixtures. Set along Central Avenue on east side of walk in front of bathhouses, spaced equally at approximately thirty-five feet on center. Some lights are missing from the original pattern.	Fair
Trash receptacle	3-114	Black steel trash receptacle (36" diameter) located along Bathhouse Row at entrances to bathhouse buildings and at Maurice Historic Spring.	Good
Pedestrian light signal	3-115	Pedestrian light signals located at cross walk connections on Central Avenue.	Good
Uplights	3-116	Uplights light buildings and signs along Bathhouse Row, and consist of rectangular light fixture set approximately 18" above finish grade.	Good Some cracking of the fixture cover
Interpretive Signs	3-117	Interpretive signs built in 1989, located at each bathhouse. Black steel frame and posts with an ultraviolet protected sign panel with photos and historical narratives.	Good

Directional Signs	3-118	Directional signs along Bathhouse Row. Double panel steel signs with white letters with wood blocking mounted on steel post.	Good
Rules & Regulation Signs	3-119	Rules and regulation signs along Bathhouse Row. Steel panel sign with brown with white letters, mounted on steel post.	Good
Handrails	N/A	Handrails are located on steps and ramps at bathhouses and on top of retaining walls, (9) different types of handrails are found throughout Bathhouse Row. Styles are not consistent.	Good Some in fair condition due to deterioration and damage
Electrical Transformers	3-120	Unscreened green metal electrical transformers adjacent to sides of bathhouses.	Good
Electrical disconnect boxes	3-121	Electrical disconnect boxes are usually located adjacent to electrical transformers on sides of bathhouses.	Good
Air Conditioning and Heating Units	3-122	Metal air conditioning and heating units with an approximate size of six feet square by six feet tall are located adjacent to the sides or behind each bathhouse. These units produce a very loud noise.	Good



Figure 3- 48: Service Drive (MBD, 060705-49)



Figure 3- 49: Brick Sidewalk adjacent to parking (MBD, 060705-45)



Figure 3- 50: Basement Stairs at Park Administration Building (MBD, 060705-53)



Figure 3- 51: Concrete Walk at Reserve Street (MBD, 060705-55A)



Figure 3- 52: Parking Meter (MBD, 060705-55)



Figure 3- 53: Concrete Curb Ramp at Reserve Street (MBD, 060705-59)



Figure 3- 54: Fluted Concrete Wall (MBD, 060705-71)



Figure 3- 55: Monument Sign at Park Administration Building (MBD, 060705-70)



Figure 3- 56: Jug Fountain (MBD, 06005-55)



Figure 3- 57: Park Administration Building Colored Concrete Plaza (MBD, 060705-60)



Figure 3- 58: Administration Fountain at Administration Building (MBD, 060705-63)



Figure 3- 59: Boulder with NHL Plaque (MBD, 060705-69)



Figure 3- 60: Concrete Sidewalk adjacent to Central Avenue (MBD, 060905-0535)



Figure 3- 61: Trench Drain (MBD, 060705-151)



Figure 3- 62: Raised Curb Lawn (MBD, 060905-0534)

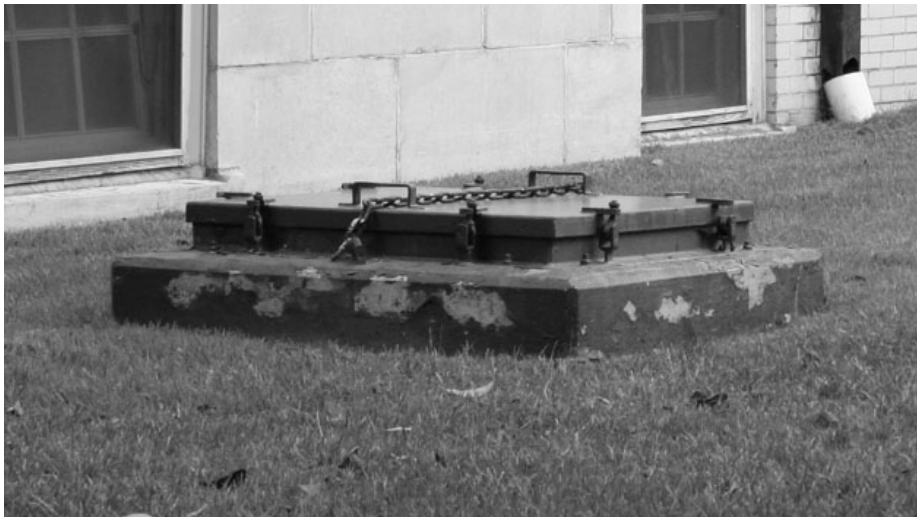


Figure 3- 63: Spring Box (MBD, 060705-164)

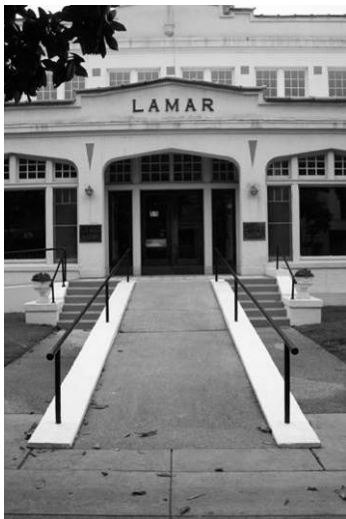


Figure 3- 64: Lamar Bathhouse Entrance (MBD, 060705-85)



Figure 3- 65: Concrete ADA Ramp at Lamar Bathhouse (MBD, 060705-94)



Figure 3- 66 (North-side), Figure 3- 67 (South-side): Basement Stairs at Lamar Bathhouse (MBD, 060705-102, 060705-81)



Figure 3- 68: Concrete Walk between Lamar and Buckstaff Bathhouses (MBD, 060705-99)



Figure 3- 69: Turf/Stone Ramp (MBD, 060705-100)



Figure 3- 70: Rock Outcrop (MBD, 060705-50)



Figure 3- 71: Retaining Wall #1 (MBD, 060705-96)



Figure 3- 72: Satellite Dishes behind Lamar Bathhouse (MBD, 060705-54)



Figure 3- 73: Buckstaff Bathhouse Entrance (MBD, 060705-107)



Figure 3- 74: Concrete Walk at Buckstaff Bathhouse (South) (MBD, 060705-103)



Figure 3- 75: Concrete Walk at Buckstaff Bathhouse (North) (MBD, 060705-110)



Figure 3- 76: Basement Stairs at Buckstaff Bathhouse (MBD, 060705-116)



Figure 3- 77, Figure 3- 78 : Remnant Concrete Piers behind Buckstaff Bathhouse (MBD, 060705-118, 060705-119)



Figure 3- 79: Retaining Wall #2 between Buckstaff and Ozark Bathhouses (MBD, 060705-124)



Figure 3- 80: Ozark Bathhouse Entrance (MBD, 060705-30)



Figure 3- 81: Concrete Ramps at the Ozark Bathhouse Front Entrance (MBD, 060705-131)



Figure 3- 82: Basement Stairs and Concrete Ramp at North side of Ozark Bathhouse (MBD, 060705-137 and 062906-3851)



Figure 3- 83: Concrete Walk to Men's Comfort Station (MBD, 060705-142)



Figure 3- 84: Quapaw Bathhouse Entrance (MBD, 060705-152)



Figure 3- 85, Figure 3- 86: Basement Stairs at Quapaw Bathhouse (MBD, 060705-148, 060705-166)



Figure 3- 87: Concrete Walk to Women's Comfort Station (MBD, 060705-160)



Figure 3- 88: Wood Fence (MBD, 060705-168)



Figure 3- 89: Wood Bench (MBD, 060705-163)



Figure 3- 90: Fordyce Bathhouse Entrance (MBD, 060805-6)



Figure 3- 91: Concrete ADA Ramp at Fordyce Bathhouse (MBD, 060905-0743)



Figure 3- 92: Visitor Center Sign (MBD, 060905-8)



Figure 3- 93: Basement Stairs at Fordyce Bathhouse (MBD, 060905-0742)



Figure 3- 94: Display Spring (MBD, 110505-2318)



Figure 3- 95: Display Spring (MBD, 110505-2322)



Figure 3- 96: Maurice Bathhouse Entrance (MBD, 060705-18)



Figure 3- 97: Concrete ADA Ramp at Maurice Bathhouse (MBD, 060805-0246)



Figure 3- 98: Maurice Historic Spring (MBD, 060805-0276)



Figure 3- 99: Maurice Historic Spring (MBD, 060805-0273)



Figure 3- 100: Maurice Historic Spring (MBD, 060805-0287)



Figure 3- 101: Dripping Spring (MBD, 060805-0270)



Figure 3- 102: Drinking Fountain (MBD, 060805-0259)



Figure 3- 103: Hale Bathhouse Entrance (MBD, 060705-15)



Figure 3- 104: Concrete Walk/Steps between Hale and Superior Bathhouses (MBD, 060805-0299)

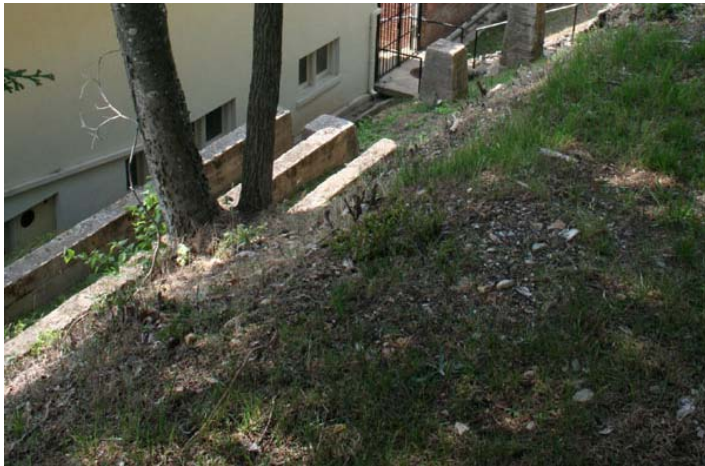


Figure 3- 105: Concrete Cooling Tank Remnants behind Hale Bathhouse (MBD, 060905-0686)



Figure 3- 3-106: Superior Bathhouse Entrance (MBD, IMG_0309)



Figure 3- 107: Concrete ADA Ramp at Superior Bathhouse (MBD, 060805-0306)



Figure 3- 108: Concrete Steps with Tufa Stone Cheek Wall (MBD, 060905-0303)



Figure 3- 109: Arched Brick Reservoir behind Superior Bathhouse (MBD, 060905-0688)



Figure 3- 110: Abandoned Concrete Building behind Superior Bathhouse (MBD, 060905-0680)



Figure 3- 111: Concrete Channel at Superior Bathhouse (MBD, 060905-0678)



Figure 3- 112: Mortared Stone Rubble Wall behind Bathhouses (MBD, 060905-0528)



Figure 3- 113: Light Pole and Fixture (MBD, 060705-158)



Figure 3- 114: Trash Receptacle (MBD, 060705-0264)



Figure 3- 115: Pedestrian Light Signal (MBD, 060905-0544)



Figure 3- 116: Uplight (MBD, 060705-68)



Figure 3- 117: Interpretive Sign (MBD, 060705-74)



Figure 3- 118: Directional Sign (MBD, 060705-161)
Sign



Figure 3- 119: Rules and Regulations



Figure 3- 120: Electrical Transformer (MBD, 060705-126)



Figure 3- 121: Electrical Disconnect Box (MBD, 060805-0256A)



Figure 3- 122: Air Conditioning and Heating Unit (MBD, 060805-0256)

Small Scale Features, Component Landscape B: Grand Promenade

Table 3-8: Small Scale Features Grand Promenade

<i>Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Reserve Street Entrance	3-123, 3-124	<ul style="list-style-type: none"> Noble Fountain: Located at the Reserve Street entrance to the Grand Promenade. The Noble Fountain was completed in 1895. It was moved from its original location in 1945, and sited at its present location in 1957. Curved Stone Wall with fence: Mortared stone wall topped with iron fence with finials. Located along the western edge of the stairway leading to the Grand Promenade. Brick Pavement and Stairway: Bordered by the Entrance Stone Wall and Curved Stone Wall with the iron fence, this red brick entry is bordered by blonde brick. It extends north through a series of two brick stairways and iron fence railing, up to a brick landing. Interpretive Sign: Metal sign at the entrance to the Grand Promenade attached to the Entrance Stone Wall. 	Good
Lower Stone Retaining Wall with fence at Rehabilitation Center	3-123	Mortared stone retaining wall topped with iron fence with decorative finials. Located along the western edge of the Rehabilitation Center property and the eastern edge of the Grand Promenade. The wall is situated atop a steep slope and visible from the southern portion of the Grand Promenade. This wall extends from Reserve Street to the concrete steps that are just south of the small utility building. The wall is the property of the Rehabilitation Center.	Fair Needs mortar repair and some stone repair.
Brick Plaza #1	3-125	Red brick pavement with a basket weave pattern and blonde brick soldier course border; it continues the northward progression of the Grand Promenade. A brick stairway with 14 risers is on the northern end of the landing. Two concrete tables with checkerboard pattern imprinted on each and two wood benches are situated on the Brick plaza.	Good Brick work appears older than that in previous area.
Light pole and fixture	3-125	Black pole and box fixture. These are located at regular intervals along the Grand Promenade.	Good

Fence	3-126	4' high, black chain link fence Extends along the top of the slope between Bathhouse Row and the Grand Promenade.	Good
Brick Seating Area #1	3-126	12'x9' seating area with red brick paving and yellow brick edge. Includes large concrete benches and concrete tables with tile checker boards, with stone planters at both ends and small shrubs (holly). A mortared stone retaining wall is located at the eastern side of the seating area. Located on the east side of the Grand Promenade.	Fair Planters have weeds and some cracked brick.
Brick Seating Area #2	3-127	12'x9' seating area with red brick paving and yellow brick edge. Includes large concrete benches and concrete tables with tile checker boards, stone planters at both ends and small shrubs (holly). The planters may be remnants of a historic structure. Located on the west side of the Grand Promenade.	Good
Upper Stone Retaining Wall with fence at Rehabilitation Center	3-127	Mortared stone retaining wall topped with iron fence with decorative finials. Located along the western edge of the Rehabilitation Center property and the eastern edge of the Grand Promenade. The wall is situated atop a steep slope and visible from the southern portion of the Grand Promenade. This wall extends from Reserve Street to the steps that are just south of the small utility building. The wall is the property of the Rehabilitation Center.	Fair, needs some mortar repair.
Stairs from Reserve Street to Rehabilitation Center	3-128	Concrete stairs with metal railings and stone retaining walls topped with ornamental metal fence. Property of the Rehabilitation Center.	Concrete stairs and metal railings good condition. Stone retaining walls and ornamental fences need some mortar repair.
Stairs to Rehabilitation Center and Brick Utility Structure	3-129	Located to the south of the small utility building illustrated in figure 3- 26. The stairs' brick structure is the property of the Rehabilitation Center.	Good

Stone/Concrete Retaining Wall	3-129, 3-131	This wall is mortared stone with a stone cap at the northern end and has a stucco surface (structure unknown) for the southern portion of the wall. A portion of it may be the remnants of a former building foundation. The stone portions may be reused blocks from the old springhouse that once enclosed the Eisele Spring (which still steams there, near the bottom of the gutter); some blocks may be in their original portions. The stucco-surfaced brick wall was a portion of the west wall of Building 8 (built 1901, demolished 1985). The blocks belong to the park, but the wall is located on Rehabilitation Center property.	Good
Brick bench pads	3-131	3'9"x6'10" redbrick basket weave with running bond blonde brick border, pad for benches (several pads do not have benches). The pads border the eastern and western edges of the Grand Promenade. Nineteen pads are on the western edge, eighteen pads are on the eastern edge. One larger pad is on the southeastern edge of the curved portion of the promenade immediately south of the Formal Entrance. Four additional pads with benches encircle Brick Plaza #5.	Fair to Good Some of the pads have been damaged or have deteriorating bricks or mortar.
Drain Inlets	N/A	Located in the brick pavement of the Grand Promenade	Good
Rock outcrop	3-132	Sandstone rock outcrop about 3' high along the eastern edge of the promenade directly south of the Formal Entrance.	Good
Rock Outcrop Sign	3-133	Small metal interpretive sign at rock outcrop near Stevens Balustrade.	Good
Stone drainage structures in Foreground Park	3-134	<ol style="list-style-type: none"> 1. Stone Drainage Channel 2. Stone headwall 3. Stone retaining wall and culvert 	Fair Some deterioration of mortar and missing stones also previous poor mortar repair.
Brick Steps	3-135	Three sets of brick steps with stone edges are located on the west side of the Grand Promenade behind the Hale Bathhouse.	Good

Tree planting areas	3-136	Two circular tree planting areas are situated in the Grand Promenade Decorative Paving (between the Superior Bathhouse and the Pump Building). They each contain a small Chinese Elm. The trees are in fair to poor condition.	Fair Dirt with weeds and fair to poor trees.
Brick Plaza #2	3-137	Red brick pavement with planting area along the western side of the Grand Promenade above the park Service Area. The plaza serves as an overlook and as the beginning/end point for the Lower Tufa Terrace Trail. A 30" high stone wall surrounds the plaza on the south and west sides. A small maple tree is situated in the planting area with an iron fence surrounding it. A hedge extends around the northwest and western sides of the stone wall, and three hollies are situated near the south side of the plaza.	Good
Brick Plaza #3	3-138	Red brick pavement situated adjacent to the northwestern side of the Grand Promenade; a stone wall with an iron fence provides an edge on the northeast, northwest, and southwest sides. Overlooks the Hot Water Cascade.	Good
Lower Tufa Terrace Trail	3-156	Steep and curvilinear trail winds between the Brick Plaza #2 and Arlington Lawn. The trail includes three sets of steps and two Thermal Water Cascade overlooks.	Fair Graffiti and irregular slopes along route.
Brick Seating Area #3	3-139	Rectangular brick paved area on the west side of the Grand Promenade across from the Hot Water Cascade Display Spring. Black iron railing.	Fair Retaining wall is in need of repair.
Tufa Cascade Pool/Hot Water Display Spring	3-140	Tufa outcrop with exposed spring. Surrounded by black wrought iron fence.	Good
Thermal Water Cascade	3-158, 3-159	Large tufa outcrop that extends from the western side of the Grand Promenade to the pools at Arlington Lawn. Spring water cascades down the steep tufa outcrop.	Fair Invasive plants are impacting surrounding vegetation.
Brick Plaza #4	3-141	Same shape as Plaza #4 with planting area and tree in center.	Fair Planting area has weeds and wall needs repair.

Tufa outcrop	3-142	Short wall of exposed tufa along the eastern side of the Grand Promenade north of the Hot Water Cascade Display Spring.	Good
Tufa sign	3-142	Small metal sign.	Good
Concrete Steps	3-143	Lead down from Grand Promenade to sidewalk that continues to Fountain Street. The stairs are concrete with brick and stone retaining walls.	Fair Need some mortar repair.
Brick Plaza #5	3-144	Circular plaza with drinking fountain in center.	Good
Simple Red Brick Pavement	3-145	Running bond red brick pavement with yellow brick edge band.	Good



Figure 3- 123: Noble Fountain, Entrance Stone Wall with Fence, Curved Stone Wall with Fence at Reserve Street pedestrian access to the Grand Promenade and Hot Springs Mountain (QEA, June 3, 2005, DSC01721)



Figure 3- 124: Interpretive Sign, Brick Paving, Stone Retaining Wall (QEA, June 3, 2005, DSC01723)



Figure 3- 125: Brick Plaza #1, Landing with Concrete Table, Wood Benches, and Light Fixture; the Rock Outcrop is in the background (QEA, June 3, 2005, DSC01735)



Figure 3- 126: Brick Seating Area #1 (west side of Grand Promenade); the black chain link fence can be seen in the background. (QEA, 2 June 2005, DSC01792)



Figure 3- 127: Brick Seating Area #2 (east side of Grand Promenade); Upper Stone Retaining Wall with Fence at the Rehabilitation Center (QEA, 2 June 2005, DSC01781)



Figure 3- 128: Stairs from Reserve Street to Rehabilitation Center (QEA, Nov 2005)



Figure 3- 129: Steps, Retaining Walls, and Brick Utility Structure at Rehabilitation Center (QEA, 2 June 2005, DSC01813)



Figure 3- 130: Sloped concrete walk at intersection with Grand Promenade (QEA, DSC01812)



Figure 3- 131: Wood Bench with Brick Pad; Stone and Concrete Retaining Wall (QEA, DSC01828)



Figure 3- 132: Grand Promenade paving and rock outcrop south of the Stevens Balustrade (QEA, DSC01826)



Figure 3- 133: Metal Interpretive Sign at Rock Outcrop (QEA, DSC01830)



Figure 3- 134: Stone Drainage Structures in Foreground Park (QEA, Nov 2005)



Figure 3- 135: Brick Steps (QEA, Nov 2005)

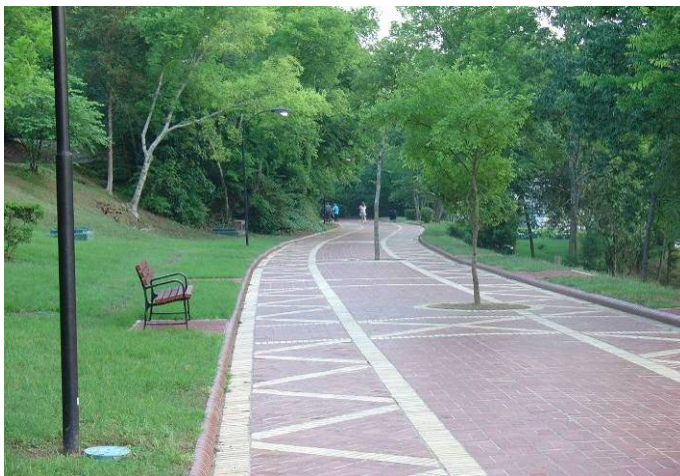


Figure 3- 136: Tree Planting Areas (QEA, June 2005,DSC01872)



Figure 3- 137: Brick Plaza #2 (QEA, June 2005, DSC01864)



Figure 3- 138: Brick Plaza #3 (QEA, June 2005)



Figure 3- 139: Brick Seating Area #3 (QEA, June 2005)



Figure 3- 140: Tufa Cascade Pool/Hot Water Cascade Display Spring (QEA, June 2005, DSC01896)



Figure 3- 141: Brick Plaza #4 (QEA, June 2005)



Figure 3- 142: Tufa Outcrop and Sign (QEA, June 2005)



Figure 3- 143: Concrete Steps (QEA, April 2005)



Figure 3- 144: Brick Plaza #5 (QEA, June 2005)



Figure 3- 145: Simple red brick pavement at Fountain Street entrance (QEA, June 3, 2005)

Small Scale Features, Component Landscape C: Formal Entrance (Stevens Balustrade)

The Formal Entrance, an original park entrance with elements that date to the early to mid 1890s, serves as the primary pedestrian access to Hot Springs Mountain and the Grand Promenade. The Formal Entrance connects Bathhouse Row with the Grand Promenade, and extends from Central Avenue to the Old Carriage Road. It is composed of six distinct areas, arranged symmetrically along a central axis, that step up the hillside behind Bathhouse Row. The six areas include 1) the entry/gateway at Central Avenue, 2) the sloping walk between the Maurice and Fordyce Bathhouses, 3) the Stevens Balustrade, 4) the connection at the Grand Promenade, 5) the upper steps, and 6) the original pavilion site.

**Table 3-9: Small Scale Features, Component Landscape C:
Formal Entrance (Stevens Balustrade)**

<i>Landscape Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
1. Entry/Gateway at Central Avenue			
Entry Columns	3-146, 3-148, 3-149	Two original columns, completed in 1895, define the entry/gateway. The columns, similar in height, style and construction, are arranged equidistant from the central axis of the Formal Entrance. Both are constructed of limestone blocks set on a granite base with a bronze eagle on the top. Each column has a base, middle and top on which the bronze eagle sits. The eagles show the signature of Edward Kemeys. Attached to the outer side of each column is a low carved limestone wall. The column on the north is inscribed with <i>HOKE SMITH, SECRETARY OF THE INTERIOR, 1893-1896, U.S. HOT SPRINGS RESERVATION and E.A. Hitchcock, 1898-1907.</i> The column to the south is inscribed with <i>JOHN W. NOBLE, SECRETARY OF THE INTERIOR, 1889-1893, U.S. HOT SPRINGS RESERVATION and David R. Francis, 1896-1897.</i>	Good In need of cleaning. Base of each column, particularly the eastern side requires repair. Overspray from fountains may be causing the damage to limestone walls.
Exedra Fountains and Plaza	3-150, 3-151	Scored concrete plaza, arranged as a half-circle, with two round, fluted pre-cast concrete basins with central jets (circa 1988) define the entry/gateway to the Formal Entrance.	Fair Water damage from the fountain jets is damaging basins and

			pavement surrounding each fountain.
Concrete Benches	3-150, 3-151	Six pre-cast concrete benches (circa 1988) are located along the outside of the half-circular plaza.	Good
Bollards	3-147	Ten (10) square, fluted pre-cast concrete bollards, approximately two feet in height, line the edge of the entry/gateway at Central Avenue. Many are damaged, and several are twisted or torn from their original locations. At least one is missing.	Poor
Drop-off / Driveway	3-147	An area for vehicular drop-off or access is aligned parallel with Central Avenue. It is scored concrete and is raised to the level of the adjacent curb.	Good
2. Sloping Walk			
Concrete Walk with Curb Edge	3-152	<p>Linear concrete walk connects entry/gateway with Stevens Balustrade. Walk generally follows alignment of the original drive used for both vehicles and pedestrians. Walk is defined by low concrete curb and scored into two sections with a score line on the approximate centerline of the Formal Entrance.</p> <p>Planters flank either side of walk, creating a three part pattern of equal spaces. The planters are lined by a Boxwood hedge and are filled with flowering perennials.</p> <p>At the southeastern edge, a walkway extends to the Grand Promenade, following the original road cut and alignment of the earlier drive.</p>	Good
3. Stevens Balustrade			
Lower Stair and Terrace	3-152, 3-153	Stevens Balustrade is symmetrically arranged along the central axis of the Formal Entrance. The lower stair and terrace consists of a limestone wall with a staircase on each end that ascends to a	Good

		<p>plaza above the wall.</p> <p>Wall is original construction, completed in 1895, and is constructed of limestone ashlar masonry with a limestone cap and balustrade. Wall was repaired in the late 1980's and 2002. Each staircase contains two sets of ten steps with a middle landing. The first set of steps are both cut limestone slabs. The second sets and both landings are concrete with a rough finish.</p> <p>Inscription: <i>CAPTAIN ROBERT R. STEVENS, ENGINEER</i> is carved in the limestone cap in the central bay. 1892 is inscribed on north flanking column and 1895 is inscribed on south columns noting year he arrived (1892) and year he departed for Yellowstone. Central bay contains a vaulted hemicycle niche with a recessed drinking fountain carved out of limestone. Two broad, concrete stairs step up.</p> <p>Terrace paving is red brick arranged in a basket- weave pattern with running bond blonde brick border and is similar to Grand Promenade. Steel inlets collect storm water drainage, located in the grass areas immediately adjacent to terrace.</p> <p>Low wall of stacked limestone remnants extend from either side of the Balustrade and at east edge of lower terrace.</p>	
Upper Staircase	3-154	<p>Central staircase extends from terrace to the Grand Promenade. Built of concrete, it consists of 22 steps, flanked on both sides by rough cut stone walls that create two planters. A center steel handrail extends for the length of the steps.</p>	<p>Fair Stone walls have newer mortar repairs of a lower quality than</p>

		The lower of the two planters is rough cut limestone with an original limestone cap. Interior of each holds soil and turf grasses. Uppermost terrace is also rough cut limestone, but the limestone cap appears to be newer construction and is much simpler. Uppermost planter is open on the east-side and is paved with scored concrete.	the original
4. Connection to the Grand Promenade	3-130	Refer to the Grand Promenade	Good
5. Staircase between Grand Promenade and Old Carriage Road	3-155	<p>Staircase consists of two sets of stairs, both arranged along the central axis of the Formal Promenade. The lower of the two is a double set of concrete steps approximately six feet wide and defined by low curb edge in half circular arrangement. Top two steps follow the curve to meet the landing. Space in the center of the double stairs consists of low turf grasses. Upper portion is a central stair, also defined by tufa outcrops as the edge.</p> <p>A low stone wall, defined by a stone column with a limestone cap at each end, marks the beginning of the staircase. An interpretive sign is mounted in the center of the wall. Another low stone wall built of large random stones with a hammered stone cap defines the landing. This wall appears to be original.</p> <p>Associated features: interpretive signs and a directional sign.</p>	Good
6. Pavilion site	3-25	The location of the original pavilion is covered with groundcover that is primarily Vinca major.	Fair



Figure 3- 146: Formal Entrance (Stevens Balustrade) (MBD, 060805-8)



Figure 3- 147: Formal Entrance at Central Avenue (MBD, 060705-14)



Figure 3- 148: Hoke Smith Column (MBD, 060705-10)



Figure 3- 149: John Noble Column
(MBD, 060705-12)



Figure 3- 150: North Exedra Fountain (MBD, 060705-11)



Figure 3- 151: South Exedra Fountain (MBD, 060705-13)



Figure 3- 152: Sloping walk and Stevens Balustrade (MBD, 060705-26)



Figure 3- 153: Shell Fountain in Stevens Balustrade (MBD, 060705-35)



Figure 3- 154: Upper Steps (MBD, 060705-43)



Figure 3- 155: Staircase between Grand Promenade and Old Carriage Road (MBD, 060705-57)

Table 3-10: Small Scale Features, Component Landscape D: Arlington Lawn

<i>Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Stone Wall South of Tufa Terrace Trail	3-157	This linear stone wall is situated to the southwest of the Tufa Terrace Trail and is covered with English ivy.	Fair Needs some mortar repair and ivy is impacting.
Thermal Water Cascade	3-158, 3-159	Constructed ca. 1982, a man-made naturalistic Tufa rock outcropping with thermal water cascade; it originates to the west of the Grand Promenade. The thermal water flows down to the geometric thermal pool.	Good
Desoto Rock	3-159	A large block of Tufa rock situated to the west of the thermal pool area. A bronze plaque is mounted to the rock.	Good
5-Globe Light Fixtures	3-157	Located along Fountain Street and Central Avenue sidewalks; also along the walkways within the Arlington Lawn area. The globe light fixtures along Fountain Street are much older than the ones along the Lawn sidewalks.	Good
Chain mesh over rock outcrop	3-160	A rock outcrop between the Brick Plaza #2 and the Service Area is unstable. A chain mesh lies over the rocks to stabilize the surface.	Fair Condition should be monitored.
Stone Rubble Retaining Wall at Arlington Lawn	3-161	+/- 48" Stone Retaining wall Located between the two exposed aggregate sidewalks with entrances on Fountain Street. The height varies but is approximately 48" tall. Ivy plants cover a large portion of the wall.	Fair Vegetation impacts
72" Stone Retaining Wall	3-162	Rough-cut mortared stone wall extending from the Grand Promenade area, bordering in a curved-shape towards the Fountain Street entrance, adjacent to the Concrete Walk. It cuts through the lawn on the Fountain Street side.	Fair Needs mortar repair and cap repairs
36" Stone Retaining Wall	3-163	Located directly below the 72" Stone Retaining Wall.	Fair Needs mortar and cap repairs

Stone Retaining Walls at Fountain Street Sidewalk	3-163	<ul style="list-style-type: none"> • 44" Mortared Stone Wall: Starting at the east side of the concrete walk along the Fountain Street sidewalk boundary, the wall extends 70' to the east. • 48" Mortared Stone Wall: Continuing from the 44" wall due east along the Fountain Street sidewalk boundary, the wall has numerous cracked stones where tuck pointed. The wall extends 100'. • 32" Mortared Stone Wall: Continuing from the 48" wall due east along the Fountain Street sidewalk boundary, the stone wall has a 19-20" cap width and extends 100'. • 30" Mortared Stone Wall: The stone wall has a 19" cap and continues after a 9' gap from the 32" wall and extends 87'. Some areas of the wall are in poor condition and need tuck pointing and mortar. • 34" Mortared Stone Wall: The stone wall has a 14" cap width and ends at the Grand Promenade Entrance on Fountain Street. 	Fair/Good Mostly in good condition, some portions are damaged and need replacement of stone and/or mortar repairs.
6' Mortared Stone Retaining Wall at Maintenance Area	3-164	Located to the east of the heat exchange buildings, and west of the Grand Promenade, this wall is new.	Good
Chain link Fence	3-164	The chain link fence surrounds the service area and heat exchange buildings.	Good
Two Thermal Pools	3-158, 3-159, 3-165	Two geometric thermal pools – upper and lower sections. They relate to the Thermal Water Cascade. The concrete walls are styled similar to the Concrete Entry Wall.	Good
30' Concrete Retaining Wall	3-165	Located to the Northwest of the Thermal Pool, the wall is covered in English ivy. Built prior to 1924.	Fair Ivy impacting mortar, some repair needed.
Terraced Stone Retaining Walls	3-158, 3-159	Random cut curved 18" stone walls are separated by concrete pavement, creating a terraced hardscape bordering a geometric lawn area adjacent to the Thermal Pool to the east and the Desoto Rock to the west.	Good

Terraced Stone Retaining Walls and Turf Stage	3-158, 3-159	These walls provide seating opportunities for small gatherings and presentations.	Good
18" Mortared Stone Retaining Wall	3-158	Located to the west of the Thermal Pool, this curving wall functions as a seat wall and border for the geometric lawn stage.	Good
Interpretive Sign	3-167	"A Landscaped Resort."	Good
Concrete Entry Wall with Sign	3-168	Contemporary concrete entry wall with vertical-textured ridges. The stepped wall height ranges from approx. 2' to 5'. Geometric in shape, the wall borders the sidewalk at the intersection of Fountain Street and Central Avenue and the exposed aggregate sidewalk that leads to the Gazebo. Located on the wall is an entry sign for the park.	Good
Wood Benches	3-158	Wood benches are concentrated in the area around the thermal pool (5) and the gazebo (2)	Good
Metal Trash Receptacle	3-167	Contemporary in style, these are located throughout the Arlington Lawn area.	Good



Figure 3- 156: Left: Lower Tufa Terrace Trail and Right: Upper Tufa Terrace Trail and Footbridge (QEA, April 2005, DSC01352 and DSC02239)



Figure 3- 157: Sidewalk, Light, plants, and stone wall south of Tufa Terrace Trail (QEA, DSC04461)



Figure 3- 158: Thermal Water Cascade and Pools and 18" mortared stone retaining wall (QEA, April 2005, DSC01338)



Figure 3- 159: Arlington Lawn Thermal Pools, Thermal Cascade, Turf Stage, Terraced Stone Retaining Walls, and DeSoto Rock (QEA, April 2005, DSC01350)



Figure 3- 160: Chain Mesh stabilizing slope, service area fence and Trash Loader (QEA, Nov. 2005, DSC04456)



Figure 3- 161: Stone Rubble Retaining Wall at Arlington Lawn (QEA, November 2005, DSC04478)



Figure 3- 162: 72" and 36" Stone Retaining Walls (QEA, April 2005, DSC01547)



Figure 3- 163: Stone Retaining Wall at Fountain Street Sidewalk (QEA, Nov. 2005, DSC04483)



Figure 3- 164: Service area and Stone Retaining wall (QEA, April 2005, DSC01431)



Figure 3- 165: 30' Concrete Retaining wall covered with vegetation, 18" mortared stone retaining wall and lawn stage, Terraced Stone Retaining walls, pools, light fixture (QEA, Nov. 2005, DSC04469)



Figure 3- 166: Interpretive Sign "Tufa Terrace Trail" (QEA, April 2005, DSC01346)



Figure 3- 167: Interpretive Sign "A Landscaped Resort" (QEA, April 2005, DSC01436)



Figure 3- 168: Concrete Entry Wall with Sign (QEA, April 2005, DSC01438)

**Table 3-11: Small Scale Features Component Landscape E:
Hot Springs Mountain and North Mountain**

<i>Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Fountain Street Entrance	3-169	Access to Hot Springs Mountain Road, asphalt, wood gate, stone curb and mortared stone gutter and shoulder; metal brown monument sign with white letters "Hot Springs National Park Hot Springs Mountain, Scenic Drive" on a stone base.	Good
Mortared Stone Retaining Wall	3-169, 3-170, 3-171, 3-176, 3-185	Wall height varies between 2' and 20'. Width varies from 8-12". Located along curved and straight portions of Hot Springs Mountain Road, on both inside and outside curves.	Fair to Good
Mortared stone drainage channel	3-182, 3-183	Mortared stone approximately 12-18" wide with shallow drainage channel.	Good to poor some mortar repairs needed.
Mortared stone gutter	3-171, 3-174, 3-175, 3-176	Gutter width approximately 18" to 24." Depth varies. Located along curved and straight portions of Hot Springs Mountain Road, on both inside and outside curves. Shallow gutter at moderate slopes and deep gutter at steep slopes.	Fair to Good
Mortared stone shoulder	3-201	Mortared stone pavement at road edges located along the roads. Often adjacent to stone gutter or retaining walls.	Good to poor In some locations mortar has been poorly repaired. Some are damaged.
Concrete drain inlets and headwalls and Masonry drain inlets and headwalls	3-173, 3-174, 3-175, 3-176	Inlet and outlet structures designed to capture runoff along the roads. Water flows from mortared stone gutters into concrete inlets in select locations along Hot Spring Mountain Road.	Good to poor In some locations mortar needs repair. Some are damaged.

Concrete Steps and Iron Railing	3-177, 3-178	Two sets of concrete stairways connected by a painted crosswalk across Hot Springs Mountain Road. The upper stairway leads toward Peak Trail; the lower stairway continues west toward Arlington Lawn.	Good
Mortared Stone Wall and Arched Culvert	3-180, 3-181	Located adjacent to Lower Stairway; mortared stone with stone coping, with arched culvert; brick structure (inlet or manhole) with concrete coping; stone gutter.	Good to poor some mortar repairs needed.
Mortared Stone Gutter with Concrete Extension	3-184	Typical treatment for curved areas along Hot Springs Mountain Road.	Good to poor some mortar repairs needed.
Concrete Pedestrian Bridge	3-189	Access to Promenade and Arlington Lawn from Hot Springs Mountain Road.	Good
Mortared Stone Slope and Stone Culvert	3-190, 3-191	East of Hot Springs Mountain Road, near the Fountain Street Entrance; arched stone culvert with stone coping adjoining a mortared stone slope.	Good to poor some mortar repairs needed.
Stone Retaining Wall with English Ivy	3-192, 3-193	West of Hot Springs Mountain Road and due east of Brick Plaza #5, mortared stone retaining wall with stone coping	Fair to Good
Stone Wall with Drainage	3-194, 3-195	East of Hot Springs Mountain Road, recessed mortared stone wall with inlet pipe not visible from road, east of Promenade Brick Plaza #5; adjoining mortared stone culvert with cut notch over outlet pipe.	Fair Poor mortar repairs
Mortared Stone Gutter	3-198	2' mortared stone gutter bisecting the parking area and Hot Spring Mountain Road	Good
Stone Water Fountain	3-197	Stone fountain, ashlar, random pattern; wider at base, located at the Picnic Area near the Overlook Tower.	Good
Accessible Water Fountain	3-199	The cold-water drinking fountain, exposed aggregate concrete set on a concrete pad, universally accessible, at the picnic area, with concrete walk access to Hot Springs Mountain Road.	Good
Trail Signs	3-200	Single panel steel signs mounted on steel posts, usually at the beginning of trail, and intersections of two or more trails.	Good

Stone Stairway and Path (Peak Trail)	3-202	Located on .1 miles north of Hot Springs Mountain Tower; 7" risers, 16" treads, 5' wide mortared stone steps; in two section of 4 and 3 risers, respectively. A gravel path links the two stairways.	Stone Stairway: Good Gravel Path: Poor due to severe erosion
Metal Cap over Mortared Stone Drainage Channel	3-203	Metal Cap over mortared stone drainage channel bordering Hot Springs Mountain Road near Goat Rock Pavilion	Good
Goat Rock Overlook	3-204	Sandstone platform with metal rail provides expansive views of surrounding mountains.	Fair Some mortar needs repair, graffiti damage.
Painted Pedestrian Crosswalk	3-205	Pavement striping at trail crossings on Hot Springs Mountain Road, seven locations.	Good



Figure 3- 169: Stone Terrace and Curb and Entrance Sign at Hot Springs Mountain Road entry, Fountain Street (QEA, June 3, 2005, DSC02022)



Figure 3- 170: Stone Retaining Wall and Stone Gutter (QEA, April 2005, DSC01464)



Figure 3- 171: Mortared Stone Retaining wall, Gutter, and Road Edge (QEA, June 3, 2005, DSC02050)



Figure 3- 172: Stone Gutter at Concrete Road (QEA, April 2005, DSC01463)



Figure 3- 173: Irregular Stone Gutter and Discrete Concrete Box Inlet (QEA, April 2005, DSC01465)



Figure 3- 174 and Figure 3- 175: Wide Stone Gutter and Stone Headwall
(QEA, April 2005, DSC01476 and DSC01477)



Figure 3- 176: Hot Springs Mountain Road Stone Wall with Gutter and Drainage Structure
(QEA, April 2005, DSC01508)



Figure 3- 177: Upper Stairway: Concrete steps and Iron Railing east of Hot Springs Mountain Road (QEA, April 2005, DSC01507)



Figure 3- 178: Lower Stairway: Concrete Steps with Iron Railing west of Hot Springs Mountain Road (QEA, April 2005, DSC01520)



Figure 3- 179: Stone Gutter with Brick structure (inlet or manhole) and concrete cap (QEA, April 2005, DSC01516)



Figure 3- 180: Stone Wall and Culvert, view east toward Hot Springs Mountain Road (QEA, April 2005, DSC01522)

Figure 3- 181: Stone Wall and Culvert view from the road (QEA, April 2005, DSC01517)



Figure 3- 182: Mortared Stone Gutter and Mortared Stone Drainage Channel (QEA, June 3, 2005, DSC02024)



Figure 3- 183: Culvert with Mortared Stone Drainage Channel (QEA, June 3, 2005, DSC02025)



Figure 3- 184: Mortared Stone Gutter with Concrete extension (QEA, June 3, 2005, DSC02027)



Figure 3- 185: Mortared Stone Retaining Wall with Culvert (QEA, June 3, 2005, DSC02030)



Figure 3- 186: Mortared Stone Retaining Wall with Square opening (QEA, June 3, 2005, DSC02031)



Figure 3- 187: Mortared Stone Gutter set back from road edge (QEA, June 3,2005, DSC02033)



Figure 3- 188: 20' Stone Retaining Wall, Fountain Street is on the left.
(QEA, June 3, 2005, DSC02041)



Figure 3- 189: Concrete Pedestrian Bridge between Fountain Street and Hot Springs Mountain Road (QEA, June 3, 2005, DSC02043)



Figure 3- 190: Mortared Stone Slope and Stone Culvert (QEA, June 3, 2005, DSC02045)



Figure 3- 191: Stone Culvert near Fountain Street entrance to Hot Springs Mountain Road (QEA, June 3, 2005, DSC02047)



Figure 3- 192: Stone Retaining Wall with English Ivy, view to southwest (QEA, June 3, 2005, DSC02052)



Figure 3- 193: Stone Retaining Wall with English Ivy, directly east of Promenade Brick Plaza #5 (QEA, June 3, 2005, DSC02053)



Figure 3- 194: Recessed Mortared Stone Wall with Inlet Pipe not visible from road, east of Promenade Brick Plaza #5 (QEA, June 3, 2005, DSC02056)



Figure 3- 195: Cut Notch over Outlet Pipe, adjoining Recessed Mortared Stone Wall in Figure 3- 170 (QEA, June 3, 2005, DSC02055)



Figure 3- 196: Mortared Stone Retaining Wall and Gutter (QEA, June 3, 2005, DSC02059)



Figure 3- 198: Stone Gutter in pavement, Picnic Area is in the background (QEA, June 3, 2005, DSC02076)



Figure 3- 197: Stone Water Fountain in Picnic Area on Hot Springs Mountain (QEA, June 3, 2005, DSC02082)



Figure 3- 199: Water Fountain (QEA, June 3, 2005, DSC0280)



Figure 3- 200: Hot Springs Mountain Trail Sign; Mortared Concrete and Stone Slab over Drainage Channel (QEA, June 3, 2005, DSC02902)



Figure 3- 201: Mortared Stone Shoulder (QEA, June 6, 2005, DSC02097)



Figure 3- 202: Peak Trail with Stone Steps to Hot Springs Mountain Tower (QEA, June 3, 2005, DSC02110)



Figure 3- 203: Metal Cap over drainage channel (QEA, June 3, 2005, DSC02139)



Figure 3- 204: North Mountain Overlook (QEA, June 3, 2005, DSC02259)



Figure 3- 205: Pedestrian Crosswalk, Hot Springs Mountain Road (QEA, June 3, 2005, DSC02147)

Table 3-12: Small Scale Features, Component Landscape F: West Mountain

<i>Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
West Mountain Roads	3-206	Two lane asphalt transverse West Mountain to its summit. Original configuration of roads on West Mountain have changed since the original roads were installed in the late 1800s.	Good
Prospect Avenue Entrance	3-206, 3-207	West Mountain Drive, asphalt road, wood gate, concrete curb and gutter-mortared stone, gutter-mortared stone median, stop sign; metal brown monument sign with white letters <i>"Hot Springs National Park West Mountain"</i> on a stone base, attached concrete sidewalk along Prospect Avenue; paint stripped pedestrian crosswalks; trail access to West Mountain Trail.	Overall: Good Stone Gutter: Poor in some sections due to poor mortar repair
Whittington Avenue Entrance	3-209	West Mountain Drive, asphalt road, wood gate; metal brown monument sign with white letters <i>"Hot Spring National Park West Mountain"</i> on a stone base; stone gutter on both sides of asphalt road; white metal rules and regulation sign, with black text <i>"Commercial Vehicles Excluded"</i> mounted on wood post.	Good
Stone Retaining Wall at Road	3-210	Stacked stone retaining wall retains the slope along straight and curved portions of West Mountain Drive and West Mountain Summit Drive. Walls are located on both inside and outside curves. Height of wall varies two to five feet, and length of the wall varies to respond to the hillside.	Good Fair some wall failure
Mortared Stone Gutter at Road	3-211	Mortared stone gutter along curved and straight portions of roads. Gutters vary in width from eighteen to twenty-four inches and terminate into inlets. Gutter depth is shallow on moderate slopes and deep on steep slopes.	Good Some sections have mortar failure
Mortared Stone Shoulder/Gutter at Road	3-212	Mortared stone shoulder with an attached stone gutter located along curved and straight portions of roads. Width of the shoulder varies from six to eight feet with the attached gutter approximately two to three feet wide.	Good/Fair Some cracking and displacement
Mortared Stone Headwall at Road	3-213	Mortared stone headwalls located at end of some mortared stone gutters. Connect to culvert under the road.	Good

Concrete Inlet	3-214	Water flows from mortared stone gutters into concrete inlets in select locations along roads.	Fair Deterioration of concrete
Wood Guardrail	3-215	Wood posts with wood rail approximately twenty-four inches tall. Located on curves along roads.	Good
West Mountain Overlook #1	3-216, 3-217, 3-218	Located along West Mountain Summit Drive at a curved section of road where thick forested vegetation opens to views of the city of Hot Springs. Overlook consists of pull-off lane for parking, mortared stone curb, broom- finished concrete walk adjacent to mortared stone curb, twenty-four inch tall mortared stone retaining wall adjacent to concrete walk, bear-proof trash receptacle.	Good
West Mountain Overlook #2	3-219, 3-220, 3-221, 3-222	Located on West Mountain Summit Drive. Overlook consists of ten space asphalt parking area; cleared vegetation for views of city of Hot Springs; stone shelter (see buildings/structures), mortared stone curb, broom-finished concrete walk, mortared stone retaining wall (appears to have two different types of stone) with black wrought iron guardrail, two mortared stone planters (one with a tree, one without tree), two wood picnic tables, bear proof trash receptacle; mortared stone steps to shelter; and trail access to Canyon Trail and West Mountain Trail.	Overall: Good Stone Planters: Fair Some deterioration of mortar Stone Steps: Poor Deterioration of mortar and settling
West Mountain Overlook #3	3-223, 3-224, 3-225, 3-226	Culminates at end of West Mountain Summit Drive, and accesses summit of West Mountain. Large boulders line right side of road. Overlook consists of seven space asphalt parking area; cleared vegetation for views of city of Hot Springs and surrounding area. Mortared stone curb, landscape median inside mortared concrete stone curb with trees and turf, broom-finished concrete walk, red brick paving/plaza area; wood bench (without back) mounted to stone retaining wall; mortared stone retaining wall; black steel guardrail on top of wall; bear proof trash receptacle. Concrete walk changes to crusher fines surface at trail access to Sunset Trail.	Overall: Good Wood Bench: fair condition due to deterioration of wood

West Mountain Trails	3-227, 3-228, 3-229	Trails consist of crushed gravel surface with varying width hanging from three to seven feet that meander around the mountain and to the summit. West Mountain Access points include: Oak Trail Exchange Street (a soft trail surface from behind building is currently not maintained), Canyon Trail at Central Avenue (soft trail surface adjacent to parking garage), West Mountain Trail at Prospect Avenue (four foot wide set of fifteen mortared stone steps with a steel handrail in the center and mortared stone cheek walls, photo 196); and Mountain Top Trail at NPS maintenance complex.	Overall Good/Fair: Minor deterioration Some trails in fair condition due to vegetation growth over trail surface. Gravel/ trail maintenance needed Mortared stone cheek walls have some minor mortar deterioration
Mortared Stone Retaining Wall on Oak Trail	3-230	Mortared stone retaining walls retain the slope at bridge crossing, probably constructed in 1935. Wall height varies from four to twenty feet. Lichen growth over stone.	Good
Mortared Stone Bridge Culvert on Oak Trail	3-231	Mortared stone bridge culvert in two locations on Oak Trail. Trail has stone surface and steel handrail. Stone culvert is part of mortared stone wall that retains uphill slope and is covered in lichen. The wall may have been constructed in the 1930s.	Fair/ Good Deterioration of mortar and poor condition of handrail
Mortared Stone Spillway on Oak Trail	3-232	Mortared stone spillway connects to culvert under the bridge culvert. Spillway is a two foot wide mortared stone channel with vertical mortared stone walls on each side varying in height from two to four feet. Spillway daylights at the bottom of West Mountain on the northeast side of the mountain. Probably constructed in the 1930s.	Good

Mortared stone gutter on Trails	3-233	Mortared stone gutters direct water across the trails. Stone gutters extend the width of the trail and are approximately eighteen inches wide.	Fair Due to deterioration of the mortar and displacement of the stones
Stone Water Bars on Trails	3-234	Stone water bars are located intermittently along trails to alleviate erosion and direct water. Stone is buried and protrudes between two to five inches above trail grade.	Good Some are covered in debris. Stones are slightly displaced
Mortared Stone Steps on Oak Trail	3-235	Mortared stone steps on uphill side of crosswalk for Oak Trail at West Mountain Summit Drive.	Good
Mortared Stone Steps on Mountain Top Trail	3-229	Mortared stone steps at Prospect Avenue	Fair Poor mortar repairs
Trail Signs	3-236	Single panel steel signs mounted on steel posts, usually at the beginning of trail, and intersections of two or more trails.	Good
Concrete Bench	3-237	Concrete benches four feet in length; provide resting places along trails in select locations on West Mountain.	Fair Wash out and exposure of concrete footings and deterioration at edges of bench
Concrete gutter on Trail	3-238	Concrete gutters direct water across the trail surface. Concrete gutters extend the width of the trail and are approximately eighteen inches wide.	Fair Some cracking, displaced, and deteriorating concrete
Painted Pedestrian Crosswalk	3-239	Pavement striping at trail crossings on West Mountain Drive, three locations.	Good



Figure 3- 206: West Mountain Roads (MBD, 060805-0387)



Figure 3- 207: West Mountain - Prospect Avenue Entrance (MBD, 060805-0464)



Figure 3- 208: Mortared Stone Gutter at Prospect Entrance (MBD, 060805-0594)



Figure 3- 209: West Mountain - Whittington Avenue Entrance (MBD, 110305-2281)



Figure 3- 210: Stone Retaining Wall at Road (MBD, 060805-0600)



Figure 3- 211: Mortared Stone Gutter at Road (MBD, 060805-0594)



Figure 3- 212: Mortared Stone Shoulder/Gutter (MBD, 060805-0368)



Figure 3- 213: Mortared Stone Headwall at Road (MBD, 060805-0598)



Figure 3- 214: Concrete Inlet (MBD, 060805-0382)



Figure 3- 215: Wood Guardrail (MBD, 061005-0811)



Figure 3- 216, Figure 3- 217: West Mountain Overlook #1 (MBD, 060805-0371, 060805-0386)



Figure 3- 218: View from West Mountain Overlook #1 (MBD, 060805-0446)



Figure 3- 219: West Mountain Overlook #2 (MBD, 060805-0430)



Figure 3- 220: West Mountain Overlook #2 Parking and Overlook (MBD, 060805-0425)



Figure 3- 221: West Mountain Overlook #2 Stone Wall (MBD, 060805-0450)



Figure 3- 222: View from West Mountain Overlook #2 (MBD, 060805-0417)



Figure 3- 223: West Mountain Overlook #3 - Entrance and Parking (MBD, 060805-0388)



Figure 3- 224: West Mountain Overlook #3 - Access to Sunset Trail (MBD, 060805-0394)



Figure 3- 225: West Mountain Overlook #3 (MBD, 060805-0400)



Figure 3- 226: West Mountain Overlook #3 (MBD, 060805-0397)



Figure 3- 227: West Mountain Trails (MBD, 061005-0779)



Figure 3- 228: West Mountain Trails (MBD, 061005-0806)



Figure 3- 229: Mountain Top Trail at Prospect Avenue (MBD, 060805-0457)



Figure 3- 230: Mortared Stone Retaining Wall at Oak Trail (MBD, 060905-0566)



Figure 3- 231: Mortared Stone Bridge/Culvert at Oak Trail (MBD, 060905-0596)



Figure 3- 232: Mortared Stone Spillway (MBD, 060905-0569)



Figure 3- 233: Mortared Stone Gutter on Trails (MBD, 061005-0783)



Figure 3- 234: Stone Water Bar on Trails (MBD, 061005-0785)



Figure 3- 235: Mortared Stone Steps on Mountain Top Trail (MBD, 060805-0590)



Figure 3- 236: Trail Sign (MBD, 060805-0573)



Figure 3- 237: Concrete Bench (MBD, 061005- 0786)



Figure 3- 238: Concrete Gutter on Trail (MBD, 060805-0382)



Figure 3- 239: Painted Pedestrian Crosswalk (MBD, 061005-0810)

Table 3-13: Small Scale Features, Component Landscape G: Whittington Park

<i>Landscape Feature</i>	<i>Figure Number</i>	<i>Description</i>	<i>Condition</i>
Channel Section One	3-240, 3-241, 3-242	Original concrete retaining wall (1897) defines both sides of Whittington Creek. Height of the wall varies, on average it is approximately five (5) feet. Remnants of stone and concrete cap occur on portions of the wall.	Fair to Poor-creek bottom eroding, undermining the wall, concrete cracking, chipping and failing.
Channel Section Two	3-243, 3-244	Sloped boulder retaining wall (early 1940s) defines both sides of Whittington Creek. Wall is large boulders that taper down the slope to the creek bottom. Height of the wall varies, on average it is approximately 5'-6'.	Good - some undermining on creek bottom.
Channel Section Three	3-245, 3-246	Sloped boulder retaining wall (early 1940s) defines the north side of Whittington Creek. Original concrete retaining wall (1897) defines the south side of Whittington Creek.	Good to Fair - creek bottom eroding, undermining and causing deterioration of concrete wall.
Channel Section Four	3-247, 3-248, 3-249, 3-250	Concrete and stone retaining wall (early 1900s) defines both sides of Whittington Creek. Stone veneer is of random sizes and shapes.	Fair to Poor-sections of wall are in fair condition, needing stabilization. Other sections are severely deteriorated, falling into the creek and in need of immediate repair. Large portions of channel bottom are eroding, exposing the bottom of

			retaining wall. Repairs are not consistent with the materials and craftsmanship of the original wall. Additional repairs were made in 2006 and are inconsistent with the original craftsmanship.
Concrete Bridge #1	3-251, 3-252, 3-253	Monolithic concrete structure with a stucco finish (1910), painted white with bridge abutments of mortared stone and concrete and arched opening for Whittington Creek. Provides trail access across Whittington Creek.	Good – some minor cracking of the concrete and grout of the abutment.
Concrete Bridge #2	3-254, 3-255, 3-256	Monolithic concrete structure with a stucco finish (1910) painted white with bridge abutments of mortared stone and concrete with an arched opening for Whittington Creek. Provides trail access across Whittington Creek.	Good – minor cracking of the concrete structure and grout of the abutment.
Concrete Bridge #3	3-257, 3-258, 3-259	Monolithic concrete structure with a stucco finish (1910) painted white with bridge abutments of mortared stone and concrete with an arched opening for Whittington Creek. Provides trail access across Whittington Creek.	Good – minor cracking of the concrete and grout of the abutment.
Concrete Bridge #4	3-260, 3-261, 3-262	Monolithic concrete structure with a stucco finish (1910) painted white with bridge abutments of mortared stone and concrete with an arched opening for Whittington Creek. Provides trail access across Whittington Creek.	Good – minor cracking of the concrete and grout of the abutment.

Stone Arch Culvert	3-263, 3-264	Original stone culvert, with concrete capstone, stacked rubble stone façade and cut keystone arch, spans Whittington Creek.	Good – some previous repairs are not consistent with the materials and craftsmanship of the original wall/capstone.
Steel Culvert at road connection to West Mountain Road	3-265	Steel culvert under road to West Mountain spans Whittington Creek. Installed in mid 1900s with road construction. Stacked, mortared stone set on top of steel.	Good – structural stability should be reviewed by structural engineer.
Stone Arch Culvert at Myrtle Street	3-266	Original stone culvert, stacked rubble stone façade, cut keystone arch, concrete capstone and steel knuckle railing. On the east side of Myrtle Street at road.	Good – structural stability should be reviewed by structural engineer.
Stone Arch Culvert – at East end of Park	3-267	Original stone culvert, stacked rubble stone façade, cut keystone arch. At the east end of the park.	Good – some cracking of mortar Structural stability should be reviewed by structural engineer.
Stone/Concrete Outfall	3-268, 3-269	Several concrete/stone outfalls convey storm-water from adjacent neighborhoods into Whittington Creek. Inlet sizes vary along the channel.	Good to Fair- Some are in good condition, others are in fair condition due to poor repairs.
Corrugated Pipe Outfall	3-270	Corrugated PVC pipe outfall conveys stormwater from adjacent neighborhoods into Whittington Creek.	Fair – Eroding wall and channel below.

Boulder Outfall	3-271	Boulder outfall set in boulder wall conveys stormwater into Whittington Creek from adjacent neighborhoods.	Good – some cleaning and vegetation. Removal needed
Steel Pipe Outfall	3-272	Steel pipe outfall set in stone and concrete channel retaining wall conveys stormwater from adjacent neighborhoods to Whittington Creek. Stone and concrete surround the steel pipe.	Fair – Repairs around the pipe are poor and not consistent with the materials and craftsmanship of original wall.
Concrete Outfall	3-273, 3-274, 3-275	Concrete outfall conveys stormwater from adjacent neighborhoods into Whittington Creek. Outfalls vary in size and occur along the wall.	Good to Fair – cracking and deterioration on some.
Soft Surface Trail	3-276, 3-277	Crushed granite trail surface, width varies from (3) three to (6) six feet wide, six (6) feet is average. Loop trail around the park with access to the other side of the park at bridge crossings.	Fair – needs a consistent width and edge treatment. In need of routine maintenance of trimming and vegetation removal at edges.
West Mountain Road connection	3-278 3-279, 3-280, 3-281, 3-282	Connection from north-side of park to south-side and West Mountain. Associated features: concrete curb inlet for stormwater, attached four (4) foot wide concrete walk on both sides of road with accessible curb ramps on all corners connecting to the soft surface trail.	Good – Some cracking of the curb and concrete walk.
West Mountain Directional Sign	3-283	Directional wood sign “ <i>Hot Springs National Park West Mountain</i> ,” set on mortared, stacked stone base. Sign directs visitors to vehicular connection through the park to West Mountain	Good - Sign in need of repainting, minor cracking of mortar.

Well	3-283	Steel well and steel grate over inlet and well head cover. Water is bubbling out of the well cover	Fair – Water source is unknown. Overflow has created a wet soggy area.
Driveway Curb Cut	3-284, 3-285	Original 1897 curb cut for the original carriage road. Curb cut does not connect to any existing site features in the park	Good
Concrete Curb Inlet	3-286	Concrete curb inlet with manhole for storm water located adjacent to the concrete curb cut.	Fair – some deterioration, patching of concrete is poor.
Myrtle Street Road Connection	3-287	Road provides north-south vehicular access through Whittington Park, but does not directly connect with adjacent streets. Road is asphalt paving with concrete curb and gutter.	Good
Hot Springs National Park – Whittington Park Sign	3-288	Park sign “ <i>Hot Springs National Park, Whittington Park</i> ” standard NPS sign with brown background and white letters installed on a stone and mortar base with a stone and mortar column with the NPS logo affixed to it	Good – some cracking of the mortar.
Bench on concrete pad	3-289	Wood bench, six feet long, painted red with steel frame and set on oval exposed aggregate concrete pad. Eighteen (18) benches are throughout the park, usually adjacent to the trail and in open areas under trees.	Good
Trash Receptacle	3-290	NPS standard bear-proof trash receptacle, dark brown, set on a concrete pad.	Good
Picnic Table	3-291	Moveable picnic table - wood table and benches on galvanized steel frame, in four (4) locations.	Good



Figure 3- 240: Channel Section One (MBD, 062806-3718)



Figure 3- 241: Channel Section One (MBD, 062806-3720)



Figure 3- 242: Channel Section One (MBD, 062806-3790)



Figure 3- 243: Channel Section Two (MBD, 062806-3732)



Figure 3- 244: Channel Section Two (MBD, 062806-3733)



Figure 3- 245: Channel Section Three (MBD, 062806-3763)



Figure 3- 246: Channel Section Three (MBD, 062806-3773)

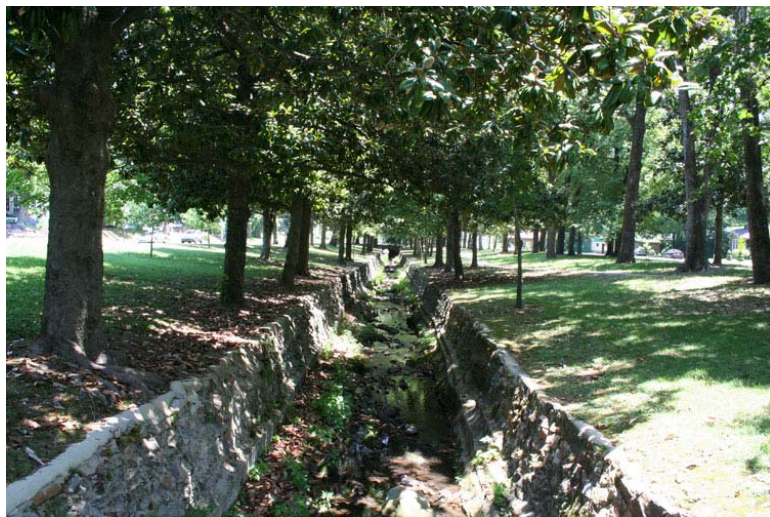


Figure 3- 247: Channel Section Four (MBD, 062906-3913)



Figure 3- 248: Channel Section Four (MBD, 062906-3943)



Figure 3- 249: Channel Section Four (MBD, 062906-4043)

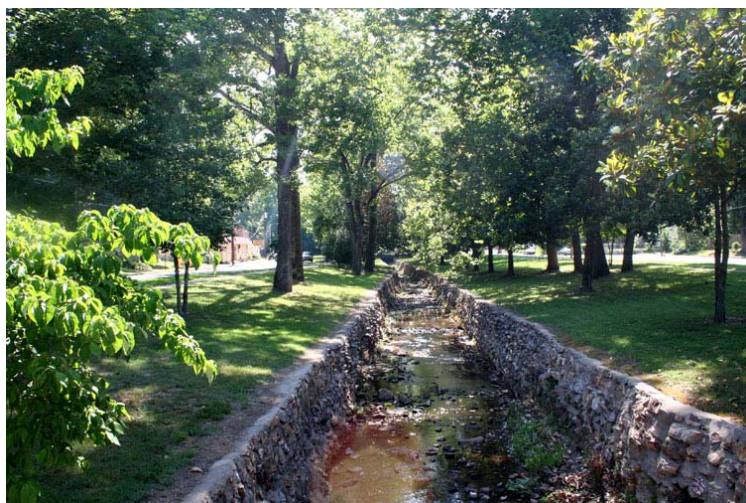


Figure 3- 250: Channel Section Four (MBD, 062906-4045)



Figure 3- 251: Concrete Bridge # 1 (MBD, 062806-3712)



Figure 3- 252: Concrete Bridge # 1 (MBD, 062806-3717)



Figure 3- 253: Concrete Bridge # 1 (MBD, 062806-3798)



Figure 3- 254: Concrete Bridge # 2 (MBD, 062806-3761)



Figure 3- 255: Concrete Bridge # 2 (MBD, 062806-3762)



Figure 3- 256: Concrete Bridge # 2 (MBD, 062806-3764)



Figure 3- 257: Concrete Bridge # 3 (MBD, 062806-3781)



Figure 3- 258: Concrete Bridge # 3 (MBD, 062806-3893)



Figure 3- 259: Concrete Bridge # 3 (MBD, 062806-3895)



Figure 3- 260: Concrete Bridge # 4 (MBD, 062806-3865)



Figure 3- 261: Concrete Bridge # 4 (MBD, 062806-3870)



Figure 3- 262: Concrete Bridge # 4 (MBD, 062806-3872)



Figure 3- 263: Stone Arch Culvert (MBD, 062906-3949)



Figure 3- 264: Stone Arch Culvert (MBD, 062906-3976)



Figure 3- 265: Steel Culvert at connection to West Mountain Road (MBD, 062906-3936)



Figure 3- 266: Stone Arch Culvert at Myrtle Street (MBD, 062906-3983)



Figure 3- 267: Stone Arch Culvert at East End of Park (MBD, 062906-4061)



Figure 3- 268, Figure 3- 269: Stone/Concrete Outfall (MBD, 062906-3973, 3983)



Figure 3- 270: Corrugated Pipe Outfall (MBD, 062806-3765)



Figure 3- 271 Boulder Outfall (MBD, 062806-3787)



Figure 3- 272: Steel Pipe Outfall (MBD, 062906-3935)



Figure 3- 273: Concrete Outfall (MBD, 062806-3882)



Figure 3- 274: Concrete Outfall (MBD, 062806-3934)



Figure 3- 275: Concrete Pipe Outfall (MBD, 062806-3736)



Figure 3- 276: Soft Surface Trail (MBD, 062806-3774)



Figure 3- 277: Soft Surface Trail (MBD, 062806-3784)



Figure 3- 278: West Mountain Road connection (MBD, 062906-3918)



Figure 3- 279: Concrete Walk (MBD, 062906-3915)



Figure 3- 280: Concrete Walk (MBD, 062906-3917)



Figure 3- 281: Concrete Curb Inlet (MBD, 062906-3919)



Figure 3- 282: West Mountain Directional Sign (MBD, 062906-3854)



Figure 3- 283: Well (MBD, 062906-3876)



Figure 3- 284: Driveway Curb Cut - South (MBD, 062906-3880)

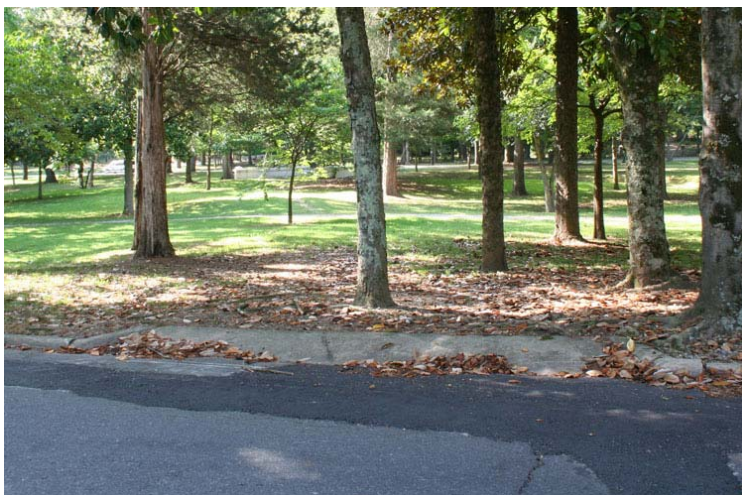


Figure 3- 285: Driveway Curb Cut - North (MBD, 062906-4034)



Figure 3- 286: Concrete Curb Inlet (MBD, 062906-3954)



Figure 3- 287: Myrtle Street Road Connection (MBD, 062906-3958)



Figure 3- 288: Whittington Park Sign (QEA)



Figure 3- 289: Bench on Concrete Pad (MBD, 062806-3727)



Figure 3- 290: Trash Receptacle (MBD, 062906-4067)



Figure 3- 291: Picnic Table (MBD, 062906-4051)

Cultural Resources: Archeological Resources

There are no archaeological sites within the project study area that are associated with significant cultural landscapes. Within the park boundary 30 recorded archeological sites range in age from Middle-Late Archaic to historic period. There are eleven archaeological sites within the project study area. Recorded sites include a prehistoric lithic scatter and historic dump on West Mountain, remnants of Happy Hollow development, and a historic dump at Gulpha Gorge Campground. Other archaeological investigations have identified locations for the Ral and Corn Hole Springs as well as 19th century bathhouse elements within the Lamar, Ozark, Maurice, and Hale Bathhouses.¹⁵

In the Hot Springs area Native Americans extracted stone for making arrowheads, spearheads, other implements and tools. The extant quarries are small – the largest measures 150 feet across and 25 feet deep. Several were later mined by European settlers who used the novaculite for whetstones. A few of the quarries were operated commercially. None of the quarry sites are within the study area. There is a high likelihood for potential prehistoric archaeological sites along major streams, atop ridges, and in the vicinity of the novaculite outcrops.¹⁶ There are some quarry sites within the study area that could conceivably have a historic resource component.

The Reservation Front, in particular Bathhouse Row and the Mountain Sidegrounds, contain several documented historic archaeological sites and a high potential for additional historical archaeological data. However, numerous construction activities over the last two-hundred years may have rendered the soil unreliable for archaeological tests. The historical resources in these areas were covered with tons of fill material when the creek arch culvert was constructed in the 1880s; and when improvements were made to the Mountain Sidegrounds from the 1890s through the 1950s. More recent construction activities may have also disturbed subsurface conditions. Potential subsurface resources include depressions excavated in the tufa at the springs to create pools for bathers in the early 1800s. Remnants of an excavation referred to as a subterranean cave exist behind or under the Hale Bathhouse (made in the 1890s). It is believed that the cave was dug into the tufa to provide a sauna. In addition, an unknown number of foundations of early bathhouses and artifacts related to the distribution of hot water are underneath Bathhouse Row.¹⁷

Special Status Species

Special Status Species: Study Area

Aside from Bathhouse Row, Hot Springs National Park is primarily forested hills and valleys, with mixed stands of oak and hickory interspersed with shortleaf pine on the more

¹⁵ Midwest Archaeological Center, Lincoln, Nebraska, Government Review Comments, 75% CLR/EA, April 2007.

¹⁶ United States Department of the Interior, *General Management Plan, Development Concept Plan: Hot Springs National Park*, 1986, 63.

¹⁷*Ibid.*, 68.

exposed slopes and ridgetops. Wildlife within the park is typical of the region, and includes rodents, bats, deer, and various species of amphibians, reptiles, and birds. A list of amphibians known within the park and vicinity includes approximately 24 *taxa* (species and subspecies) while some 135 species of birds have been documented. Aquatic wildlife is limited to portions of several small creeks, and game fish are few.¹⁸

As part of Section 7 coordination, the U.S. Fish and Wildlife Service (USFWS) has indicated that the federally threatened bald eagle (*Haliaeetus leucocephalus*) and the federally endangered wetland plant harperella (*Ptilimnium nodosum*) are known to occur in Garland County; however there are no known federally listed animals or plants within the boundaries of the park. There are several species of plants and plant communities that are of interest to the Arkansas Natural Heritage Commission (ANHC). The ANHC has listed 10 plant species and two plant communities that are considered "Inventory Elements" and for which there is conservation concern (see Table 3-15 below). A rare blue-green alga (*Phormidium treleasei*) inhabits hot water display springs and fountains along Bathhouse Row. Other known locations in North America include the springs at Banff, Alberta, Canada, Yellowstone National Park and Death Valley National Monument. Another rare species is the Graves' spleenwort (*Asplenium x gravesii*). This small fern, which is considered a sterile hybrid, typically inhabits sandstone bluffs and cliffs, and has been recorded on Hot Springs Mountain just north of Gulpha Gorge Campground. A related species, lobed spleenwort (*Asplenium pinnaatifidum*) inhabits acidic soil or exposed rock and has been located on Hot Springs Mountain and North Mountain near Highway 70B. Swan's sedge (*Carex swanii*) inhabits dry woods and fields and has been found on Hot Springs Mountain. The Ozark chinquapin (*Castanea pumila* var. *ozarkensis*) is a rare chestnut tree that grows in oak-pine and oak-hickory forests on dry, acidic soils along ridgetops and upper slopes of ravines. Several stands of this species are known in the park, and it is endemic to the Ozark Plateau region of Arkansas, Missouri, and Oklahoma. Arkansas bedstraw (*Galium arkansanum* var. *pubiflorum*) is a summer-blooming perennial plant that inhabits dry woodlands, and has been found on Hot Springs Mountain and Sugarloaf Mountain. Compact scaly blazing-star (*Liatris squarrosa* var. *compacta*) inhabits dry open places and has been located on Sugarloaf Mountain. Wild stonecrop (*Sedum ternatum*) is a succulent plant that inhabits rocks, cliffs, and woods, and has been recorded north of the Hot Springs Rehabilitation Center. Arkansas cabbage or twistflower (*Streptanthus maculatus* spp. *obtusifolius*) is an herbaceous member of the mustard family that inhabits dry ridgetop glades. The New York fern (*Thelypteris noveboracensis*) inhabits mixed woods and swamp margins, and is known in the low mountains northwest of SR 7 and Highway 70B. Unusual plant communities within the park include a Novaculite glade-outcrop and Xeric Shortleaf Pine-Oak Forests. The latter community type is distinguished by two old growth shortleaf pine (*Pinus echinata*) stands that are estimated to exceed 400 years in age, one of which is located on the northern slope of Sugarloaf Mountain. Both old growth forests are considered significant natural resources within the park and are being managed with prescribed fire.¹⁹

¹⁸National Park Service, "Fire Management Plan: Environmental Assessment, Hot Springs National Park, Hot Springs, Arkansas, 2005 and National Park Service, "National Park Service, Cultural Landscapes Inventory: Gulpha Gorge Campground, Hot Springs National Park," 2006b.

¹⁹ National Park Service, "Resources Management Plan: Hot Springs National Park," no date; personal communication with Stephen Rudd, 2006.

Table 3-14: Rare Species and Communities Within Hot Springs National Park²⁰

Scientific Name	Common Name	State Status
<u>Non-Vascular Plants</u>		
<i>Phormidium treleasei</i>	a blue-green alga	State Inventory
<u>Vascular Plants</u>		
<i>Asplenium x gravesii</i>	Graves' spleenwort	State Inventory
<i>Asplenium pinnatifidum</i>	Lobed spleenwort	State Inventory
<i>Carex swanii</i>	Swan's sedge	State Inventory
<i>Castanea pumila</i> var. <i>ozarkensis</i>	Ozark chinquapin	State Inventory
<i>Galium arkansanum</i> var. <i>pubiflorum</i>	Arkansas bedstraw	State Inventory
<i>Liatris squarrosa</i> var. <i>compacta</i>	Compact scaly blazing-star	State Inventory
<i>Sedum ternatum</i>	Wild stonecrop	State Inventory
<i>Streptanthus maculatus</i> ssp. <i>obtusifolius</i>	Arkansas cabbage	State Inventory
<i>Thelypteris noveboracensis</i>	New York fern	State Inventory
<u>Plant Communities</u>		
Novaculite glad-outcrop	—	State Inventory
Xeric Shortleaf Pine-Oak Forest	—	State Inventory

Special Status Species: Reservation Front

There are no known federally listed animals or plants within the boundaries of Hot Springs National Park. Considering that Bathhouse Row is within an urbanized environment and that this particular section of Hot Springs has, since the mid 1800's, been routinely disturbed by urban development, the likelihood of locating terrestrial sensitive and rare species would be very remote. However, there are two known species on the Arkansas State Inventory that are located in the Reservation Front. The rare blue-green alga (*Phormidium treleasei*) is present at certain locations along Bathhouse Row (*i.e.*, the Display Springs). Wild stonecrop inhabits rocks, cliffs, and woods, and has been recorded north of the Hot Springs Rehabilitation Center.

Special Status Species: Mountains

There are no known federally listed animals or plants within the boundaries of Hot Springs National Park; however there are several species of plants and plant communities in the park that are of interest at the state level. These include lobed spleenwort on North Mountain near its base by Highway 70B; Swan's sedge, Arkansas bedstraw, Grave's spleenwort, and lobed spleenwort on Hot Springs Mountain; compact scaly blazing-star and Arkansas bedstraw on Sugarloaf Mountain; and New York fern north of North Mountain.

²⁰ "Fire Management Plan Environmental Assessment, Hot Springs National Park, Hot Springs, Arkansas," US Department of the Interior, National Park Service, 2005, D-41 and Arkansas Natural Heritage Commission, "State Species of Special Concern – Plants," 2005.

Special Status Species: Whittington Park

There are no known federally listed animals or plants within the boundaries of Hot Springs National Park; however there are several species of plants and plant communities in the park that are of interest at the state level, though none occur within Whittington Park.

Special Status Species: Gulpha Gorge Campground

There are no known federally listed animals or plants within the boundaries of Hot Springs National Park; however there are several species of plants and plant communities in the park that are of interest at the state level, though none occur within Gulpha Gorge Campground.

Water Quality

Water Quality: Study Area

Natural thermal (hot) springs are the primary resource of Hot Springs National Park, although there are also non-thermal surface waters/streams that drain mountainous portions of the park. The water is geothermally heated along a gradient at a depth estimated in excess of 7,000 feet, and rises through faults in the Hot Springs sandstone formation to emerge (discharge) from the thermal springs. The unique geology and topography of the area has created this discharge zone which forms a narrow strip about 0.25 mile long at the foot of Hot Springs Mountain. The origin of the heat is a combination of the depth from the surface as well as from radioactive decay. This area has been the focus of human use and development over the years and now consists of Bathhouse Row and downtown Hot Springs. The springs are largely concealed from park visitors except for three display areas along the Row. The remainder of the springs were capped prior to 1901 to prevent contamination. The watershed feeding the springs, or recharge zone, includes the highly permeable Bigfork cherts and the Arkansas Novaculite formation. The largest outcrops of these formations typically occur on mountain slopes and narrow ridges above 700 feet in elevation. From an aerial perspective, the recharge zones form long ellipses around the valleys drained by Hot Springs and Gulpha Creeks in the Park, and beyond its boundary.²¹ The Hot Spring National Park natural resources division is currently working on a proposal to partner with the U.S. Geological Survey to develop a water quality database for the three creeks within the park.

Water Quality: Reservation Front

A narrow strip of earth, about a quarter mile long, and at the foot of Hot Springs Mountain, is where thermal water emerges from fractures in the underlying sandstone formation that gave the area its name sake. This area (the Discharge Zone) has been the focus of human use and intensive development over the years and is now the site of Bathhouse Row and downtown Hot Springs.

²¹ United States Department of the Interior, National Park Service, 2005, 9 and personal communication with Stephen Rudd, Natural Resources Program Manager, Hot Springs National Park, 2006.

Bathhouse Row is a relatively level area situated along Central Avenue in downtown Hot Springs in the valley between Hot Springs Mountain and West Mountain and along the original bed of Hot Springs Creek. This creek still flows underneath Bathhouse Row through a large arched tunnel as it has since the 1880s. Surface water sheet flow generally follows the slight southerly slope of Central Avenue and ultimately drains into Hot Springs Creek. No water quality data is available for this creek.

Retaining walls line the eastern side of Bathhouse Row where it meets the steep topography of Hot Springs Mountain. Although most of the buildings along Bathhouse Row are elevated (six inches to four feet) above the promenade, it would only offer marginal protection during a 100-year flood event which could inundate the area under five to six feet of water.

Bathhouse Row and the park in general has limited surface water exposures; overall the quality is excellent and does not require any mitigation strategy. Cold water is treated with ozone and ultra-violet light before being distributed, thermal water is not treated. Monitoring is carried out through an in-park laboratory certified by the Arkansas State Department of Health.

The majority of surface waters, both hot and cold water springs, originate from groundwater sources deep below the surface. Geothermally heated water rises as much as 7,000 feet through faults in the Hot Springs sandstone formation to form thermal springs.²² Several springs exist along Bathhouse Row but are generally concealed from public view, with a few exceptions.

The recharge zone for the springs along Bathhouse Row and the greater Hot Springs area is only partially within the park boundary. Approximately eighty percent of the recharge zone is outside park boundaries, to the east and north. Groundwater percolates off the chert and novaculite formations of Hot Springs, West, and North mountains.

The Arlington Lawn thermal pools and thermal water cascade consist of a man-made naturalistic tufa rock outcropping with thermal water that flows down to upper and lower geometric thermal pools. This feature originates west of the Grand Promenade, and was constructed around 1982. All surface waters eventually empty into Hot Springs Creek, many via underground culvert piping. No water quality data is available for this creek.

Water Quality: Mountains

Hot Springs Mountain and West Mountain are steeply sloped and heavily wooded, with several streams and ravines that receive water primarily from precipitation and runoff. Mortared stone gutters and swales occur along the edges of many roads, such as those along Hot Springs Mountain Road. Water then flows into concrete or stone mortared inlets at selected locations. There are also some mortared stone gutters that direct water across pedestrian trails (see Component Landscape E: Hot Springs Mountain and North Mountain). All surface waters eventually empty into Hot Springs Creek, many via underground culvert piping. Hot Springs

²² Rudd, 2006.

Mountain serves as portions of the hydrologic conservation area within the park boundary where precipitation percolates off the chert and novaculite formations of Hot Springs Mountain and North Mountain. No water quality data is available for this creek.

Water Quality: Whittington Park

Whittington Park was formerly known as the Whittington Lake Reserve from 1892 through 1911. The lakes were created along portions of Whittington Creek, a tributary to Hot Springs Creek that essentially bisects the linear park. During construction of the lakes, bedrock was encountered at five feet below the surface. Over the history of its development within the park, Whittington Creek has had periods of insufficient flow, leading to “stagnant, unpleasant, and potential health hazards.” Between 1913 and 1915, stone retaining walls were built along the creek banks, a culvert was installed and attached to the city sewer system, and a drain tile was installed to alleviate surface drainage problems. In 1934 a concrete jug fountain was built at the sidewalk edge to provide access to the cold spring water in front of the maintenance building on Whittington Avenue. In 1943, riprap was installed in Whittington Creek to improve the aesthetics of the park and some sections of the creek were subsequently channelized (see Component Landscape G: Whittington Park). Whittington Creek carries storm water runoff from the urban areas in the vicinity of the park. No water quality data is available for this creek.

Water Quality: Gulpha Gorge Campground

Gulpha Creek is the primary stream that flows southward through the Gulpha Gorge area. Iron Spring occurs on an adjacent mountain slope. There are two submerged/partially submerged stone and concrete dam ruins that currently prevent the stream from being free-flowing in this vicinity.²³ No water quality data is available for this creek.

Floodplains

Floodplains: Study Area

100-year floodplains are associated with Hot Springs Creek, Gulpha Creek and the Hot Springs Creek tributary that flows through Whittington Park. The 100-year floodplains associated with Hot Springs Creek includes most of Bathhouse Row Hot Springs Creek was diverted underground beneath Bathhouse Row, but could still inundate this area with water levels up to five or six feet above ground level (NPS, 1986). A portion of Gulpha Gorge Campground is within the 100-year floodplain of Gulpha Creek. Most of Whittington Park is within a 100-year floodplain.

Floodplains: Reservation Front

According to mapping by the Federal Emergency Agency (FEMA), the lower edge of the Grand Promenade borders the 100-year floodplain of Hot Springs Creek, and virtually all of

²³ Federal Emergency Agency (FEMA), “Flood Insurance Rate Map: Garland County, Arkansas and Incorporated Areas, Panel 93 of 200,” 1991.

Bathhouse Row and Arlington Lawn are located within the 100-year floodplain of Hot Springs Creek (see Floodplain and Wetlands figure at the end of this Chapter).²⁴ As mentioned above several of the existing structures on Bathhouse Row are elevated to a certain degree to help mitigate the threat. The floodplain averages approximately 400 feet wide through Bathhouse Row and from Reserve Street to Fountain Street declines sixteen feet over 0.34 mile.

Floodplains: Mountains

According to mapping by FEMA (1991), there are no areas of 100-year floodplain within the Hot Springs Mountain or West Mountain portions of the park.²⁵

Floodplains: Whittington Park

According to mapping by FEMA (1991), nearly all of Whittington Park occurs within the 100-year floodplain of a tributary to Hot Springs Creek.

Floodplains: Gulpha Gorge Campground

According to mapping FEMA (1991), the western edge of the Gulpha Gorge Campground is located within the 100-year floodplain of Gulpha Creek. Flooding of the creek in this area is considered to occur infrequently.²⁶

Visitor Experience

Visitor Experience: Study Area

The park has historically been a major contributor to regional tourism. Regional tourist attractions have been developed over the past decades, providing visitors to the region many more opportunities for outdoor and indoor recreation activities. Regional attractions include botanical gardens, horse racing, a science museum and a national forest.

Hot Springs National Park provides visitors an opportunity to experience resources associated with the historic development and use of natural hot springs as a “national” spa resort. According to the park website, visitation to the park has been decreasing in the past few years. In Fiscal Year (FY) 2003 there were 1,561,311 total recreation visits to the park. The number of total recreation visits for FY 2006 decreased to 1,273,457.

The park is integrated with the downtown of the city of Hot Springs, Arkansas and a symbiotic relationship has developed to provide extensive visitor experiences and activities. The Hot Springs National Park visitor center and museum are located in the Fordyce Bathhouse. The park provides visitors access to historic spas through guided tours and opportunities to take a traditional bath at Buckstaff Baths; which is a bathhouse operated by a

²⁴ Federal Emergency Agency (FEMA). “Flood Insurance Rate Map: Garland County, Arkansas and Incorporated Areas, Panel 93 of 200,” 1991.

²⁵ Ibid.

²⁶ U.S. Department of the Interior, National Park Service, *Fire Management Plan: Environmental Assessment, Hot Springs National Park, Hot Springs, Arkansas*, 2005b.

concessionaire. Although not part of the park, other bathhouses in the city of Hot Springs offer visitors the opportunity to enjoy the spa experience. These bathhouses are permitted by Hot Springs National Park, but not operated by the park.

There are 26 miles of hiking trails on West, North and Hot Springs Mountains for the more adventurous. More leisurely strolling is encouraged on the Grand Promenade behind the bathhouses and along Central Avenue. Park roads provide access to West, North and Hot Springs Mountains. Visitor amenities along these park roads include overlooks and picnicking facilities. Hot Springs Mountain Road leads to Hot Springs Mountain Tower, which provides a viewscape of the park, the city of Hot Springs and region. Camping at Hot Springs National Park is provided at Gulpha Gorge Campground. Resources at the park are interpreted through ranger-led tours and interpretive signage. There is no admission charge to enter Hot Spring National Park, although there are fees for private events. All of the bath/spa facilities are contracted by leases to private concessionaires.

Visitor Experience: Reservation Front

The Grand Promenade serves as an urban plaza and an area for passive recreation. In addition, it is a pedestrian circulation corridor that provides connections between Reserve Street, Fountain Street, and a number of access points to the Formal Entrance/Stevens Balustrade, Bathhouse Row, and trails on Hot Springs Mountain. Visitor amenities along the Grand Promenade include benches, lights, a drinking fountain, and trash receptacles. Interpretive waysides and brochures are provided for self-directed experiences, and ranger-guided tours are scheduled. There are no campgrounds within this section of the park.

Bathhouse Row provides a unique historical and cultural experience as it pertains to the human use and consumption of the thermal hydro-geological resources found at Hot Springs. The Magnolia Promenade, extending from Reserve Street to Fountain Street, is situated between Central avenue and bathhouse lawns is a wide walkway with magnolia trees, manicured lawns, and hedge rows which allows for stress free reflection while in the historical district. Visitor amenities found along Bathhouse Row include the architecture of the individual bathhouses, benches, lights, several drinking fountains, restrooms, trash receptacles, pedestrian crosswalks, aesthetic fountains, and avenues designed to allow transition to other venues. Interpretive waysides and brochures are provided for self-directed experiences, and ranger-guided tours are scheduled. Thermal water bathing is still allowed at the Buckstaff Bathhouse which still functions commercially as a bathhouse.

Central Avenue fronts Bathhouse Row. This four lane road is a state highway (SR 7) and can get quite congested during peak traffic hours in the morning and evening. Vehicular parking is not provided along Bathhouse Row on the east side of Central Avenue, although on-street parking occurs along the west side of Central Avenue. A drop-off point has been established at the historical Formal Entrance beside Fordyce Bathhouse which is the Visitor Center for the park. During calendar year 2006, Hot Spring National Park had 15 motor vehicle traffic accidents, 3 of which involved personal injury, and there were no fatalities. Although Central Avenue is congested with traffic, the majority of traffic accidents occurred along Gorge Road and West Mountain Road (seven and five accidents, respectively).

Arlington Lawn serves as an urban park and plaza that is utilized for formal and informal individual and group activities. The area provides pedestrian circulation routes between Fountain Street, the Grand Promenade, and Central Avenue. The hot water cascade provides opportunities for visitors to view the spring water in an outdoor environment. The platform adjacent to the hot water cascade is used for weddings, presentations, and other gatherings. Several signs provide information regarding the history of the property.²⁷²⁸ There are no campgrounds within this section of the park.

Visitor Experience: Mountains

Vehicular access to Hot Springs Mountain Road is from Fountain Street. Hot Springs Mountain is located east of Bathhouse Row and downtown Hot Springs and are primarily used for leisure and recreational purposes. The mountain is wooded and includes a system of pleasure drives, hiking trails, trail shelters, overlooks, picnic areas, pedestrian stairs and bridges along trails, drinking fountains. The 11 hiking trails include Arlington Trail, Dead Chief Trail, Dogwood Trail, Floral Trail, Goat Rock Trail, Grand Avenue Trail, Honeysuckle Trail, Hot Springs Mountain Trail, Peak Trail, Reserve Trail, and Short Cut Trail. Automobile parking is available at all overlooks along Hot Springs Mountain Road including Hot Springs Mountain Observation Tower situated atop the high point of Hot Springs Mountain which serves as a focal point and provides opportunities for visitors to access long reaching views of the regional landscape (see Component Landscape E: Hot Springs Mountain and North Mountain). Near the observation tower is a small clay roofed structure designated as the Pagoda Pavilion which serves as a shelter for the overlook.

West Mountain is located west of Bathhouse Row and downtown Hot Springs and is used for leisure and recreational purposes. The mountain is wooded and includes a system of pleasure drives, hiking trails, trail shelters, overlooks, and associated features including stone walls, gutters, and drainage channels. The five hiking trails include Oak Trail, Canyon Trail, West Mountain Trail, Mountain Top Trail, and Sunset Trail (which encircles the park). Two vehicular access points connect West Mountain with the city of Hot Springs along the park drive - West Mountain Drive. West Mountain Drive connects to West Mountain Summit Drive, a scenic road that takes visitors to the summit of West Mountain. Three overlooks provide broad vistas of the city of Hot Springs and the surrounding area (see Component Landscape F: West Mountain). There are no campgrounds within this section of the park.

Visitor Experience: Whittington Park

Whittington Park is a highly landscaped area that is heavily used by local residents and only rarely by park visitors. There are soft trails (fitness trails) that occur along the north and south sides of Whittington Creek, as well as short cross-trail segments at the location of bridges across the creek. Benches and trash receptacles are provided periodically along these soft trails. Picnic tables are located southeast of Whittington Avenue and Myrtle Street (north side of the creek), at the very western end of the park on the south side of the creek, and at the very eastern end of the park on the north side of the creek. The vehicular bridge southwest of Whittington Avenue and Linden Avenue has concrete pedestrian walkways. Vehicular access to

27

Whittington Park is primarily along Whittington Avenue, which encircles the park, and by connecting side streets such as Downs Terrace, Linden Avenue, Roanoke Street, Myrtle Street, Willow Street, and Water Street. There are no campgrounds within this section of the park (see Cultural Resources/Cultural Landscapes: Component Landscape G, Whittington Park).

Visitor Experience: Gulpha Gorge Campground

Gulpha Gorge Campground is located on a fairly level wooded valley floor immediately east of Gulpha Creek and west of US 70B. This site is primarily used for leisure and recreational purposes, and has been little changed since it first became a campground in 1924. Predominant uses include camping, picnicking, campfire gatherings, educational/amphitheater programs, an Artist-in-Residence program, weddings, and access to trails linked to the campground (*e.g.*, Grand Avenue Trail, Gulpha Gorge Trail, and Sunset Trail). There are 32 campsites at Gulpha Gorge Campground. A concrete footbridge crosses over Gulpha Creek adjacent to the amphitheater.²⁹ Structures within the campground include picnic tables, a ranger station, and restrooms.

Park Operations

Hot Spring National Park maintenance staff includes 22 permanent positions and 31 seasonal positions for grounds-keeping, roads and trails, and structures. There are currently four vacant positions in the maintenance division. Most of the time required by maintenance personnel is for projects associated with structures along Bathhouse Row. The primary maintenance facility is located Whittington Avenue. A second maintenance facility is located at north end of Bathhouse Row, next to the Superior Bathhouse. Because there is limited space behind the bathhouses and there is no off-street parking, or parking along the east side of Central Avenue, maintenance staff has to park on the sidewalk in front of the bathhouses and on the Formal Entrance. As in most, if not all parks, understaffing hinders the maintenance division's ability to keep up with daily requirements. A high percentage of seasonal staff is involved in the bathhouse construction project that is ongoing. This is a significant effort, which limits flexibility in directing staff to other parts of the park for maintenance requirements.

Interpretive staff at Hot Spring National Park totals six full-time staff. There are three interpretive rangers, one park guide, a program assistant and the Division Chief. There is one museum specialist. There is no part-time staff. There will only be one summer seasonal position in 2007. Although there is an Education Plan for Hot Spring National Park, there is no Education Specialist at the park. Volunteers are utilized for greeting visitors and providing tours of the Fordyce Bathhouse. The interpretive and museum staff offices are located in the Fordyce Bathhouse. Because the park does not have enough seasonal, part-time and full-time staff to adequately cover all components of the park, interpretation priorities are focused on Bathhouse Row and Reservation Front. When adequate numbers of interpretation staff is available, other components of the park are interpreted.

²⁹ Ibid.

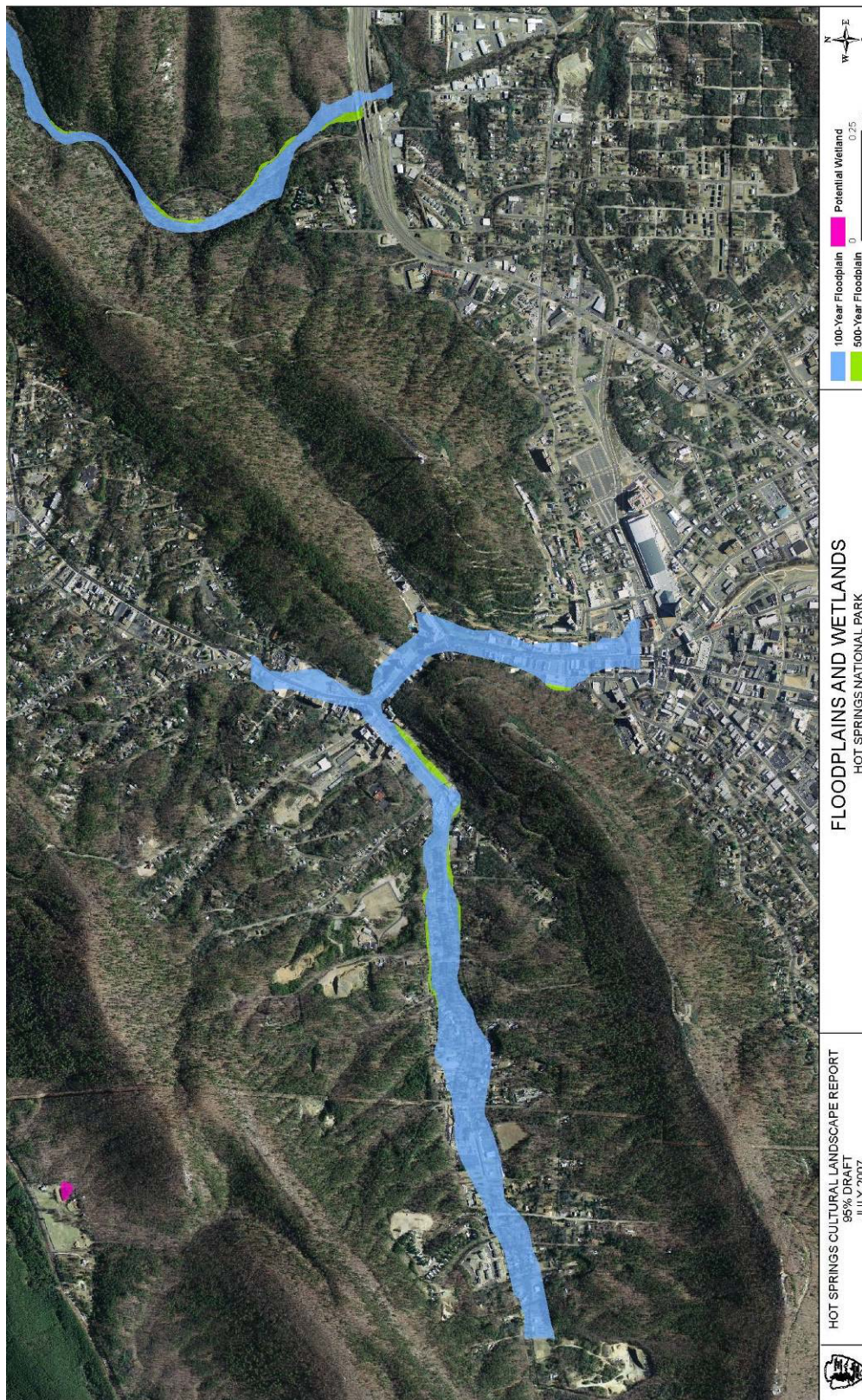
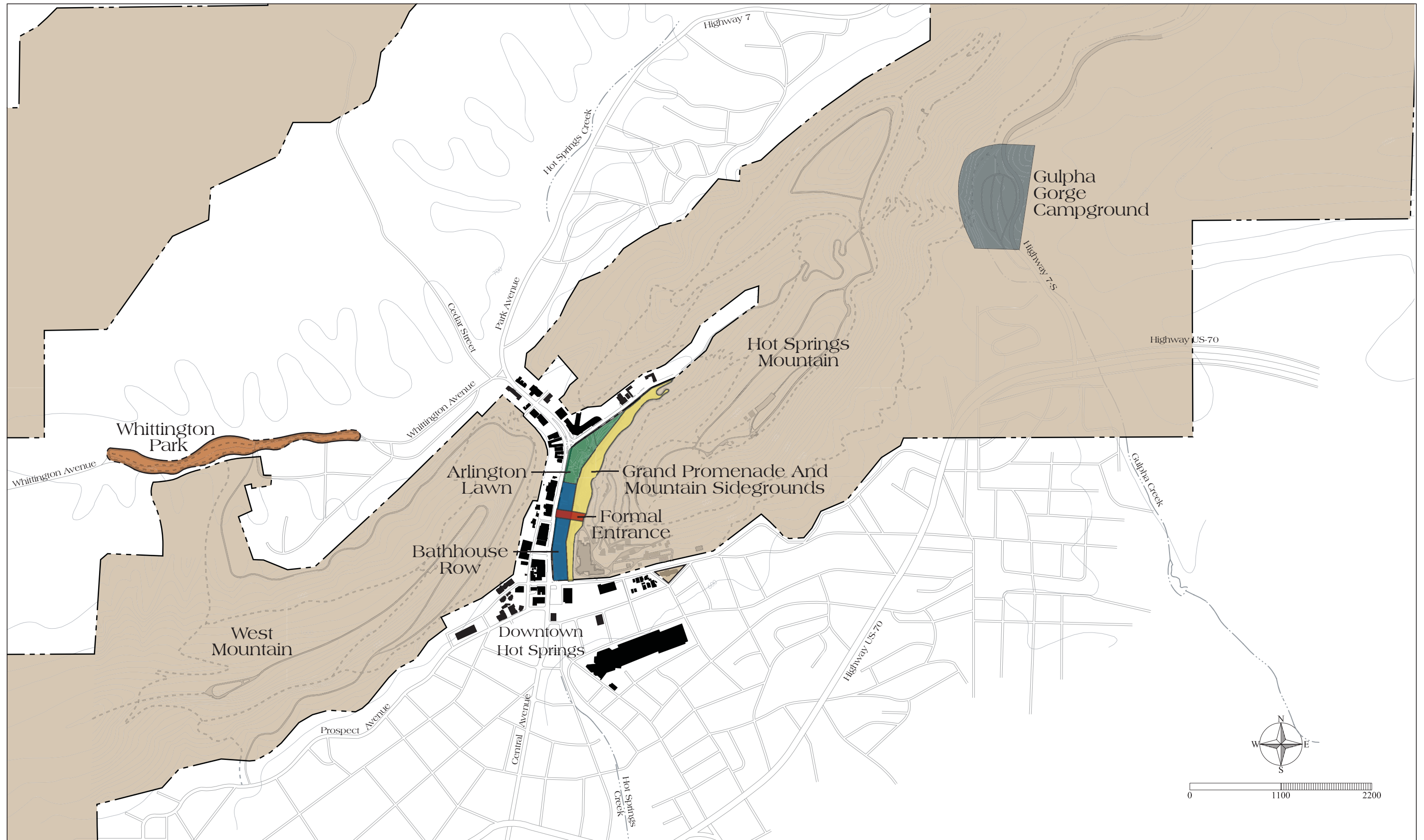


Figure 3- 292: Floodplains and Wetlands, 2007 (source: Woolpert, Inc.)




HOT SPRINGS CULTURAL LANDSCAPE REPORT

March 2008

CULTURAL LANDSCAPE COMPONENTS

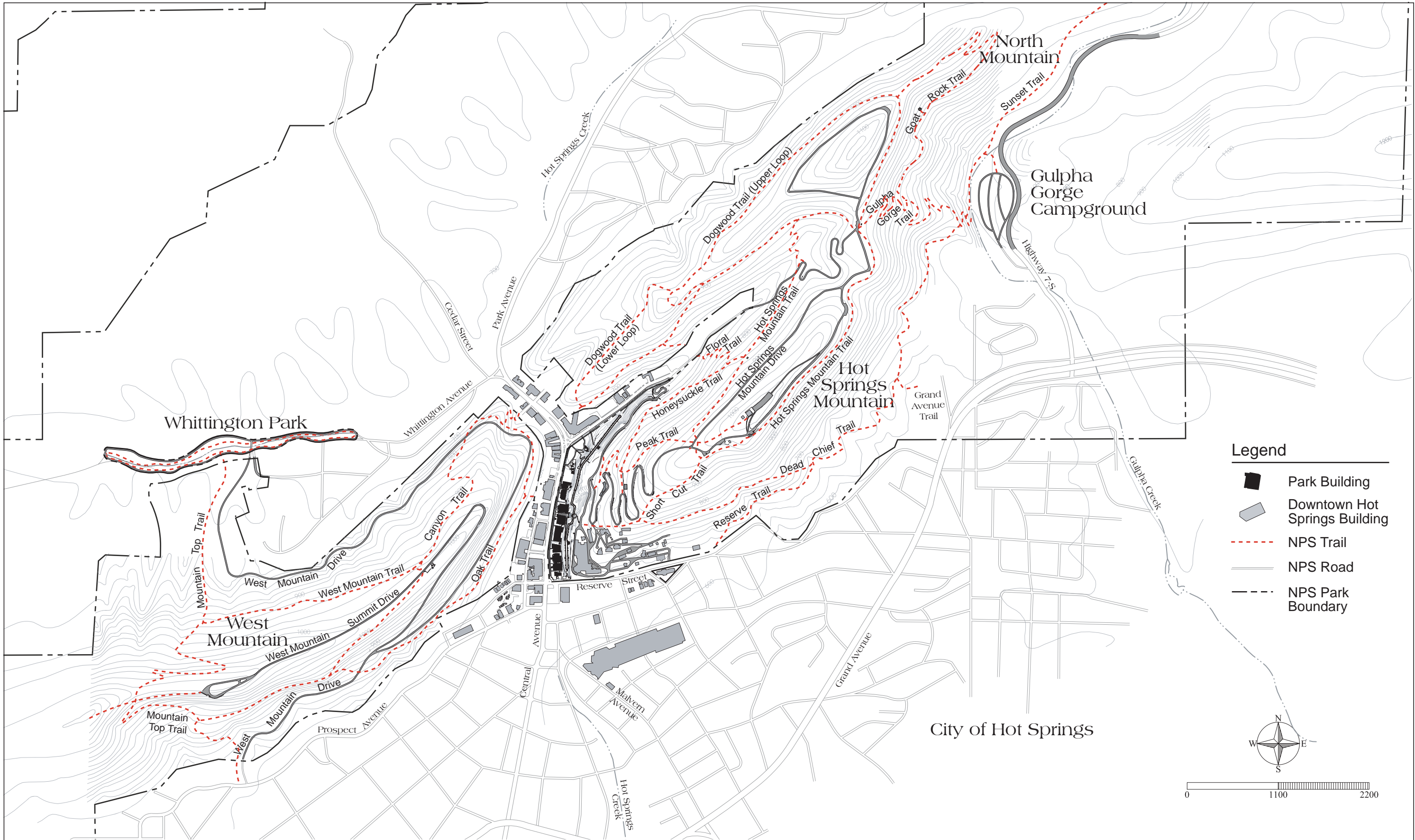
HOT SPRINGS NATIONAL PARK

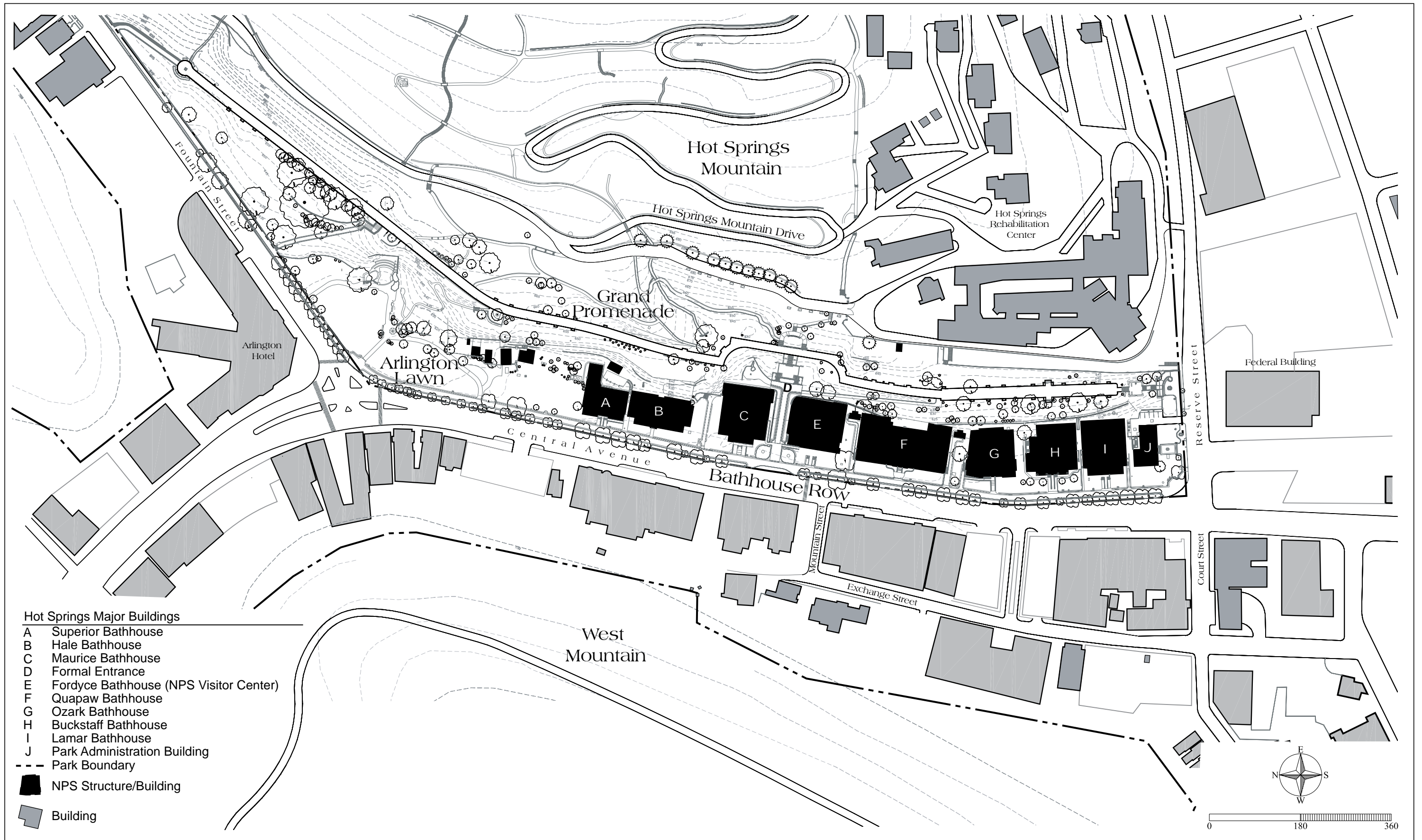

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 Ann Arbor, Michigan 48104
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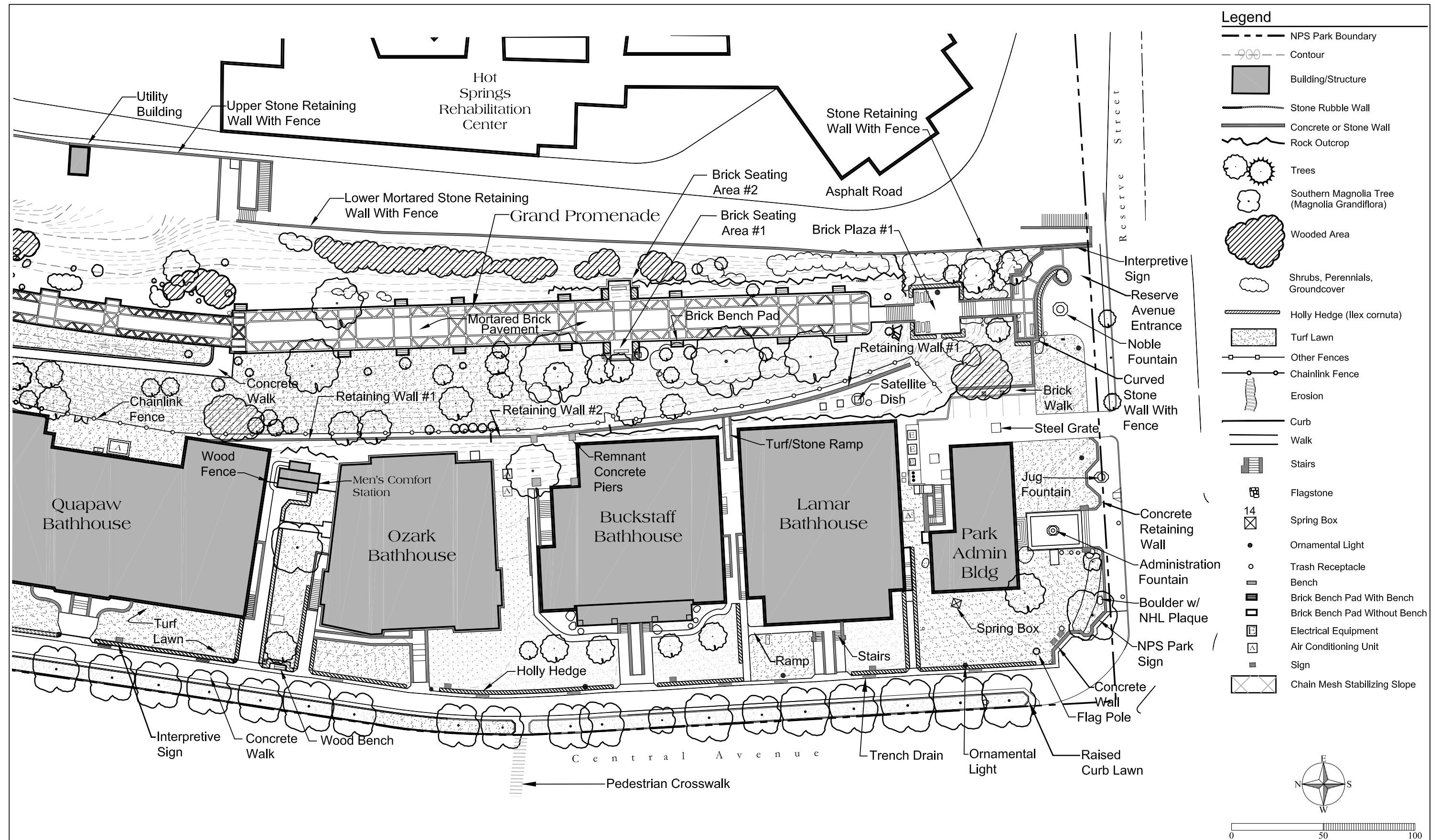

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 333 Colfax Ave. Ste 350 Denver CO 80204
 Tel (303) 477-5244 Fax (303) 477-5146

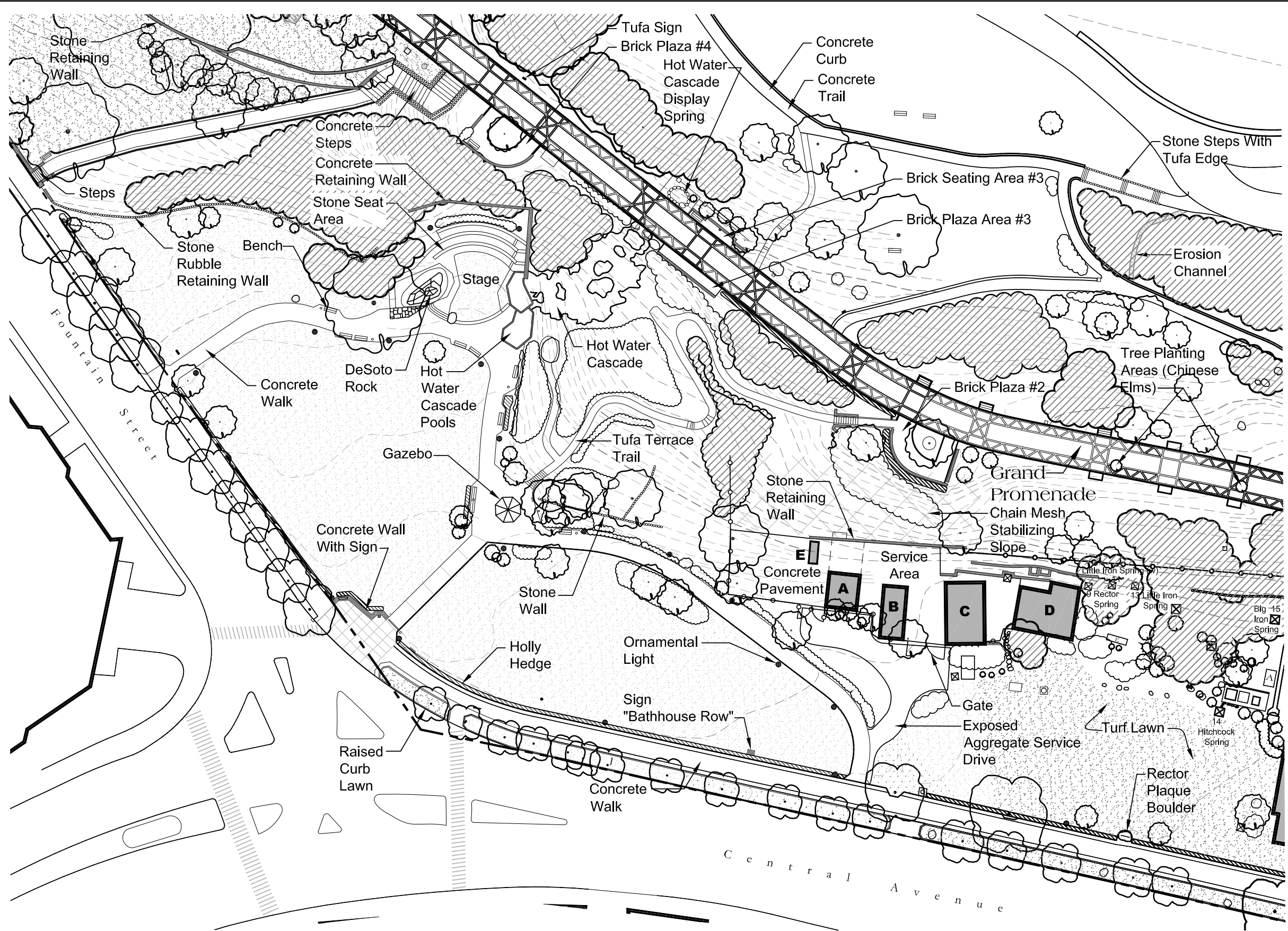
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SHEET NO.
LR1









Legend

- NPS Park Boundary
- Contour
- Building/Structure
- Stone Rubble Wall
- Concrete or Stone Wall
- Rock Outcrop
- Trees
- Southern Magnolia Tree (Magnolia Grandiflora)
- Wooded Area
- Shrubs, Perennials, Groundcover
- Holly Hedge (Ilex cornuta)
- Turf Lawn
- Other Fences
- Chainlink Fence
- Erosion
- Curb
- Walk
- Stairs
- Flagstone
- Spring Box
- Ornamental Light
- Trash Receptacle
- Bench
- Brick Bench Pad With Bench
- Brick Bench Pad Without Bench
- Electrical Equipment
- Air Conditioning Unit
- Sign
- Chain Mesh Stabilizing Slope
- A Sweeper Bldg
- B Air Conditioning Fans
- C Cool Water Exchanger Bldg
- D Pump Bldg
- E Trash Loader

Scale: 0 50 100

North Arrow



HOT SPRINGS CULTURAL LANDSCAPE REPORT

March 2008

EXISTING CONDITIONS GRAND PROMENADE/ARLINGTON LAWN

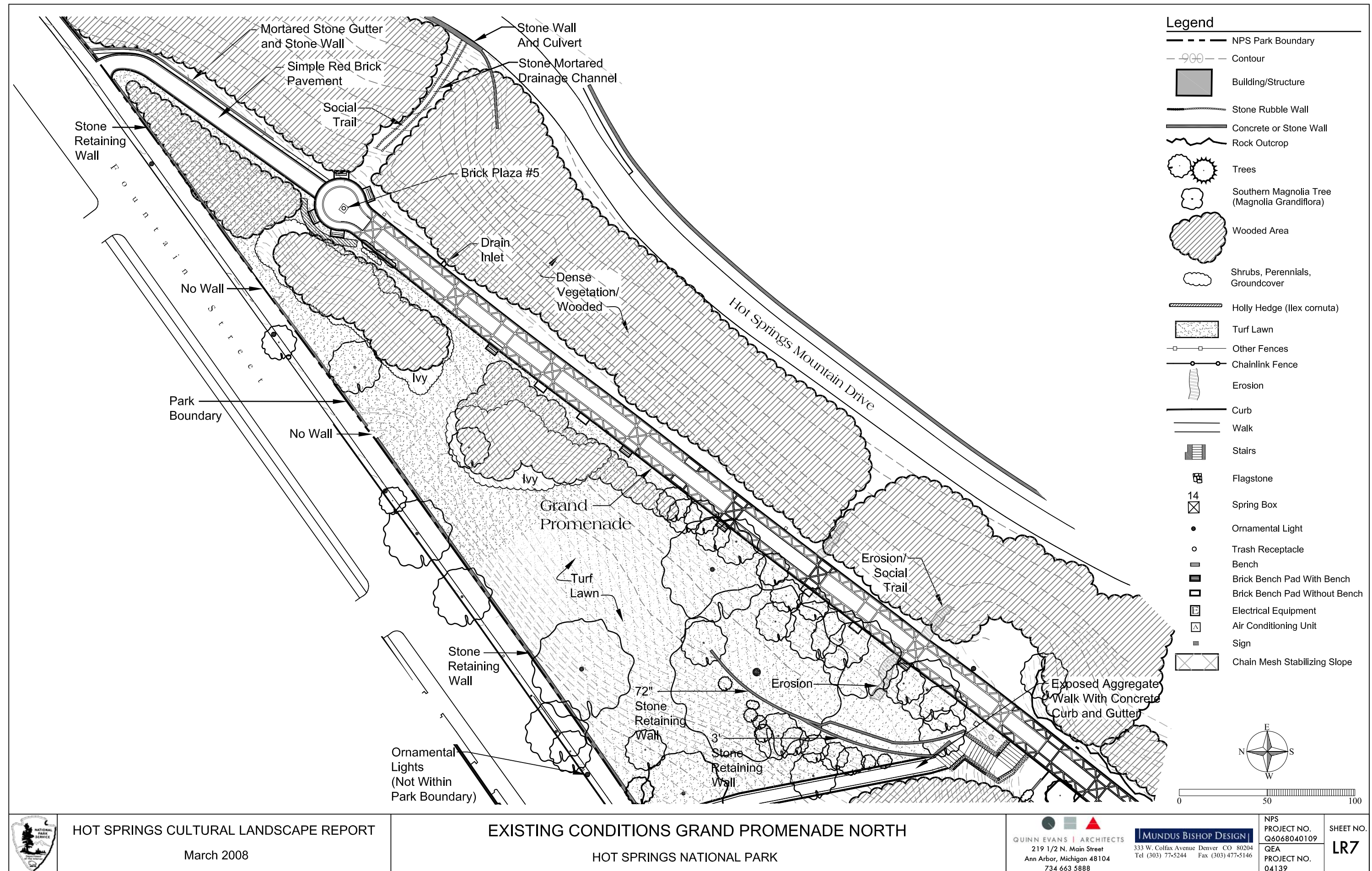
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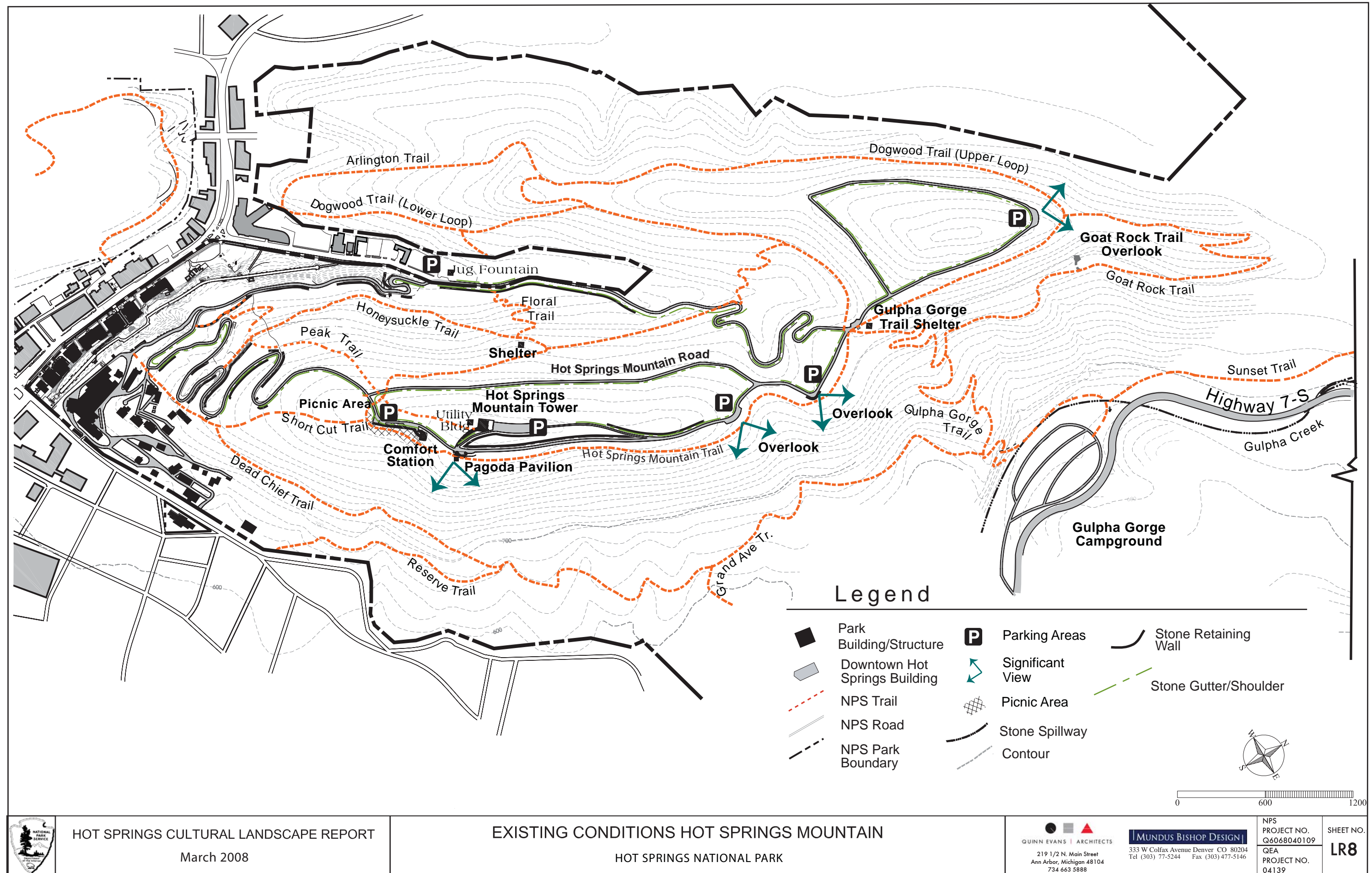
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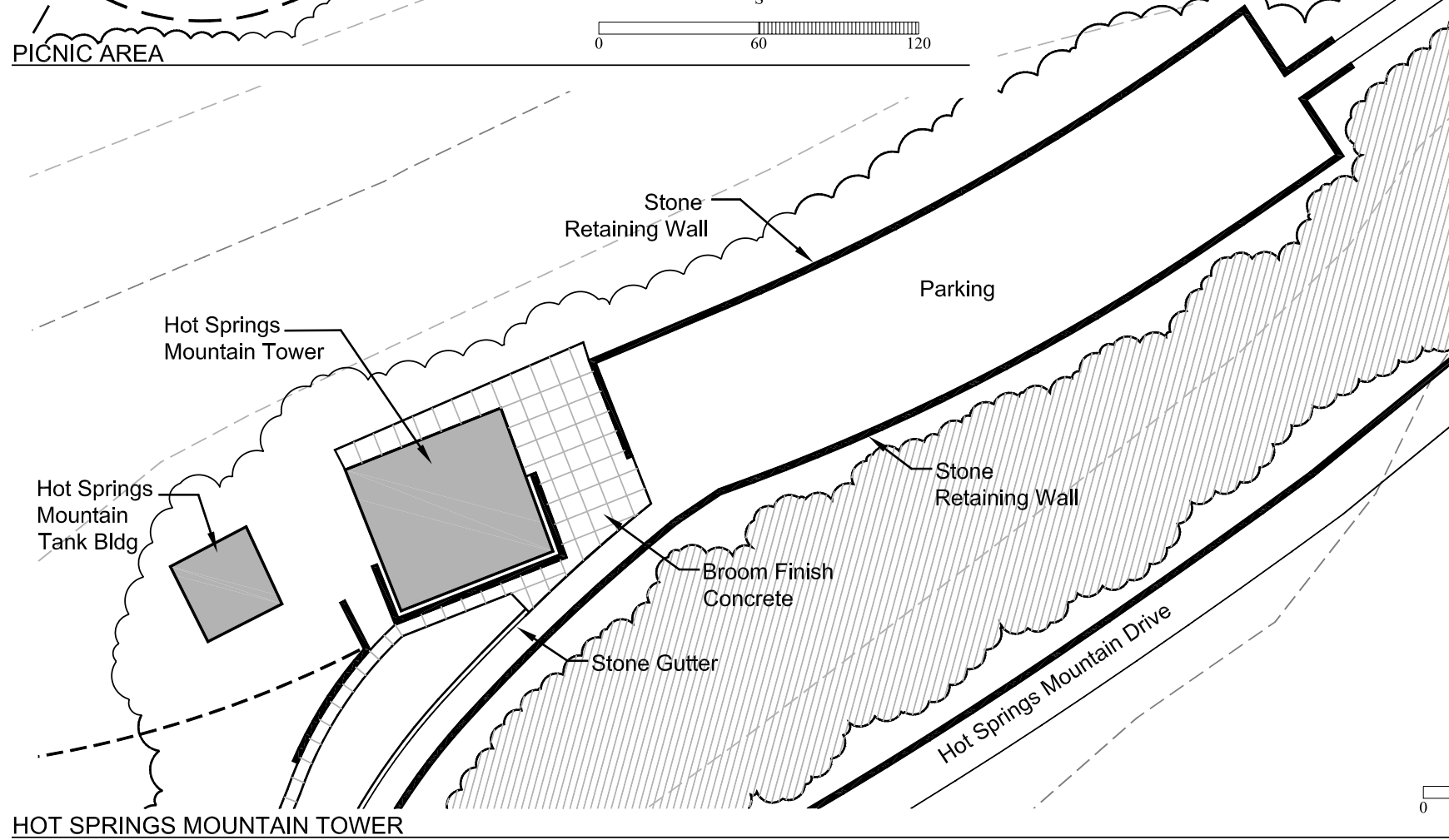
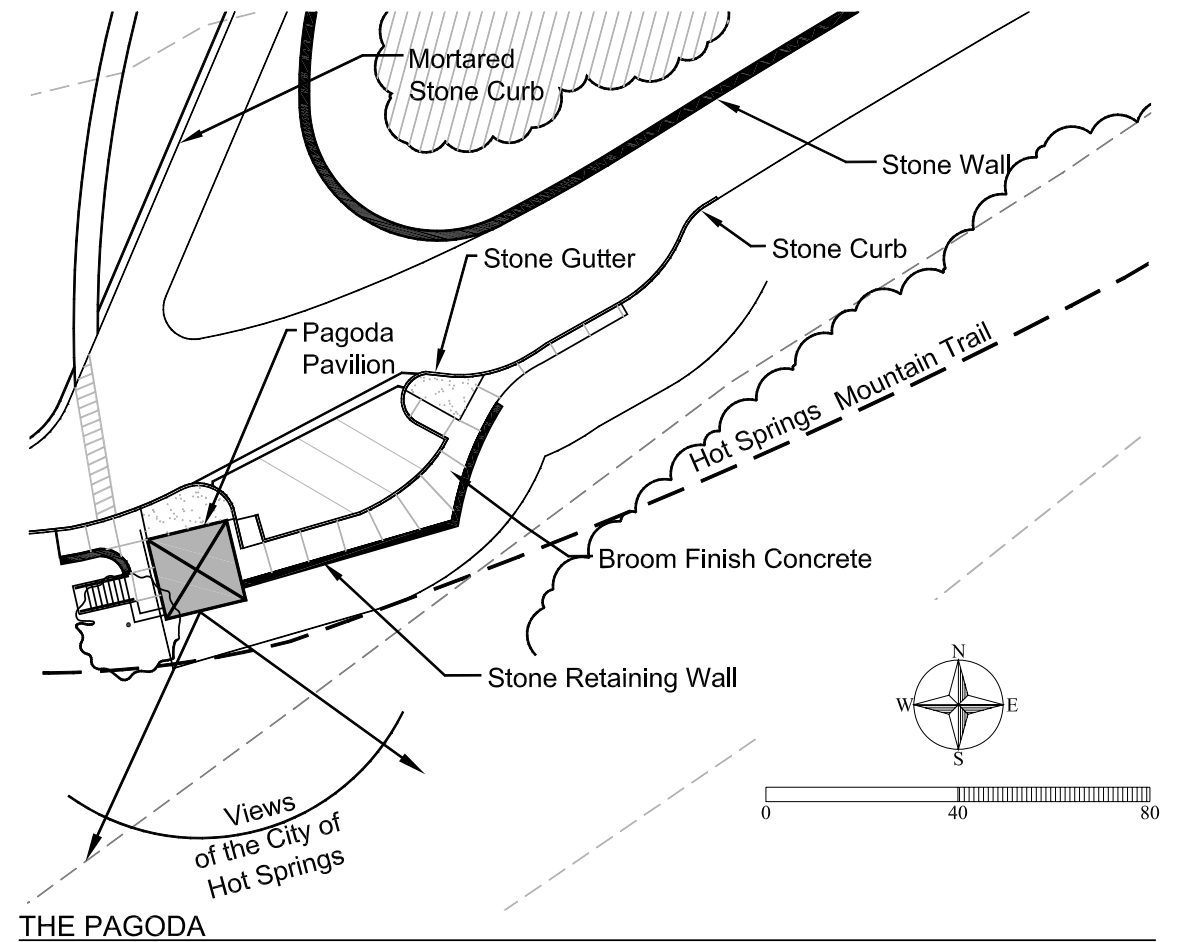
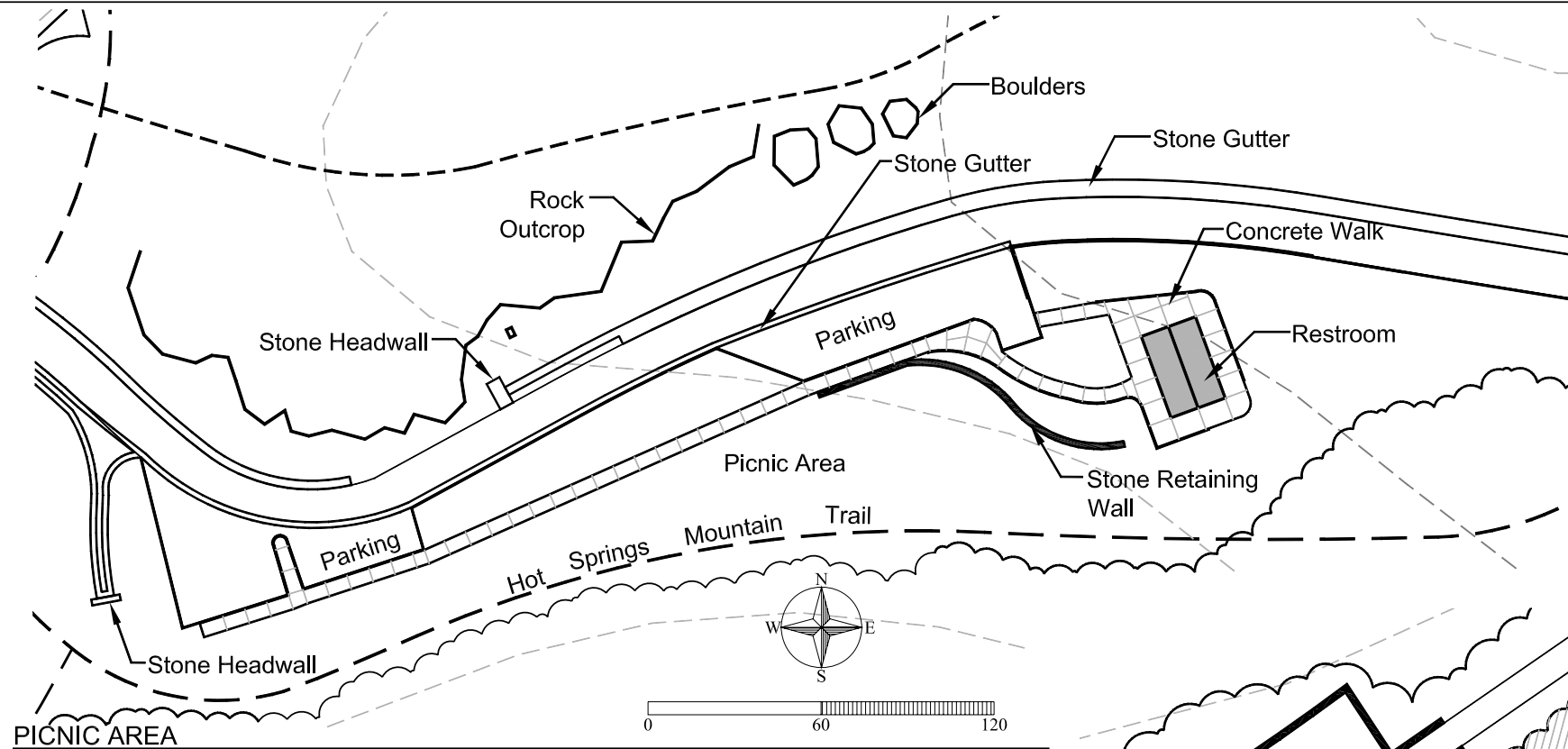
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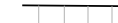



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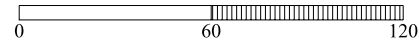






Legend

-  NPS Building/Structure
-  Concrete or Stone Wall
-  Tufa/Rock Outcrop
-  Curb
-  Walk
-  Trail
-  Vegetation Edge
-  Wooded Area



HOT SPRINGS CULTURAL LANDSCAPE REPORT

March 2008

EXISTING CONDITIONS HOT SPRINGS MOUNTAIN OVERLOOK ENLARGEMENTS HOT SPRINGS NATIONAL PARK

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734 663 5888

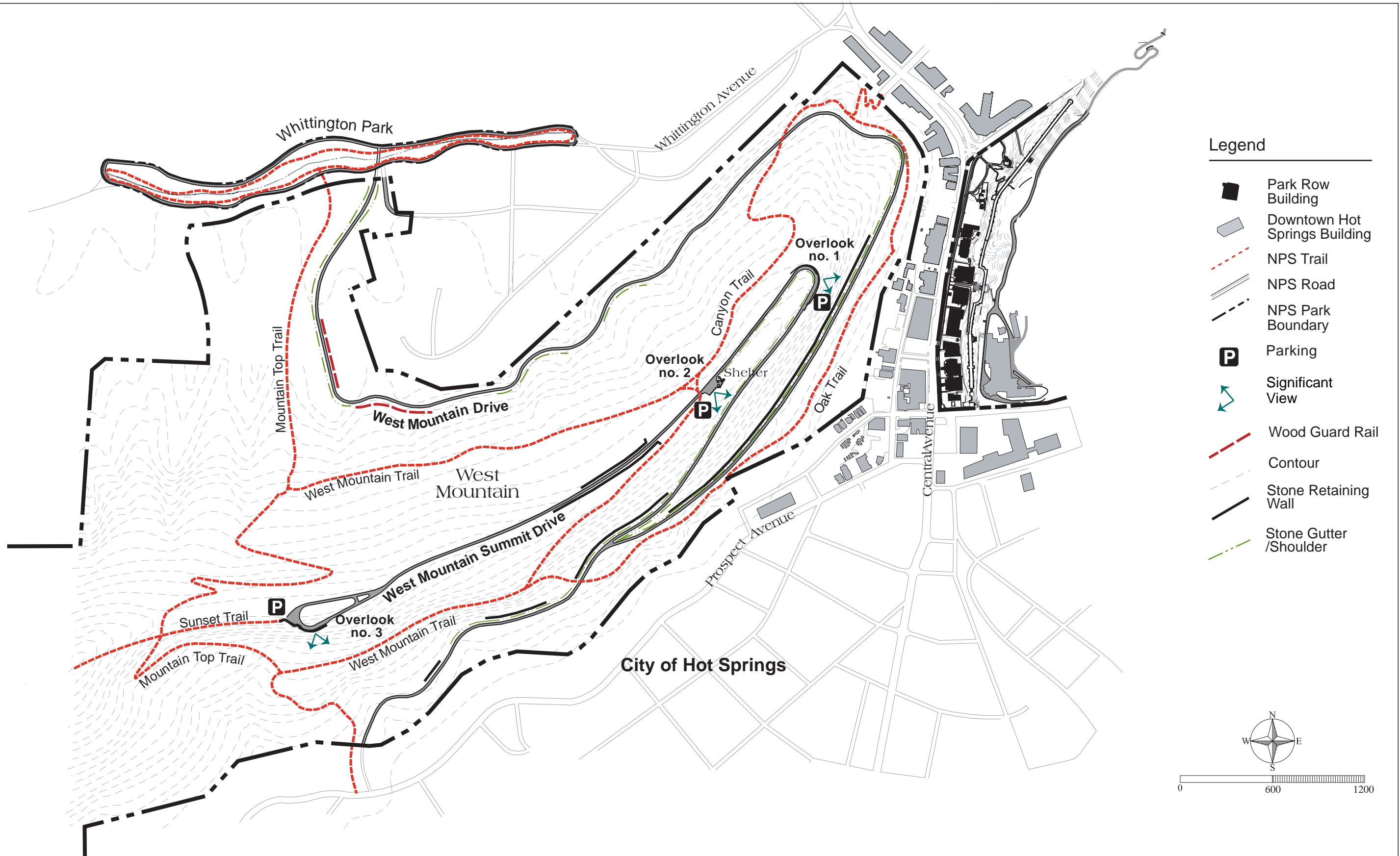
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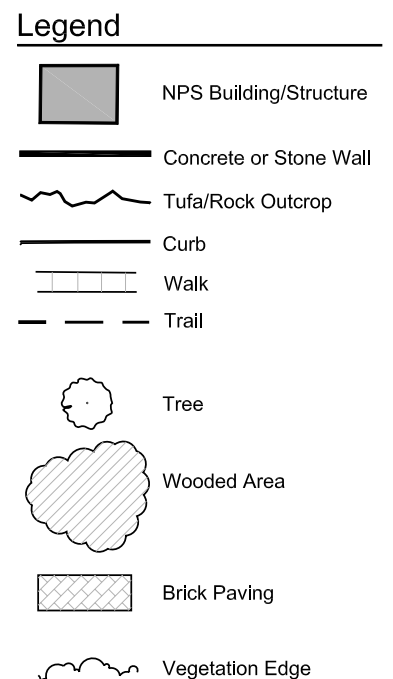
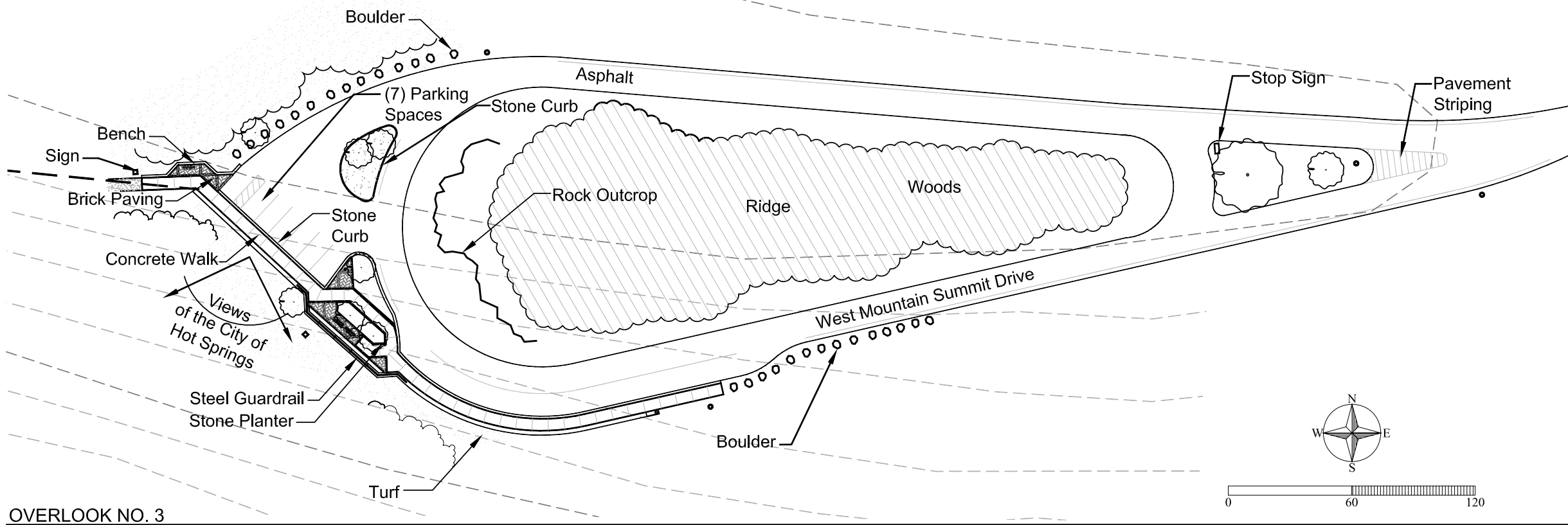
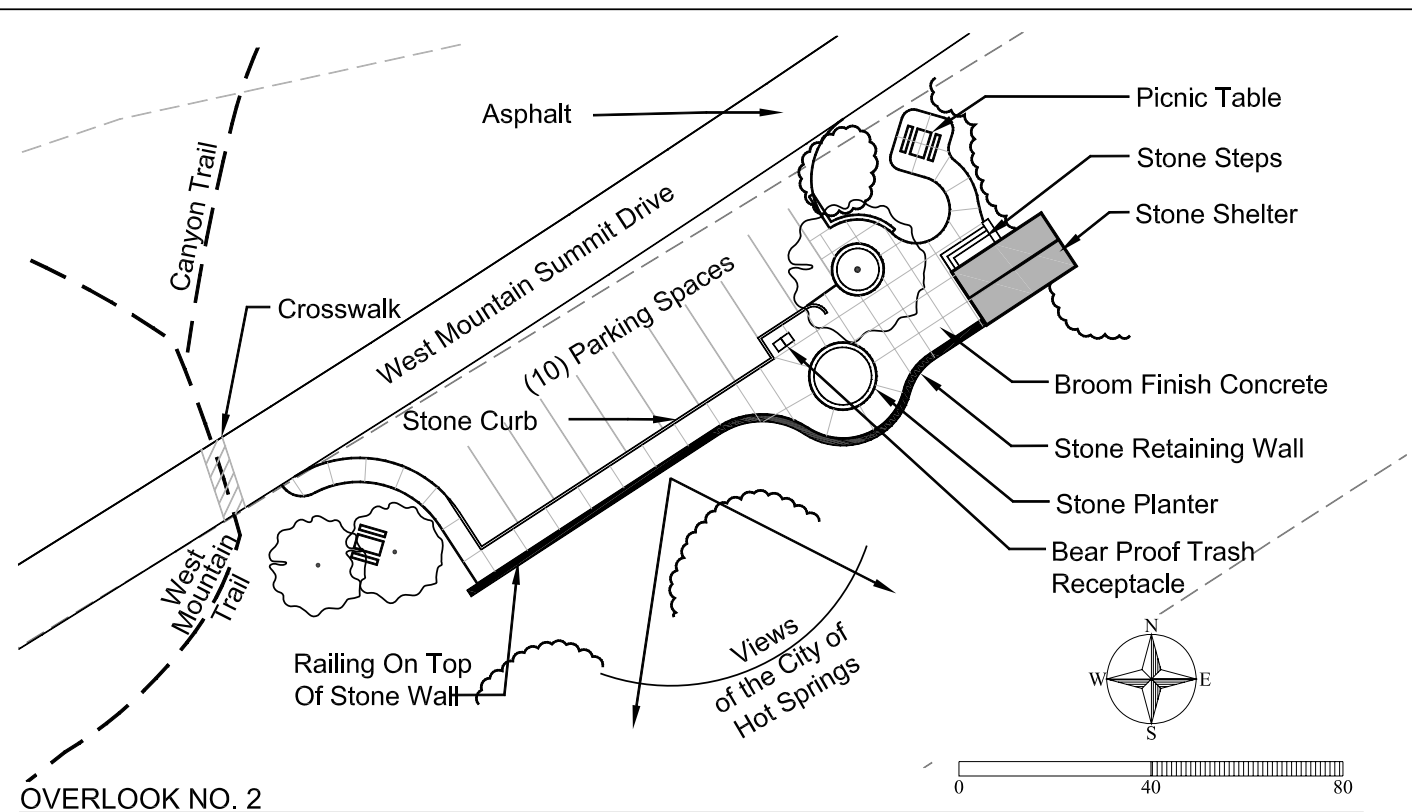
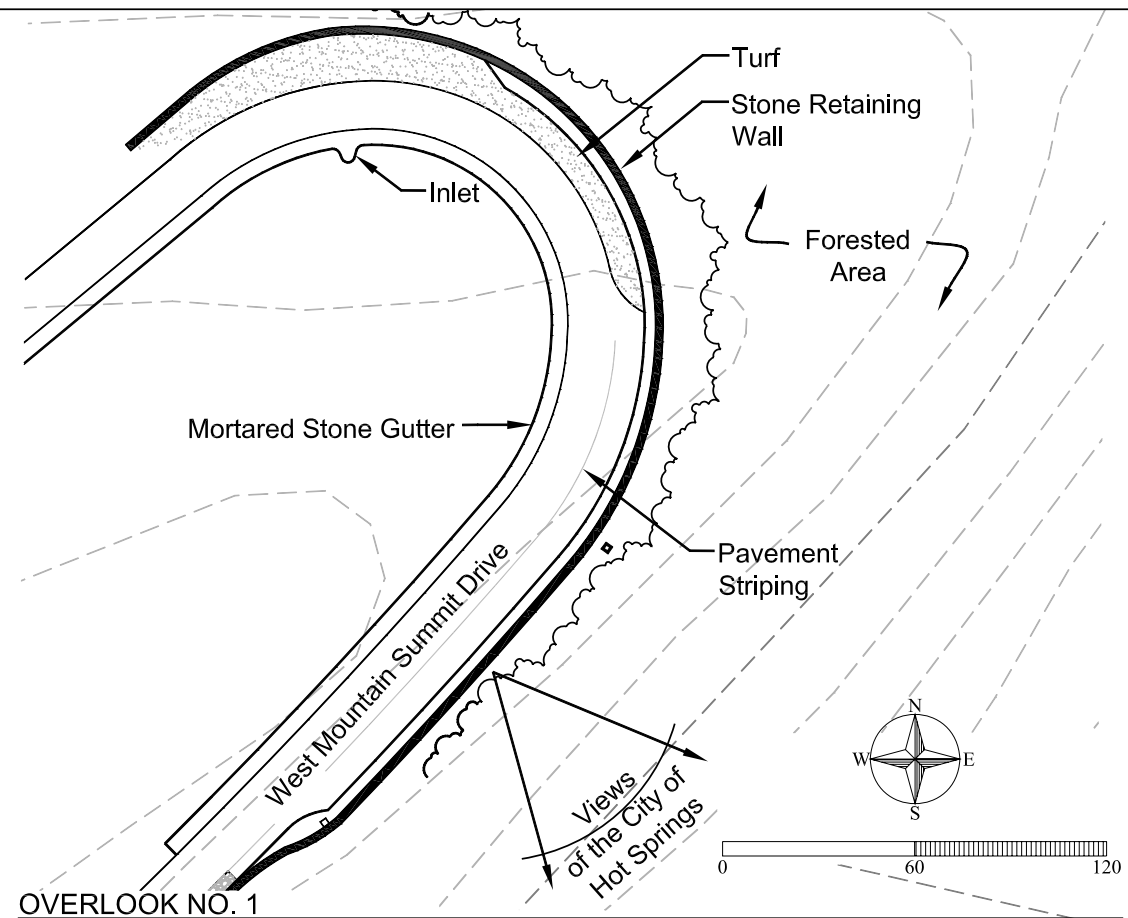
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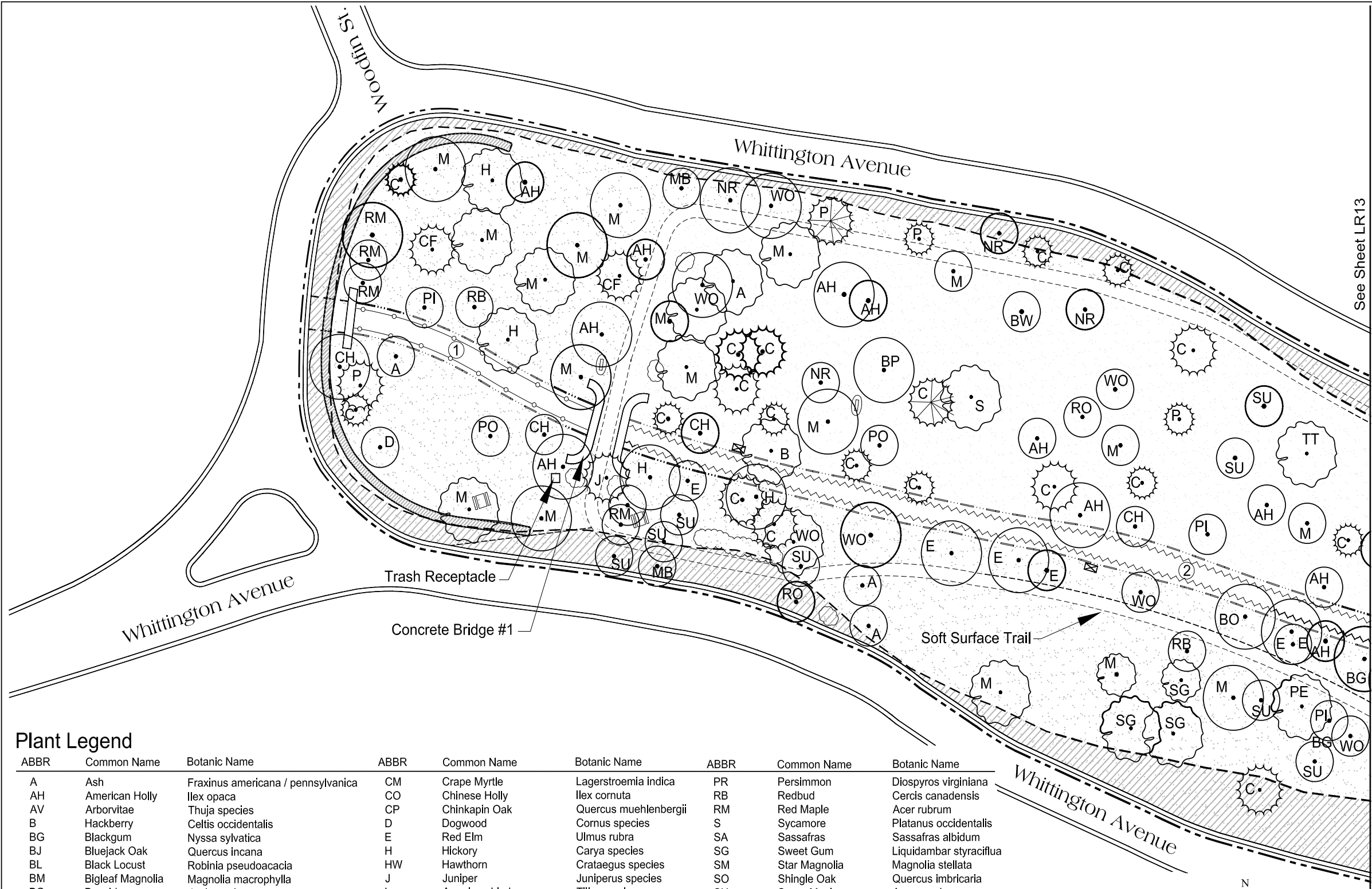
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LR9







Plant Legend

ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name
A	Ash	Fraxinus americana / pennsylvanica	CM	Crape Myrtle	Lagerstroemia indica	PR	Persimmon	Diospyros virginiana
AH	American Holly	Ilex opaca	CO	Chinese Holly	Ilex cornuta	RB	Redbud	Cercis canadensis
AV	Arborvitae	Thuja species	CP	Chinkapin Oak	Quercus muehlenbergii	RM	Red Maple	Acer rubrum
B	Hackberry	Celtis occidentalis	D	Dogwood	Cornus species	S	Sycamore	Platanus occidentalis
BG	Blackgum	Nyssa sylvatica	E	Red Elm	Ulmus rubra	SA	Sassafras	Sassafras albidum
BJ	Bluejack Oak	Quercus incana	H	Hickory	Carya species	SG	Sweet Gum	Liquidambar styraciflua
BL	Black Locust	Robinia pseudoacacia	HW	Hawthorn	Crataegus species	SM	Star Magnolia	Magnolia stellata
BM	Bigleaf Magnolia	Magnolia macrophylla	J	Juniper	Juniperus species	SO	Shingle Oak	Quercus imbricaria
BO	Boxelder	Juglans nigra	L	American Linden	Tilia americana	SU	Sugar Maple	Acer saccharum
BP	Balsam Poplar	Acer negundo	M	Southern Magnolia	Magnolia grandiflora	SWO	Swamp White Oak	Quercus bicolor
BW	Black Walnut	Populus balsamifera	MB	White Mulberry	Morus alba	TT	Tulip Tree	Liriodendron tulipifera
C	Red Cedar	Juniperus virginiana	NR	Northern Red Oak	Quercus rubra	WO	White Oak	Quercus alba
CA	Crabapple	Malus species	P	Shortleaf / Loblolly Pine	Pinus echinata / taeda			
CE	Chinese Elm	Ulmus parvifolia	PE	Sweet Pecan	Carya illinoensis			
CF	China Fir	Cunninghamia lanceolata	PI	Pin Oak	Quercus palustris			
CH	Black Cherry	Prunus serotina	PO	White Poplar	Populus alba			

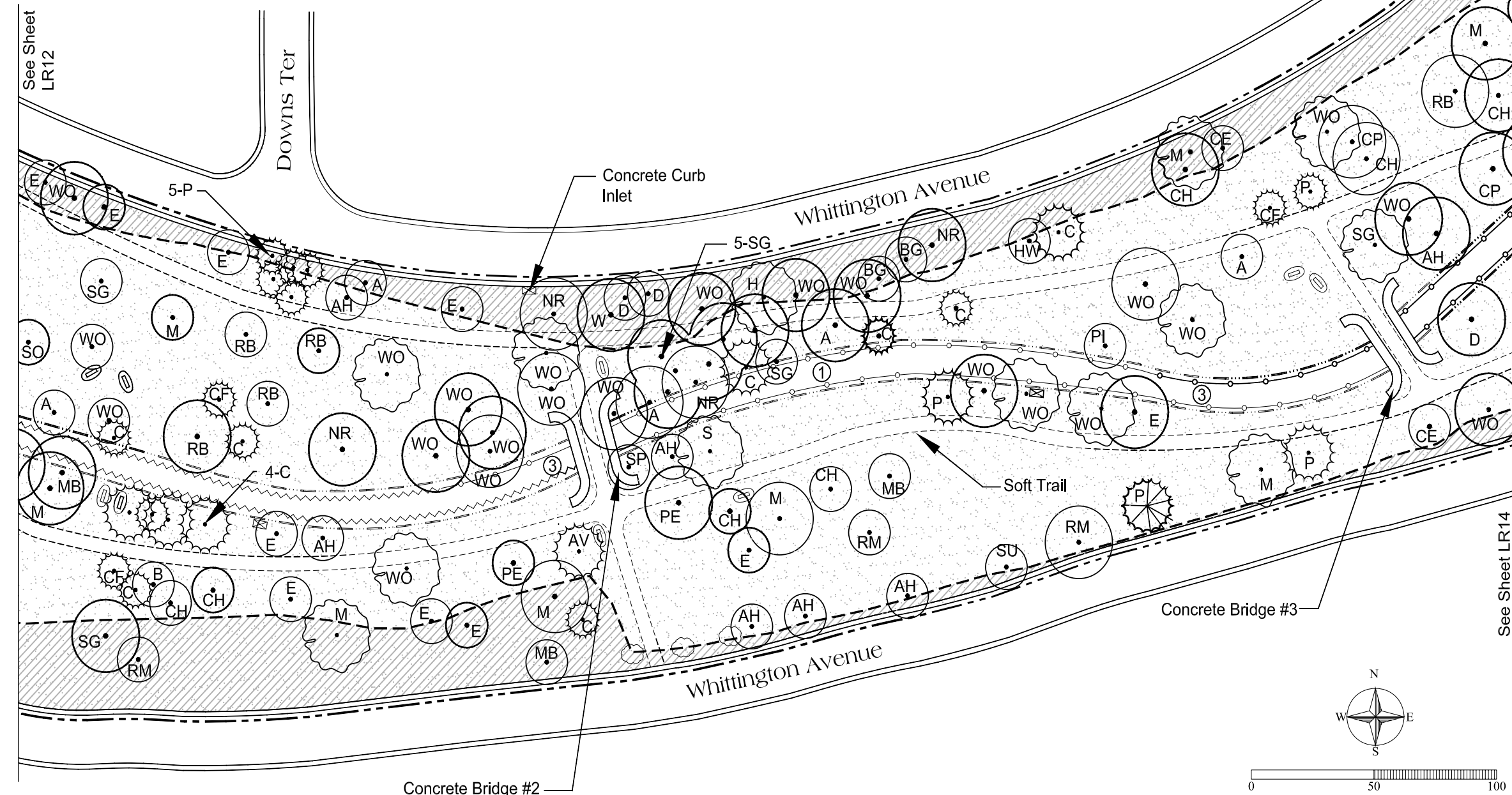
Legend

- NPS Park Boundary
- Deciduous Tree
- Specimen Deciduous Tree
- Specimen Evergreen Tree
- Evergreen Tree
- Shrubs
- Holly Hedge (Ilex cornuta)
- Turf Lawn
- Curb
- Top of Bench
- Topo Remnants
- Soft Surface Trail
- Bench on concrete pad
- Pinic Table
- Trash Receptacle
- Whittington Creek
- Culvert
- Bridge
- Concrete Walk
- Inlet
- Concrete retaining wall
- Stone retaining wall
- Boulder streambank edge
- Channel Section One
- Channel Section Two
- Channel Section Three
- Channel Section Four



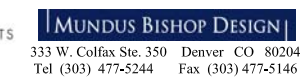
ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name
A	Ash	<i>Fraxinus americana</i> / <i>pennsylvanica</i>	CM	Grape Myrtle	<i>Lagerstroemia indica</i>	PR	Persimmon	<i>Diospyros virginiana</i>
AH	American Holly	<i>Ilex opaca</i>	CO	Chinese Holly	<i>Ilex cornuta</i>	RB	Redbud	<i>Cercis canadensis</i>
AV	Arborvitae	<i>Thuja species</i>	CP	Chinkapin Oak	<i>Quercus muehlenbergii</i>	RM	Red Maple	<i>Acer rubrum</i>
B	Hackberry	<i>Celtis occidentalis</i>	D	Dogwood	<i>Cornus species</i>	S	Sycamore	<i>Platanus occidentalis</i>
BG	Blackgum	<i>Nyssa sylvatica</i>	E	Red Elm	<i>Ulmus rubra</i>	SA	Sassafras	<i>Sassafras albidum</i>
BJ	Bluejack Oak	<i>Quercus incana</i>	H	Hickory	<i>Carya species</i>	SG	Sweet Gum	<i>Liquidambar styraciflua</i>
BL	Black Locust	<i>Robinia pseudoacacia</i>	HW	Hawthorn	<i>Crataegus species</i>	SM	Star Magnolia	<i>Magnolia stellata</i>
BM	Bigleaf Magnolia	<i>Magnolia macrophylla</i>	J	Juniper	<i>Juniperus species</i>	SO	Shingle Oak	<i>Quercus imbricaria</i>
BO	Boxelder	<i>Juglans nigra</i>	L	American Linden	<i>Tilia americana</i>	SU	Sugar Maple	<i>Acer saccharum</i>
BP	Balsam Poplar	<i>Acer negundo</i>	M	Southern Magnolia	<i>Magnolia grandiflora</i>	SWO	Swamp White Oak	<i>Quercus bicolor</i>
BW	Black Walnut	<i>Populus balsamifera</i>	MB	White Mulberry	<i>Morus alba</i>	TT	Tulip Tree	<i>Liriodendron tulipifera</i>
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CF	China Fir	<i>Cunninghamia lanceolata</i>	PI	Pin Oak	<i>Quercus palustris</i>			
CH	Black Cherry	<i>Prunus serotina</i>	PO	White Poplar	<i>Populus alba</i>			

	NPS Park Boundary
	Deciduous Tree
	Specimen Deciduous Tree
	Specimen Evergreen Tree
	Evergreen Tree
	Shrubs
	Holly Hedge (<i>Ilex cornuta</i>)
	Turf Lawn
	Curb
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	Topo Remnants
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	Picnic Table
	Trash Receptacle
	Whittington Creek
	Culvert
	Bridge
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	Inlet
	Concrete retaining wall
	Stone retaining wall
	Boulder streambank edge
	Channel Section One
	Channel Section Two
	Channel Section Three
	Channel Section Four



March 2008

HOT SPRINGS NATIONAL PARK



NPS PROJECT NO. Q6068060019	
QEA PROJECT NO. 06127.0	

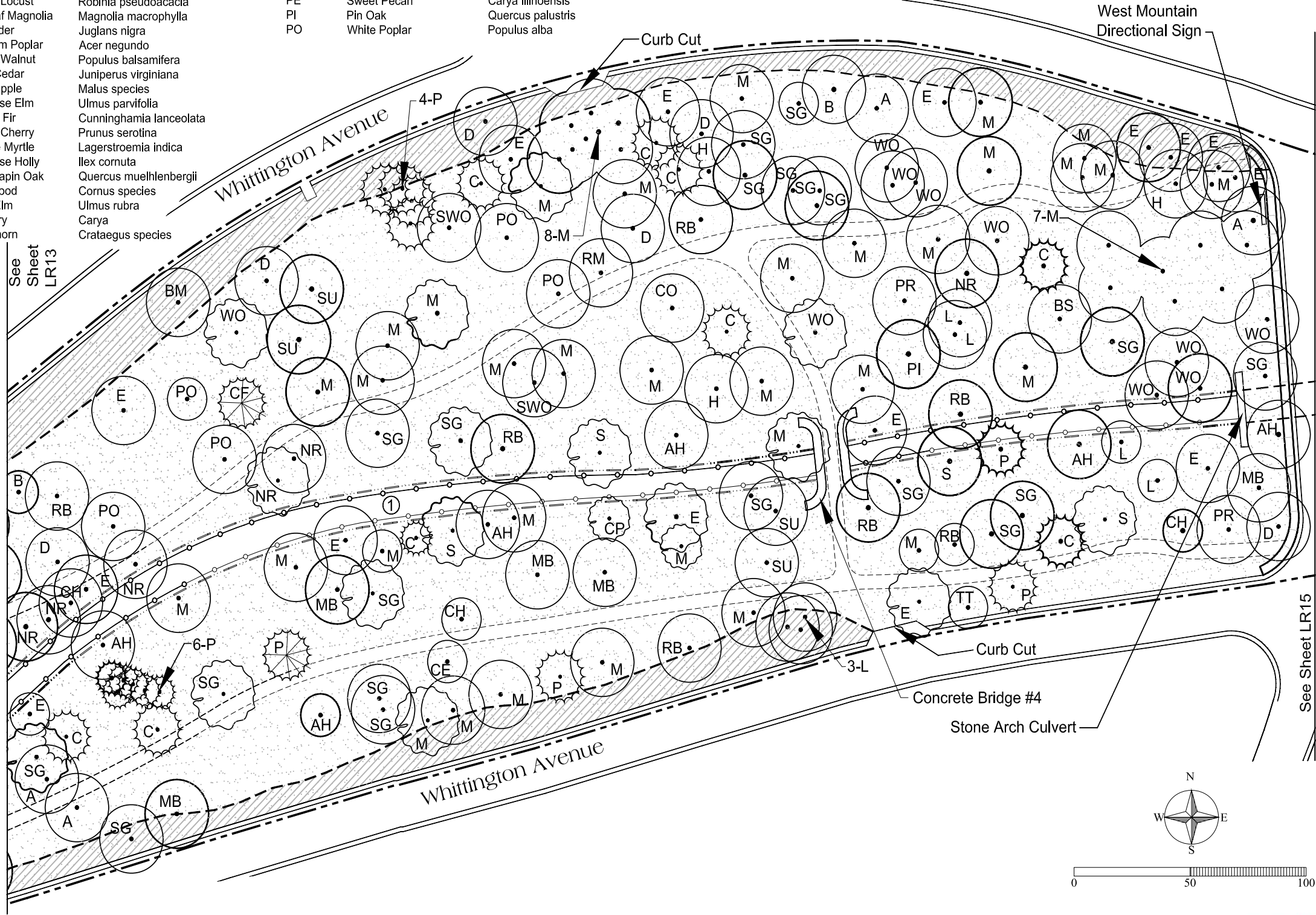
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Plant Legend

ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name	ABBR	Common Name	Botanic Name
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CO	Chinese Holly	Ilex cornuta									
CP	Chinkapin Oak	Quercus muelhlenbergii									
D	Dogwood	Cornus species									
E	Red Elm	Ulmus rubra									
H	Hickory	Carya									
HW	Hawthorn	Crataegus species									

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- Concrete retaining wall
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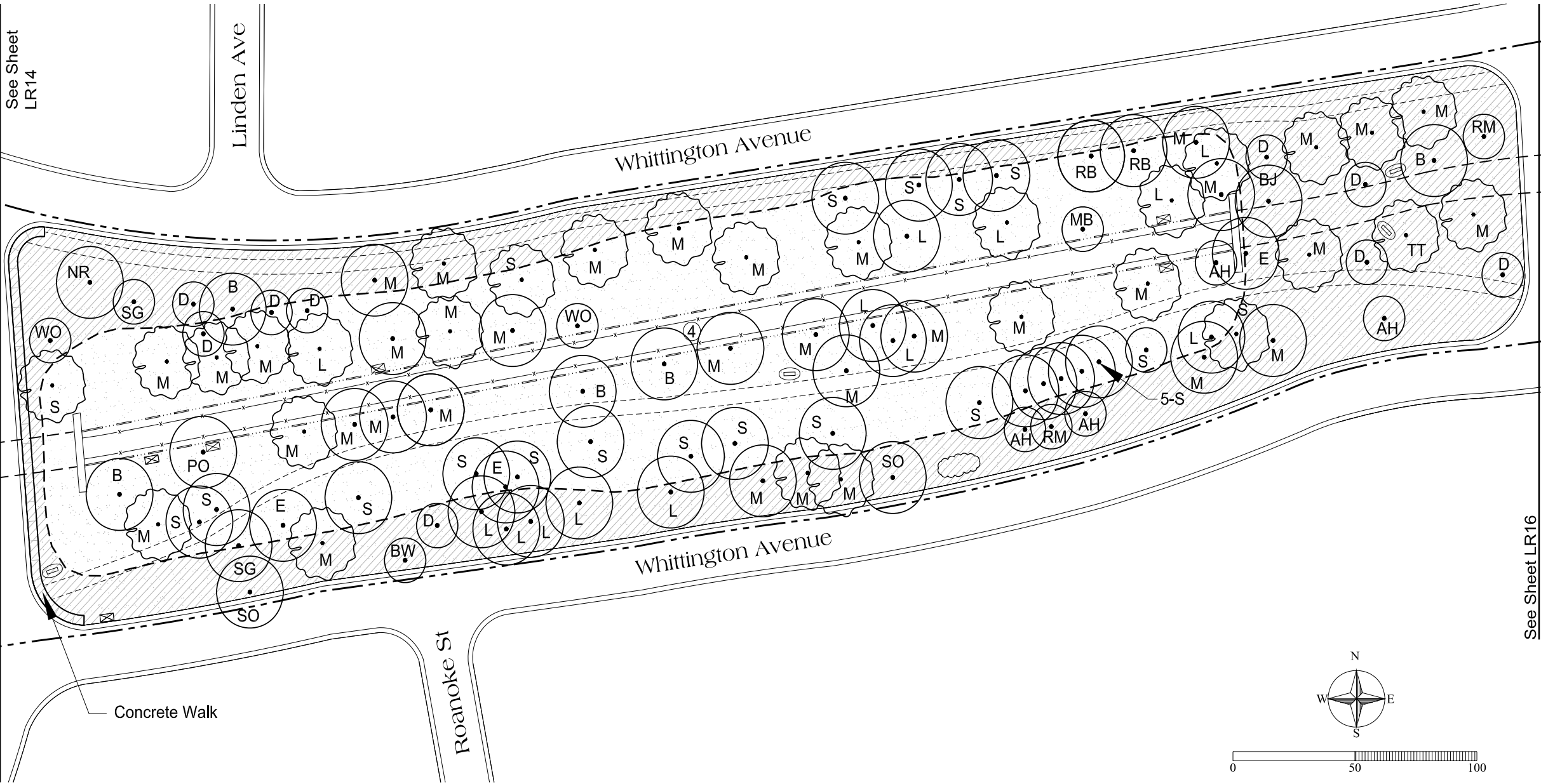


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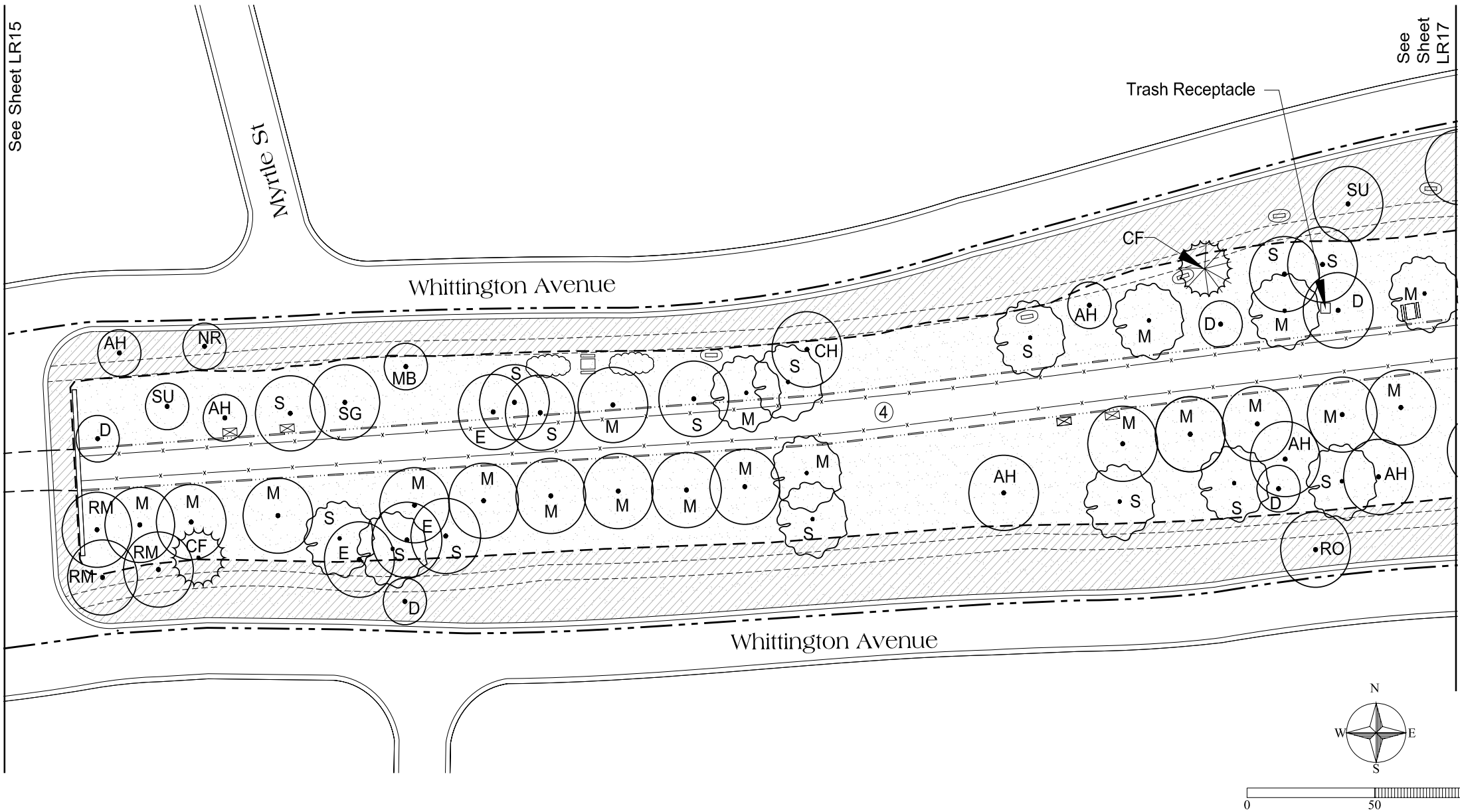


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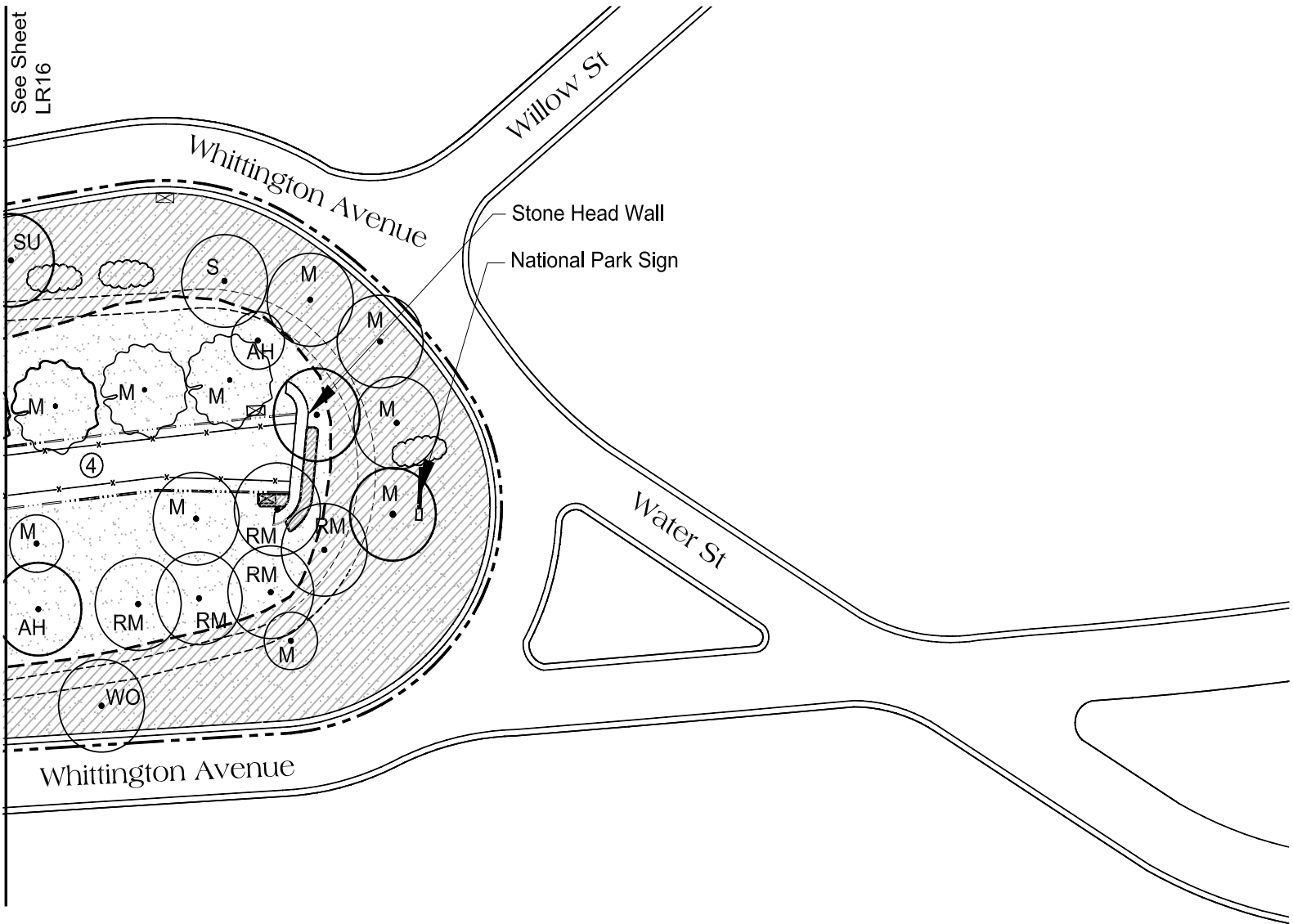


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Chapter IV: Landscape Analysis

Chapter IV: Landscape Analysis

The historic landscapes at Hot Springs National Park have developed as a result of interactions between people and the landscape surrounding the hot springs for over two-hundred years. Today, within the boundaries of the over 5,000 acre park, four major components contain extant resources that represent the significant themes associated with the historic landscape. These four include the Reservation Front (including Bathhouse Row, the Mountain Sidegrounds, Arlington Lawn, and the site of the former superintendent's office and maintenance facility) (see Figure 4-5), the Mountains, Whittington Park, and Gulpha Gorge Campground (see Figure 1-1). Previous evaluations have verified the significance of selected landscape resources related to the Reservation Front (Bathhouse Row and the Grand Promenade have both been assessed) and Gulpha Gorge Campground. Therefore, the current evaluation focuses on resources that have not been adequately examined in the past. These include resources within the Reservation Front, Mountains, and Whittington Park.

Existing National Register Status

Bathhouse Row was initially listed as a National Register Historic District in 1974. A nomination in 1985 resulted in the designation of a National Historic Landmark District in 1987 including Bathhouse Row, the Formal Entrance, and a portion of the Grand Promenade. The statement of significance indicates:

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 bathhouse 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.¹

The nomination emphasizes the significance of the architecture but the role of the landscape is discussed throughout the document as integral to the integrity of the property. The consistent building set back, height, scale, and proportions of the buildings are noted as contributing to the unity of the district, as are the sidewalk, green spaces in front of the buildings, Magnolia Promenade, and Grand Promenade.²

¹ Harrison, *Bathhouse Row, Hot Springs National Park, National Historic Landmark Nomination*, 1985. Item 8, 1.

² *Ibid.*, Item 8, 4.

The nomination further indicates the importance of the landscape with a summary of the creation of the Creek Arch in 1884 – which moved the creek underground and at the same time created space for landscaped “gardens” along Bathhouse Row. The evolution of the formally designed landscape is also emphasized: *“From 1892 until 1900 the Department of the Interior undertook a massive beautification project to improve the character of the ‘National Health Resort.’”*³ The magnitude of the role played by Lieutenant Robert Stevens in designing the landscape is alluded to generally, indicating that he designed the Formal Entrance/Stevens Balustrade, the other entrances, the Magnolia Promenade, the *“meandering upper terrace behind the bathhouses,”* and the paths, carriage roads, and *“vest-pocket parks.”*⁴

The departure from Stevens’ design to create the Grand Promenade is noted but not directly addressed in the evaluation. The following statement from the nomination hints at the need for a more complete understanding of the development of this portion of the park: *“The more formally aligned Grand Promenade at the rear of the bathhouses (begun in the 1930s and completed in the 1960s) replaced the meandering Victorian path and changed the architectural character of the area.”*⁵

The boundary for the National Historic Landmark district is enclosed on the south by Reserve Street, on the west by Central Avenue, on the north by the Superior Bathhouse, and on the east by the Grand Promenade pavement (see Figure 4-1). Although the main emphasis of the nomination property description is on the architecture of Bathhouse Row, portions of the landscape are briefly addressed. The section of the Grand Promenade that is included within the district is described, as are the fountains and Magnolia Promenade. One statement hints of the importance of the landscape as a unifying element: *“The varied architectural styles of the Bathhouses are pulled together by the linear greenbelts of the Magnolia Promenade and the Grand Promenade, and by the plantings of smaller hedges and bushes that soften the edges of the spaces between the buildings.”*⁶ Unfortunately, the nomination does not clearly indicate which landscape features are contributing.

³ Ibid., Item 8, 2.

⁴ Ibid., Item 8, 3.

⁵ Ibid.

⁶ Ibid., Item 7, 9.

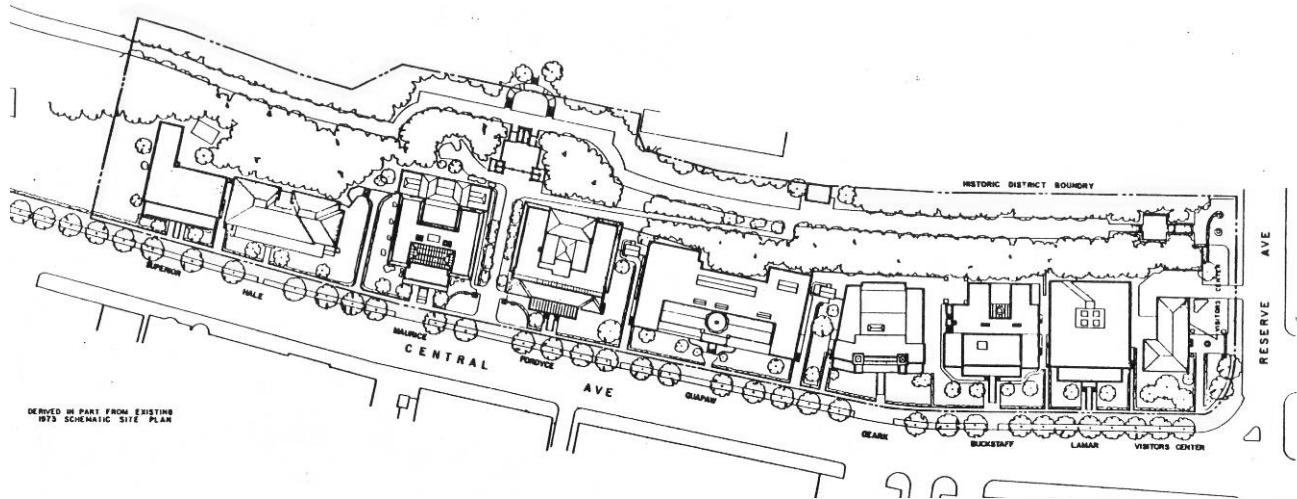


Figure 4 - 1: Boundary of Existing National Historic Landmark District for Bathhouse Row (source: National Register Nomination for Bathhouse Row, Hot Springs National Park, prepared by Laura Soulliere Harrison, 1985 – NHL established 1987).

A more detailed description is provided for the Formal Entrance/Stevens Balustrade, including descriptions of the stone pillars, bronze eagle sculptures, and the balustrade. Of the other entrances the nomination states: “several other entrances were located at various points along the linear development of Bathhouse Row during the 1890s, but they have disappeared over the years as a result of newer construction.”⁷ Analysis conducted for the current *Cultural Landscape Report* indicates that four of the historic entrances are extant.

Despite the thorough evaluation of the buildings within the National Historic Landmark District, and an adequate indication of the importance of the landscape as related to the buildings, the overall significance of the historic landscape is unclear in the nomination. A *Cultural Landscapes Inventory* was prepared for Bathhouse Row in 1998 and a Determination of Eligibility for Bathhouse Row and the Grand Promenade was prepared and concurred with by the State Historic Preservation Officer and the Superintendent of Hot Springs National Park in 2000. These documents more fully address the landscape significance for Bathhouse Row, the Formal Entrance/ Stevens Balustrade, and the Grand Promenade.

Cultural Landscapes Inventory and Determination of Eligibility, Bathhouse Row, 1998/2000

The 1998 *Cultural Landscapes Inventory* (CLI) for Bathhouse Row and the Grand Promenade clarifies the statement of significance and provides a boundary definition for the historic landscape. The boundary of the eligible area is described as:

The boundary of the Bathhouse Row Historic District begins at the city curb at the northeast corner of Central and Reserve Avenues, then extends north along the curb to approximately 50 feet north of the Superior Bathhouse. From this point, the boundary parallels the Grand Promenade in a generally north/northeast direction along a line 25 feet west of the irregular western edge

⁷ Ibid.

of the Promenade to its intersection with the Fountain Street sidewalk. It crosses this intersection to approximately 25 feet northeast of the Promenade, then follows in a generally south/southwest direction along a line 25 feet east of the irregular eastern edge of the Promenade, (but excluding the two modern comfort stations along the Promenade), to the city curb at Reserve Avenue. The boundary line then turns west along the curb to the starting point at the corner of Reserve and Central Avenues.⁸

The CLI indicates that this boundary also applies to the original 1974 National Register Nomination, but not the NHL. The CLI indicates that Arlington Lawn has been identified as a separate component landscape.

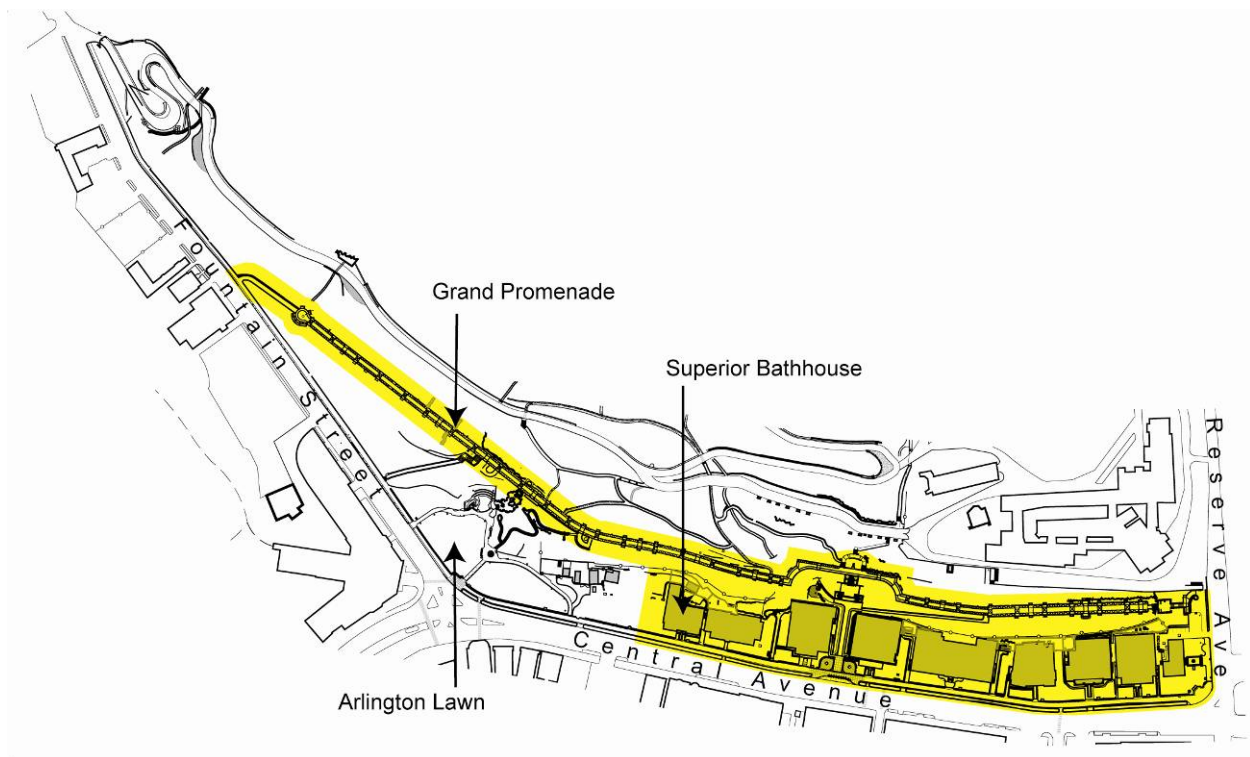


Figure 4 - 2: Bathhouse Row Historic District Boundary described in the 1998 CLI (source: QE | A, 2007)

⁸ Burt and Young, *Cultural Landscapes Inventory Bathhouse Row*, 1998, 4.

The statement of significance in the *CLI* indicates that Bathhouse Row is nationally significant as a representative of the history of the use of thermal waters as a therapeutic aid and of efforts to develop a national spa that would rival the great European spas. In addition, it is nationally significant as a representative of an important stage in the development of the American conservation movement, specifically to preserve the watershed and hydrologic systems that feed the springs. Finally, it is regionally significant as the architectural core of downtown Hot Springs.⁹ This information was incorporated into a *Determination of Eligibility (DOE)* that was approved in 2000. The *DOE* also provides descriptions of contributing landscape features within the district.

A *Cultural Landscapes Inventory (CLI)* for Gulpha Gorge Campground was prepared by the Midwest Regional Office of the National Park Service in 2006. According to the *CLI*, the Gulpha Gorge Campground is eligible for listing to the National Register under Criterion A for its association with trends related to the design and development of campgrounds in national parks. The development of the campground since its acquisition by the National Park Service in 1924 has been directly affected by work related to the Civilian Conservation Corps (CCC), the Civilian Works Administration (CWA), and Mission 66-funded improvements. Although certain original features once associated with the campground no longer exist, the overall balance of continuity of use, evolution of campground facilities, and retention of distinctive characteristics contribute to the distinct historic character and identity of the site.¹⁰

Although the 1998 *CLI* and 2000 *DOE* address the landscapes associated with Bathhouse Row, and the 2006 *CLI* addresses Gulpha Gorge Campground, the rest of the Study Area landscapes have not been previously evaluated. Given the clear relationship between historic master plans and detailed designs and the extant features within the Mountain Sidegrounds, Arlington Lawn, Hot Springs Mountain and West Mountain, these landscapes have been evaluated herein to determine their contribution to the previously established historic themes. In addition, Whittington Park was a major element in the overall design prepared by Stevens. Although the physical features have been changed, the park retains an ability to serve as the northwestern anchor of the park/downtown area. Therefore, it is potentially contributing to one theme of national significance.

Proposed Historic Landscape District Statement of Significance

The Hot Springs National Park historic landscape district is nationally significant under Criterion A and C as a historic designed landscape. The master plan prepared for Hot Springs Reservation by Lieutenant Robert Stevens during the years 1892 through 1894 is a significant representative of the influence of master planning and landscape design on the development of spa resorts and public recreational landscapes in the United States in the late 1800s and early 1900s. The complexity of the design reflects the influence of nationally known landscape architects including those associated with the office of Fredrick Law Olmsted, Sr. Annual

⁹ Ibid., 10.

¹⁰Burt, *Cultural Landscapes Inventory Gulpha Gorge Campground*, 2006, 10. The Arkansas State Historic Preservation Officer concurred with the Cultural Landscapes Inventory.

reports prepared by Stevens and subsequent superintendents, document the implementation of many of the recommended improvements.

In addition, park planning efforts during the early 1900s led to a unique situation within the National Park Service. The formal Beaux Arts design developed by the Little Rock architectural firm of Mann and Stern for Bathhouse Row and the surrounding landscape seemed to depart from and contradict the policy of landscape preservation and harmonization espoused by director Stephan T. Mather and National Park Service landscape architects and engineers. While a formally designed landscape development plan did not reflect the overall policy at that time, it did correspond with the park's focus of developing a national spa resort, the desire to provide exceptional access, and the critical obligation to protect the hot spring water for public use and consumption. Although the Mann and Stern plan was never directly implemented, it did influence future design and development of the site as a unique formal landscape. The continued development and preservation of the park's mountain landscapes and hot springs watershed, based on subsequent master plans, more closely reflected the naturalistic design approach advocated by the National Park Service from the early 1900s through 1942.

The park landscape also represents an important stage in the development of the American conservation movement, specifically to preserve the watershed and hydrologic systems that feed the springs. Finally, portions of the park landscape represent the history of the use of thermal waters as a therapeutic aid and of efforts to develop a national spa to rival the great European spas.

Proposed Historic District Boundary Description

The proposed Hot Springs National Park historic landscape district consists of the majority of the "permanent reservation" as defined by the Hot Springs Commission and set aside by Congress in 1880 (see Figures 4-3 and 4-4). This boundary included 264.93 acres of the original 2560 acres (4 sections of land) set aside by President Andrew Jackson in 1832. The portion of the 1880 permanent reservation that lies upon Sugarloaf Mountain is not included in the historic district. Despite the fact that Stevens provided direction for all other parts of the reservation, this landscape was not addressed directly in his reports, other than being enumerated as a portion of the reservation on page three of the 1893 report. Further significant planning and design efforts during ensuing years also failed to focus on Sugarloaf Mountain.

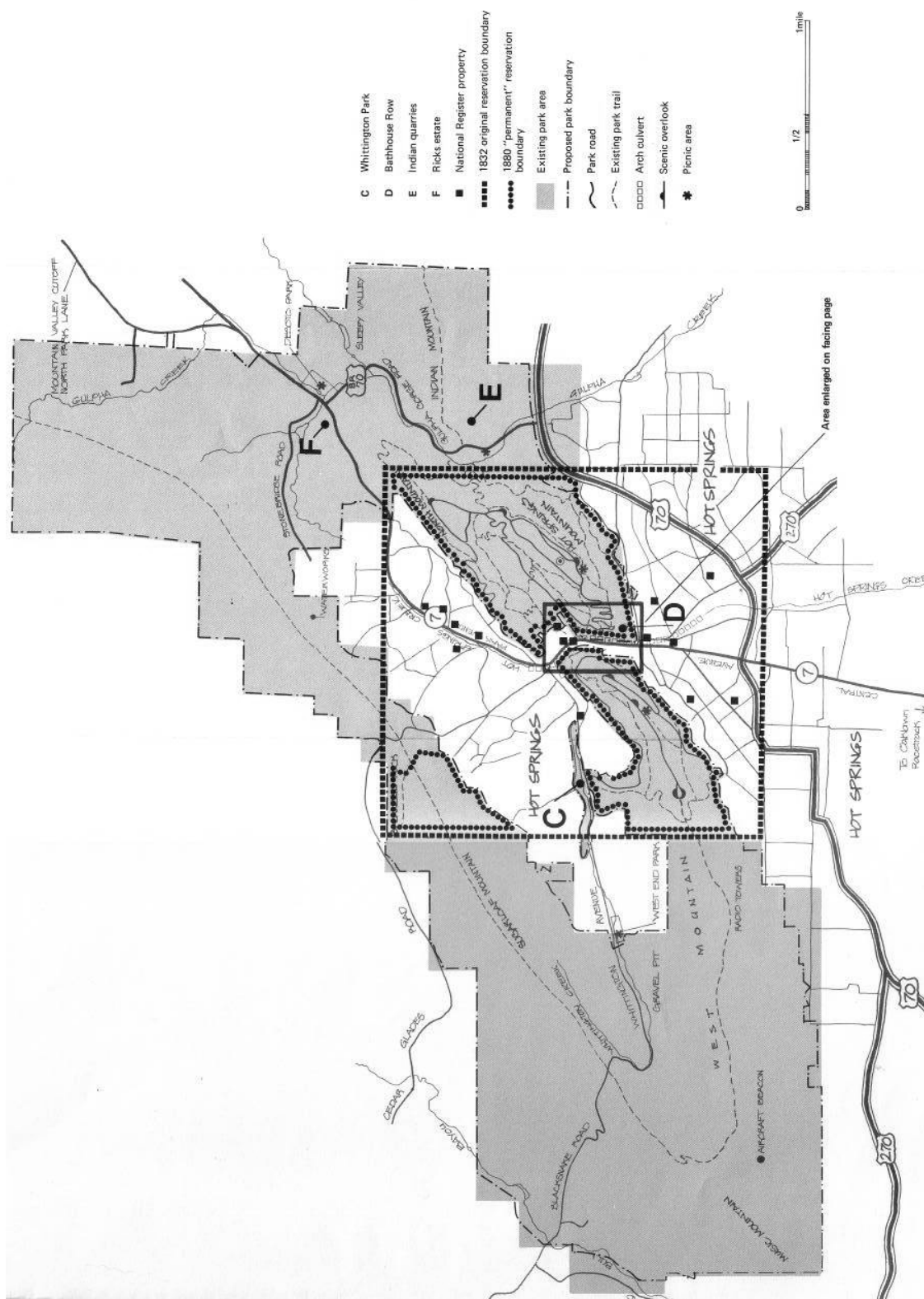


Figure 4 - 3: Historic boundaries of Hot Springs National Park

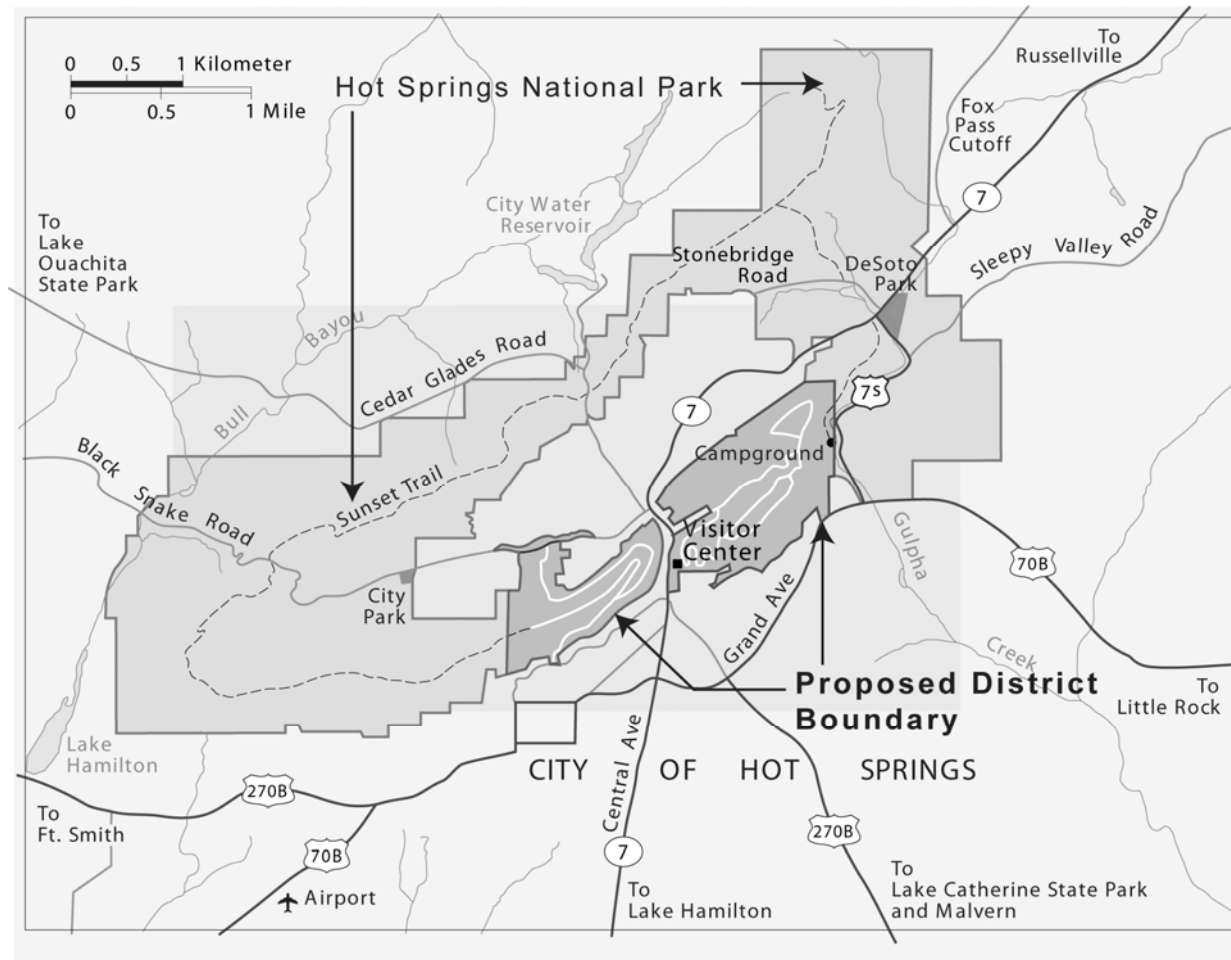


Figure 4 - 4: Proposed Historic District Boundary

Description and Boundaries of the Reservation Front

The Reservation Front forms the heart of the proposed Hot Springs National Park Historic Landscape District. It contains the core historic landscapes at the park, further subdivided into six “landscape character areas”: Bathhouse Row, South Park, Foreground Park, Tufa Park, Arlington Lawn, and Wooded Park. The term “Reservation Front” refers to the portion of the park that lies between Reserve Street, Central Avenue, Fountain Street and the initial portion of Hot Springs Mountain Drive as well as the retaining wall at the southern property edge of the Rehabilitation Center (see Figure 4-5). The idea of the “Reservation Front” was initially presented by Lieutenant Robert Stevens in his annual report of June 1893. He discussed the park improvements being undertaken, noting that although the plans addressed the entire Reservation, the initial construction allotment was applied to the Reservation Front area due to the primary importance of its landscape features, mainly the springs, to the purpose of the Reservation. Throughout his subsequent reports he continued to refer to the Reservation Front as a whole entity that served as a defining component of the overall Reservation.

Stevens' intent for this landscape is clearly described in his reports. His overall concept was for this landscape to serve as a large park consisting of several smaller character areas with and 'architectural park' made up of a formal promenade along Central Avenue, lawns, and bathhouses (today known as Bathhouse Row and the Magnolia Promenade). These would be directly connected by eight pedestrian entrances to a series of parks and designed landscapes at a higher elevation directly east and northeast of the buildings (see Figure 4-6). Stevens referred to this higher area as the Mountain Sidegrounds and described four parks with distinct characteristics that were included within the Mountain Sidegrounds. The South Park, Foreground Park, Tufa Park, and Wooded Park were intended to provide a variety of experiences for visitors, while also accommodating a pleasure drive and supply road for the bathhouses. Descriptions of each of these landscape character areas are provided in this chapter. In his reports, Stevens emphasized the importance of the "entrances" as vital elements of the design that providing multiple pedestrian connections between Bathhouse Row and the Mountain Sidegrounds (see Figure 4-7). The change in elevation was achieved by a system of retaining walls, stairs, ramps, and sloped ground. Over time changes to the buildings and landscape along Bathhouse Row have resulted in removal of entrances two, three, five, and seven. One entrance has been added at Arlington Lawn.

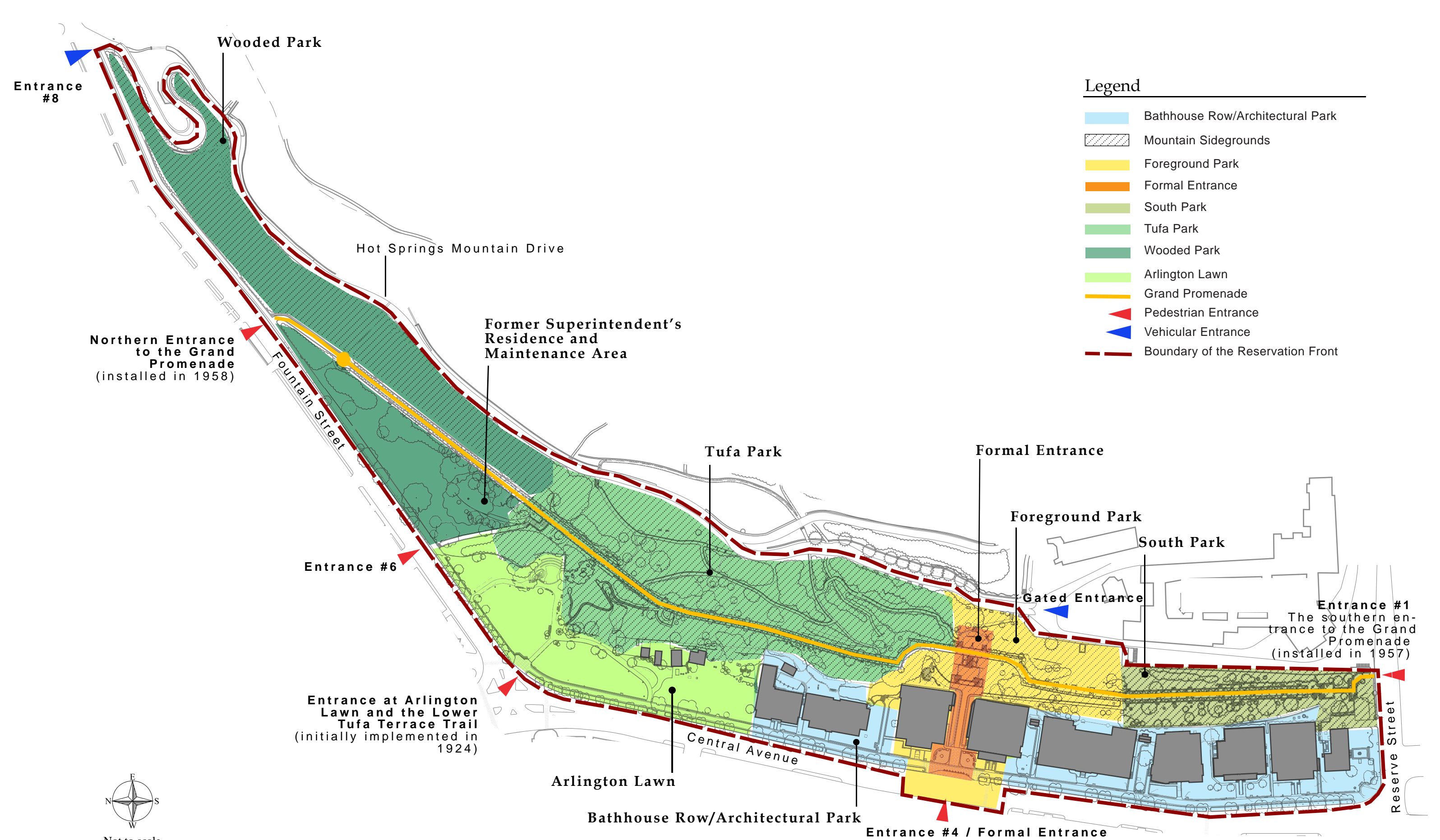
Within the Reservation Front one area was not directly addressed by Stevens. The land lying to the north of the Arlington Hotel contained the Reservation Superintendent's residence/administrative headquarters, maintenance structures, and a work area. Stevens did not propose a different use for this area, so it may be assumed that he intended for it to continue to serve as a residence and operational headquarters. It is addressed herein as a part of the Wooded Park.

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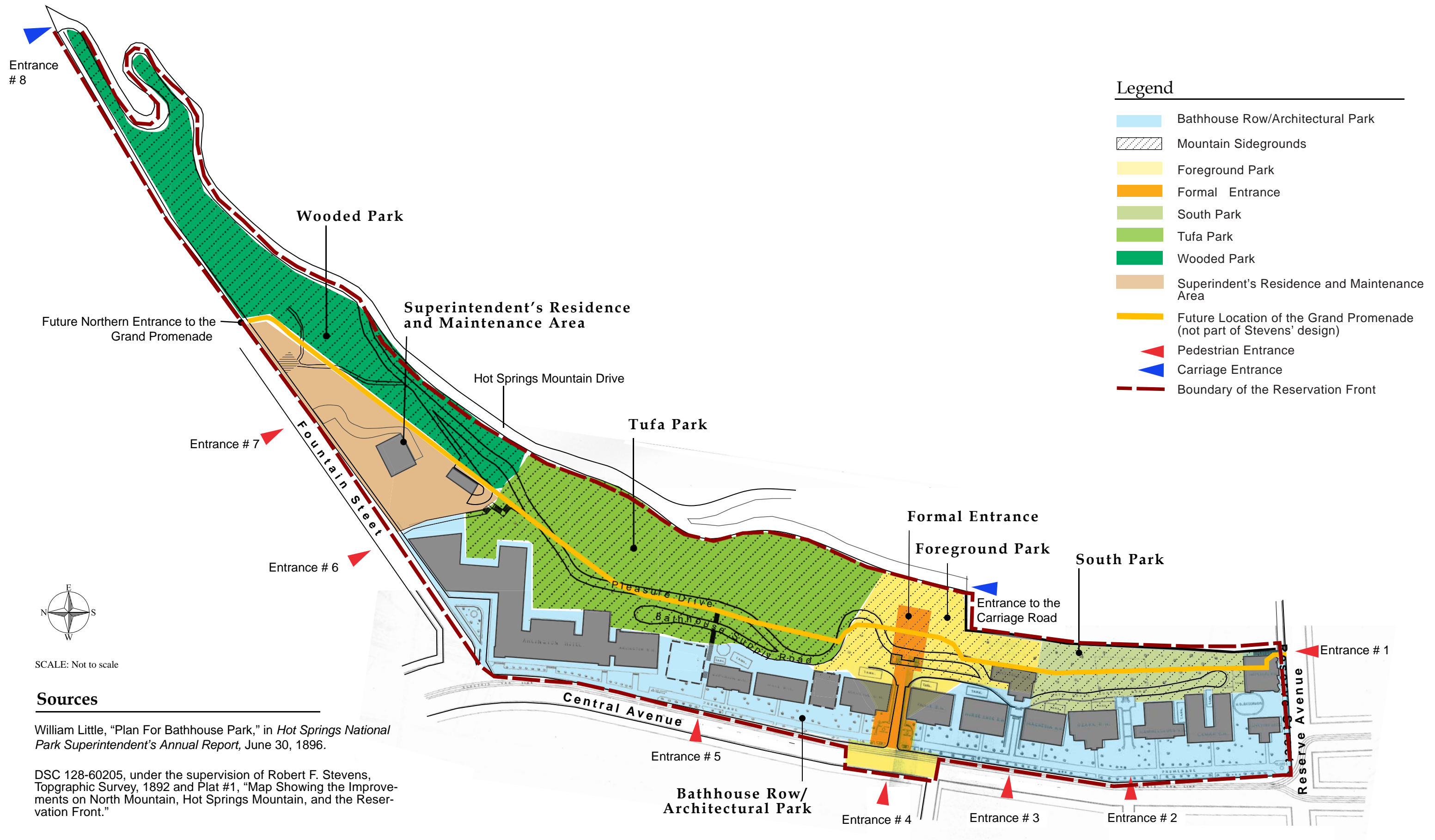
Figure 4 - 5: Reservation Front Landscape Character Areas

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Figure 4 - 6: Reservation Front Original Intent



Reservation Front: Landscape Character Areas



Reservation Front: Original Intent

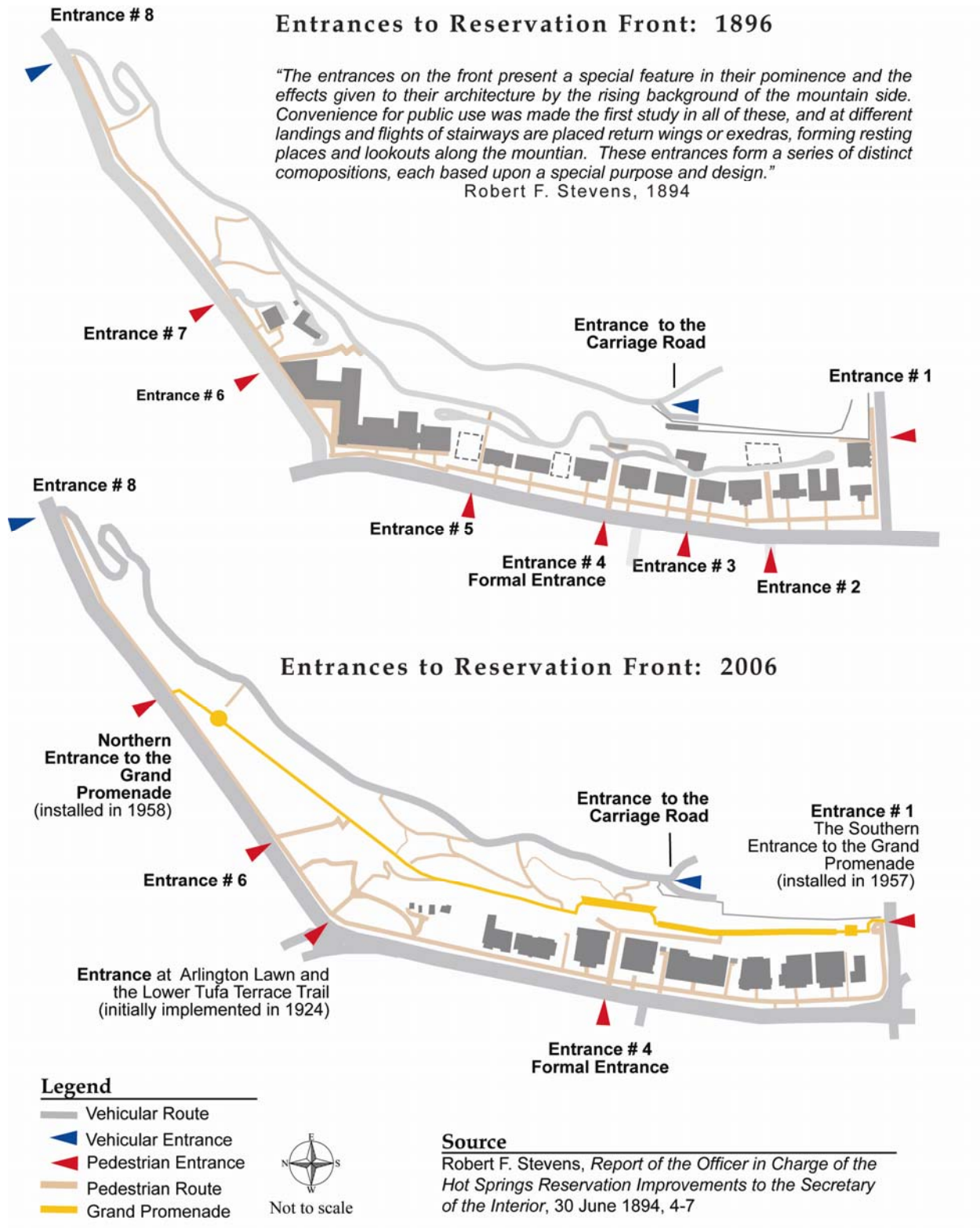


Figure 4 - 7: Reservation Front Entrances Analysis

Reservation Front Entrances as described by Robert F. Stevens, 1894:

"Entrance no. 1 is a stone stairway extending up from Reserve Avenue to the foreground level of the mountain. It is immediately adjacent to the two stairways forming a double entrance, separated only by a wall on the department line."

"Entrance no. 2 (proceeding northward and on the west front of the reservation) is formed of a succession of stairways with side exedras. Special effects are given in its contrasts of masonry. The upper wall is of dark-brown sandstone, seldom in equaled in coloring, the lower or side walls are of North Mountain agate stone, capped and finished with brown sandstone. This entrance leads to the Foreground Park lying west of the War Department grounds."

"Entrance no. 3 forms the opening of the Government bath house. It presents a design of stairways with side courts and inclosed by walls of novaculite stone, much whiter and grater density than limestone which forms the coping of the composition. In connection with this work, further improvements have been made at the Government bath house, by finishing, with cut- stone coping, walls formerly constructed there. The vicinity of the bath house has also been graded, and finishing details have been added to the building itself in the form of stone bases at the front stairways and a sloping approach to the side entrance, with a retaining and parapet wall of native range work, finished with cut stone."

"Entrance no. 4 opens on the street front as a sloping, paved roadway, flanked with sidewalks and streetcar landings. On each side, in the lawn park and opening inward and on to the front promenade, is a paved exedra surrounding a central drinking fountain and inclosed by a paneled wall, which curves in to a massive stone column surmounted by sculptured bronze eagles, the marking pieces of the entrance. At the base of the high ground of the mountain, and squarely fronting the opening of the main entrance, is a stone stairway rising in a vertical face, with central corbel inclosing a wall fountain. Stairways ascend on each side in crossing flights, with a central landing at the top. The composition shows entirely white cut stone. The front is faced with 6 inch veneering and the stair is inclosed by an outside line of balusters and the landings by balusters and paneled parapets. The trimmings are appropriately molded. Turning off from this masonry front the drive makes a curve to the southward, and, passing again along the foreground, crosses through the line of the general stairways at the top of the lower stairs. From this road crossing the entrance plan continues in a second stairway, landing in the foreground park with side stairs and court returns. The winding flight of stairs, broken by the park openings, but consisting of three, five, and seven steps, connects with the upper composition of stairways. This, one on each side, is flanked at the landing of the first central flight of steps with octagon exedras inclosed with paneled parapets in white cut stone. These courts form the base of the double flights of stairs which complete the rise to the terrace front and main road."

"Entrance no. 5 (the next along the front) is near the Arlington Hotel. The lower flight of steps is cut in the natural tufa or hot-water deposit. The other flights are of white limestone in rough finish, flanked with side walls of tufa rock."

"Entrance no. 6 is at the superintendent's residence and grounds on Fountain Street, and is formed by successive flights of steps and landing cut into the tufa."

"Entrance no. 7 is a double gateway, inclosing the drive at the north entrance from Fountain Street to the superintendent's grounds, and is finished with stone flanking columns."

"Entrance no. 8, the final entrance to the reservation front from this side, is that of the drive leading from Fountain Street and connecting with the main drive of Hot Springs Mountain."¹¹

¹¹ Stevens, Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior, 30 June 1894, 4-7.

Although numerous changes have occurred within the Reservation Front, the landscape today exhibits an overall organization similar to that proposed by Stevens. For the purpose of analysis, Stevens' concept has been used to define landscape character areas that correspond to the existing conditions (see Figure 4-5). These can be compared to a diagram illustrating Stevens' intent (see Figure 4-6).

The landscape currently known as Arlington Lawn was essentially a part of Bathhouse Row during Stevens' tenure, when the majority of the space was occupied by the Arlington Hotel and Bathhouse. The hotel burned in 1923 and after that time the resultant open space was converted to a park-like setting; currently this has been defined as a distinct landscape character area.

A major change to the Reservation Front landscape as it had been envisioned by Stevens occurred over a period of several decades. The design and subsequent installation of a paved pathway that would become known as the Grande Promenade ultimately replaced the pleasure drive and bathhouse supply road. The construction of the Grand Promenade substantially altered the character, spatial organization, circulation, material, workmanship vegetation, and topography of the four mountainside ground parks. The most significant impact of the Grand Promenade on the mountainside grounds is the complete redefinition of the area as a linear corridor, rather than a series of separate, distinct parks. Impacts to the individual landscape character areas are discussed later in this chapter.

In the early 1930s, the Grand Promenade was designed by the National Park Service San Francisco "Landscape Division" design office headed by Thomas Vint (see Figure 4-8). Implementation of the promenade began in 1933, when the southern-most portion was constructed. The middle and northern parts were built in the 1950s. The dynamic red and yellow pattern of the wide brick pavement became the dominant feature. As use and maintenance of the corridor occurred in a linear fashion, the distinct characteristics of the four parks gradually diminished. Today many of the general characteristics of the individual parks described by Stevens are present yet, the perception is that it is one linear park rather than four areas with unique characteristics.



Figure 4 - 8: Proposed alignment of the Grand Promenade, 1940 (source: NP-HS 20 33) Note: The proposed Grand Promenade alignment indicates a major feature to be developed at the Tufa Park above Arlington Lawn.

Landscape Analysis - Bathhouse Row

Boundaries of Bathhouse Row

Bathhouse Row is located along Central Avenue in the downtown core of the City of Hot Springs. Bathhouse Row is defined on the south by Reserve Street and to the west by Central Avenue. It extends north to the northern side of the Superior Bathhouse and is bounded on the east by stone retaining walls and steep slopes behind the bathhouses.

Description and Analysis of Integrity of Bathhouse Row

In his master plan for Hot Springs National Park, Lieutenant Robert Stevens envisioned Bathhouse Row as a finished or formal park, in contrast to the less formal character of the improvements he planned for the mountains. Stevens explained in his 15 September 1895 report that it was to be one of “two main centers for improvement as finished parks” (the other being Whittington Park), and that it would serve as an anchor for the overall park. This contrast of

formal versus informal spaces and function provided a balance to Stevens' design for the whole park.

Bathhouse Row serves as the front door for Hot Springs National Park and is the primary location of the park's architectural resources. As noted in his 1893 report, Stevens intended Bathhouse Row to be an "Architectural Park," where buildings and landscape would unite into one cohesive space (see Figure 4-9). Stevens' design intent for Bathhouse Row dictated that the bathhouses be oriented toward Central Avenue and that a consistent building setback between the building facades and the street edge be enforced. This arrangement created a broad landscape space between Central Avenue and the bathhouse facades. It consisted of three main landscape features: the lawn border at the street edge, the promenade for pedestrian circulation, and the lawn park in front of the bathhouses that extended for the full length of Bathhouse Row. Today this landscape space between the bathhouse facades and Central Avenue differs from the downtown building setback across the street, which although consistently spaced, is defined by a more typical urban frontage of concrete sidewalk, street lighting, parallel parking, and sporadic plantings.

In 1917 a master plan prepared by the Little Rock architectural firm of Mann and Stern emphasized the formal aspects of the Architectural Park. Their plan reflected the City Beautiful Movement of the early twentieth century which emphasized strong axial relationships, monumental scale, classical architecture styles, symmetrical plantings, and formal setbacks. While not directly implemented, their ideas influenced the development of Bathhouse Row over the next two decades when the buildings of Bathhouse Row were remodeled or rebuilt with increasingly larger footprints (see Figure 4-10). The building setback established by the Mann and Stern plan was adhered to and remains intact (see Figure 4-10). While the Mann and Stern plan slightly narrowed the building setback established by Stevens, it maintained a consistent distance between Central Avenue and the Bathhouse Row building facades thus preserving the lawn border, the promenade, and the lawn park (see Figure 4-12).

The lawn border, as envisioned by Stevens, was a planted space that provided a separation between Central Avenue and the pedestrian promenade. Implemented in the late 1890s, the nine foot wide border was edged by a limestone curb along Central Avenue. The original plantings were bluegrass lawn and a row of Lombardy poplar trees that were later replaced with a row of magnolias after the poplars had "*served their term of usefulness*"¹² as noted in Stevens' report. In 1918, a formal holly hedge, featured in the Mann and Stern plan was planted the length of the perimeter of the lawn border. It also extended to the building entrances. The mature, rectilinear hedge was maintained at a three foot height.

The lawn border remains an integral part of the historic landscape today, though changes have occurred. With the widening of Central Avenue, the lawn border has narrowed to eight feet and the limestone curb has been replaced with a raised concrete curb on both sides that creates a raised planter. A linear row of magnolia trees remain and are arranged along the centerline of the lawn border. The magnolia trees provide generous shade along the

¹² Ibid., 5.

promenade as originally intended by Stevens, but the original spatial patterns no longer exist. The spacing of the trees has been slightly altered and is not consistent for the entire length of the lawn border. Individual magnolias have been replaced as they have reached maturity, and as a result, the age of the magnolia trees varies from approximately five to sixty years of age (a few of the trees may be over seventy years old). Portions of the holly hedge were removed at some point in the past. Newer holly plantings, inconsistent with the historic design intent, were added along secondary walks.

Adjacent to the lawn border is the promenade, known today as the “Magnolia Promenade.” In his June 1894 report, Stevens described this space as “*A concrete promenade (that) extends up the entire front, and, with car landings on the street and paved cross walks to the bath houses, forms a useful and attractive finish to the reservation and the street front.*”¹³ Stevens’ original promenade was fourteen feet wide and built of concrete, and was the primary pedestrian circulation for visitors to the ‘Architectural Park’, providing access to the bathhouse entrances.

The promenade alignment and width has remained consistent over the years; however, the walk and edge were rebuilt in 1989. At that time the material of the walk changed from a simple concrete finish to a center concrete band flanked on both sides by a sandblasted band. Trench drains to accommodate surface drainage were added along the edges within the band, providing a much needed function.

To complete the ‘Architectural Park’ Stevens envisioned a lawn park, a consistent landscape space to aesthetically unify the architecturally diverse bathhouses. Stevens noted that the lawn park “*...forms the main public front of the reservation. It is a practical level, planted in blue-grass lawns, with selected trees and groups of shrubbery.*”¹⁴

The lawn park was originally planted in a blue grass lawn with a double row of trees. The tree plantings in the lawn park complemented those planted in the lawn border, both integral to Stevens’ plan of a shaded promenade.

In the Mann and Stern era, the row of trees closest to the bathhouses was eliminated (see Figure 4-12) as the larger bathhouses were built. However, the row of trees shading the promenade remained. Mann and Stern further defined the lawn park with the addition of holly hedges bordering the bluegrass lawn and along the walkway entrances to the bathhouses (see Figure 4-12). This created a more three dimensional separation between the promenade and the lawn park.

Today, the lawn park continues to provide a unifying, consistent, and cohesive space, between the promenade and the building facades, as originally intended. The front lawns of the bathhouses retain the original lawn park character although portions of the holly hedge are missing. The original double row of trees planted from the Stevens design and the single row of

¹³ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894.

¹⁴ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894, 7.

trees planted from the Mann and Stern plan no longer exist.¹⁵ Some trees exist in front of the bathhouses and are not compatible with the historic landscape (see Figure 4-11).

Light fixtures, consistently spaced along Bathhouse Row, were added to the western edge of the lawn border in 1914, along the promenade. They consisted of five glass globes set on a single steel lamp post. Over time some light fixtures were moved while others were removed as a result of vehicular accidents.

The Mann and Stern plan also influenced the rear facades of the buildings on Bathhouse Row. As the larger building footprints extended to the east into the Mountain Sidegrounds at the base of Hot Springs Mountain, new formal stone retaining walls were added directly behind the bathhouses to support and retain the slope of the mountainside. Many of these buildings and stone walls remain today (see Figures 4-10 and 4-11).

Another significant design feature of Stevens' plan was the distinct pedestrian entrances that connected Central Avenue, Reserve Street and Fountain Street with the Mountain Sidegrounds. Four of his proposed eight entrances were within Bathhouse Row, entrances two, three, four, and five. They connected Central Avenue with the pleasure drive, the Government Free Bathhouse, the Stevens Balustrade, and the Tufa Park respectively (see Figures 4-7).¹⁶

Over time, these entrances along Bathhouse Row associated with Stevens' plan have been modified or removed. During the Mann and Stern era, entrance two was modified, reflecting the intent of the Mann and Stern plan. While the entrance is now blocked, the columns within the original entrance retaining wall between the Buckstaff and Ozark Bathhouses and portions of a retaining wall are extant features (see Figures 4-10 and 4-11). Entrance four, the Formal Entrance, was originally developed as the primary connection between Bathhouse Row and the Mountain Sidegrounds. It retains this intent today (see the *Foreground Park* section within this chapter for a discussion regarding the Formal Entrance, the Maurice Historic Spring, and the Display Fountain). Entrance three was removed when the Government Free Bathhouse was removed in 1921-22. Entrance five along the northern edge of the Superior Bathhouse was removed during the construction of the Grand Promenade. The removal of the entrances two, three, and five, coupled with the installation of the Grand Promenade shifted the east/west pedestrian circulation patterns established by the Stevens' plan to the north/south linear corridor we see today. With the installation of the Grand Promenade, Bathhouse Row's historic role as the visual and physical connection between Central Avenue and the Mountain Sidegrounds has been diminished.

Other features have altered the historic landscape character of Bathhouse Row. Several of the Bathhouse entrances were modified with the addition of accessibility ramps (see Figure 4-11). The ramps detract from Bathhouse Row's historic character due to their alignment and the use of materials that are not compatible with the historic architecture.

¹⁵ Two magnolias adjacent to the Arlington Lawn and north of the Superior Bathhouse, one magnolia on the south lawn of the Fordyce Bathhouse, and one in front of the men's restroom between the Quapaw and Ozark bathhouses are possible remnants of the Mann and Stern era planting.

¹⁶ See Chapter IV page 18 for Stevens' description of the entrances to the park.

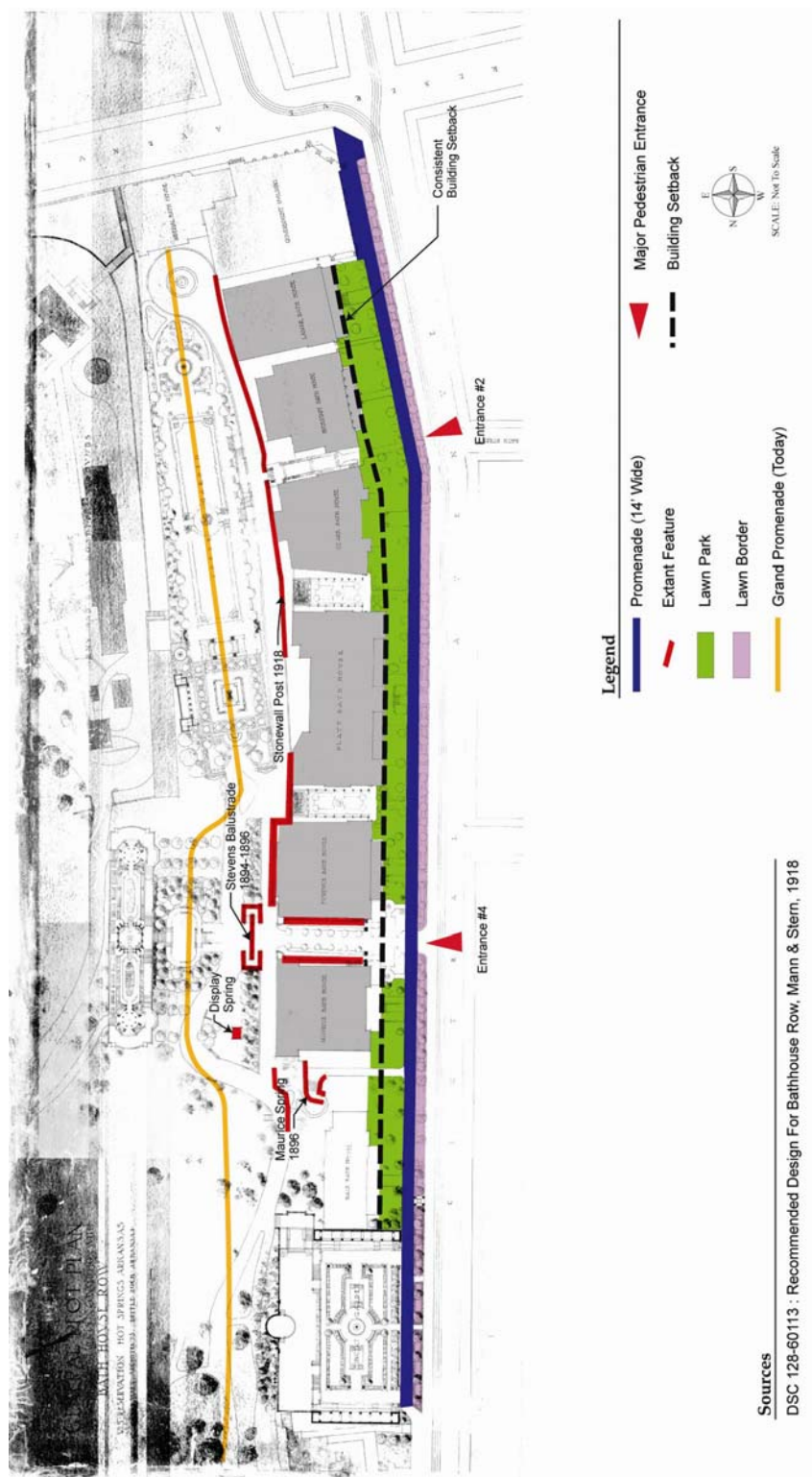
Site furnishings have been added including benches, trash receptacles and drinking fountains. The locations interrupt historic spatial patterns and the site furnishing materials are not consistent with historic features. They are non-compatible with the original landscape components. Many light fixtures along the promenade remain from the original installation in 1914. Some fixtures are not original but are consistent with the original light material and character.

Signs throughout Bathhouse Row, including commemorative, directional and interpretive signs are consistent with National Park Service standards, but the materials are not compatible with the historic landscape.

Additional site features have been added with improvements to the park including fluted concrete walls, plaza/paving renovations at the Administration Building and additional hedge plantings in non-historic locations. These locations, which interrupt historic spatial patterns, and their material composition, are non-compatible with the historic character of Bathhouse Row and negatively impact the integrity of the historic landscape.

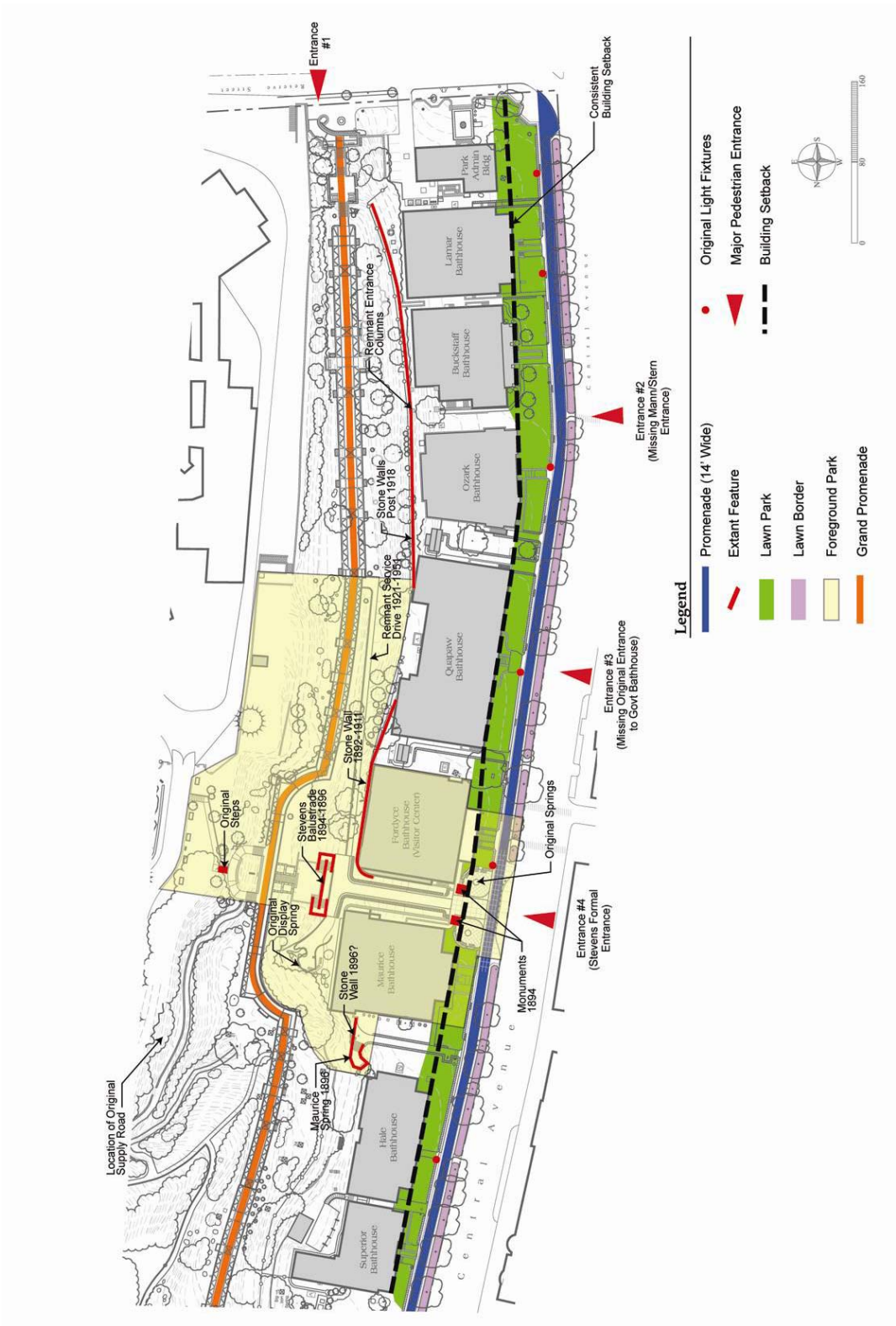


Figure 4 - 9: Bathhouse Row: Original Design Intent



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2 Figure 4 - 10: Bathhouse Row: Mann and Stern Design



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2 Figure 4 - 11: Bathhouse Row/Formal Entrance: Existing Conditions Analysis

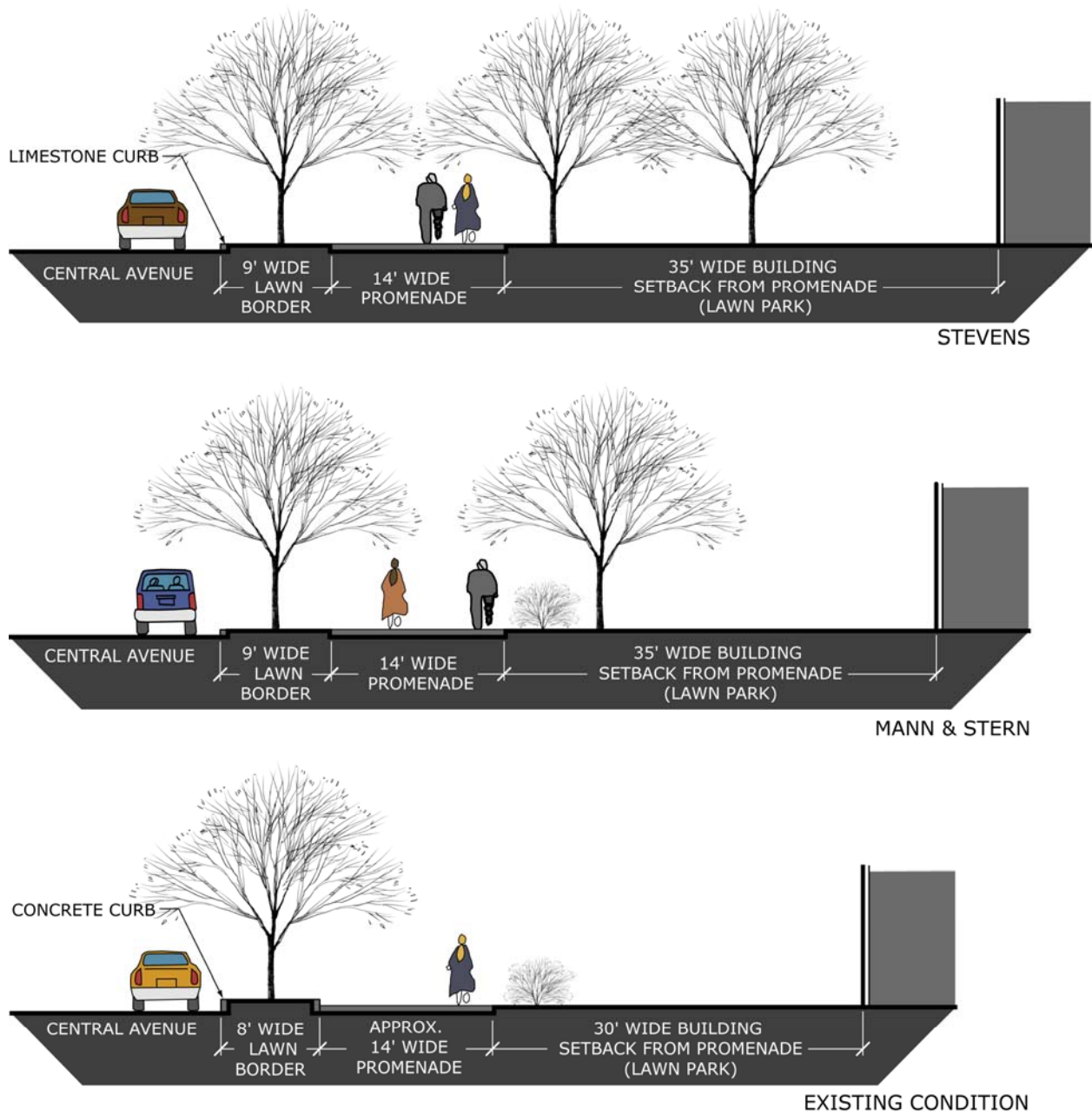


Figure 4 - 12: Bathhouse Row: Cross Section

Table 4-1: Vegetation: Bathhouse Row

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Holly hedge	3-7	Contributing	The Chinese holly hedge was added in the early 1900's and creates an architectural edge to the lawn park
Magnolia Promenade/ Southern Magnolias	3-8	Contributing	The Southern magnolias that line Central Avenue and the promenade are original landscape features installed by Stevens. Although Stevens' intent was to have a triple row of trees, the single row within the lawn border is the only row that exists
Lawn	3-9	Contributing	The lawn was an important feature of the original design intent for the "lawn park" that surrounded the fronts and sides of all of the bathhouses
Holly trees	3-10	Non-contributing, impacting	The American holly trees were not originally part of the vegetation design along the promenade

Table 4-2: Buildings/Small Scale Features Bathhouse Row

<i>Building</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Park Administration Building	3-26	Contributing	Constructed in 1936 this building is part of the NHL
Lamar Bathhouse	3-27	Contributing	Constructed and opened in 1922/1923 this building is historically significant
Buckstaff Bathhouse	3-28	Contributing	Constructed and opened 1911/1912, this building is historically significant
Ozark Bathhouse	3-29	Contributing	Constructed in 1922, this building is historically significant
Men's Comfort Station	3-30	Contributing	Constructed in 1923, this building is historically significant
Quapaw Bathhouse	3-31	Contributing	Constructed in 1922, this building is historically significant
Women's Comfort Station	3-32	Contributing	Constructed in 1923, this building is historically significant
Fordyce Bathhouse/Visitor Center	3-33	Contributing	Constructed in 1915, this building has been completely restored inside to serve as the Visitor Center. The building is historically significant
Maurice Bathhouse	3-34	Contributing	Constructed and opened 1911/1912, this building is historically significant
Hale Bathhouse	3-35	Contributing	Originally constructed in 1915 and remodeled in 1939, this building is historically significant
Superior Bathhouse	3-36	Contributing	Constructed and opened 1915/1916, this building is historically significant
Parking Lot/Service Drive	3-57, 3-58	Non-contributing, impacting	This feature was added in the 1980's and is not compatible with historic setbacks. Materials and style are not compatible with historic character.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Basement Stairs at Park Administration Building	3-59	Contributing	Part of original building construction in 1936
Concrete Walk and associated features at Reserve Street	N/A	Non-contributing, impacting	Constructed post 1970's. Materials and style are not compatible with historic character.
Concrete Retaining Wall	3-60, 3-61	Non-contributing, impacting	These features were constructed in 1989. Materials and style are not compatible with historic character.
Jug fountain	3-62	Contributing	Public access to the spring water has historically been available within the park.
Administration Building Entrance	3-57, 3-58	Non-contributing, compatible	These features are distinctly different from historic features, but do not detract from the historic character of the park.
Boulder with NHL Plaque	3-59	Non-contributing, impacting	Appearance is distracting to the historic setting.
Flagpole	N/A	Non-contributing, impacting	Appearance is distracting to the historic setting.
Linear walk	3-60, 3-61	Contributing	This feature maintains the original alignment from the late 1890's. The material was modified in 1989, but still is consistent with the historic character.
Raised curb lawn	3-62	Non-contributing, compatible	This feature is distinctly different from historic features, but does not detract from the historic character of the park.
Spring Boxes	3-63	Contributing	The springs are the historic fabric of the reason Hot Springs Reservation was originally established.
Basement Stairs at Lamar Bathhouse	3-66, 3-67	Contributing	These features have been present since the building was opened in 1923. Modifications that are non-compatible including painting of the concrete and the handrail.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Lamar Bathhouse Entrance	3-64, 3-65	Contributing Ramp: Non-contributing	This feature has been present since the building was opened in 1923. Modifications that are non-compatible include painting of the concrete and the handrail. The ramp was added in 2005. The materials and style are inconsistent with the historic character.
Concrete Walk between Lamar and Buckstaff Bathhouses	3-68	Contributing	This feature has been present since the construction of the Lamar and Buckstaff Bathhouses.
Turf Stone Ramp between Lamar and Buckstaff Bathhouses	3-69	Contributing	This feature has been present since the early 1900's.
Rock outcrop South of the Lamar Bathhouse to remnant concrete piers behind Buckstaff Bathhouse	3-70	Contributing	This feature is part of the original landscape exposed during the construction of the existing bathhouses and plays a major role in the definition of the edge of Bathhouse Row and South Park.
Mortared Stone Retaining Wall #1 South of Lamar Bathhouse, continuing to North side of Buckstaff Bathhouse where Mortared Stone Retaining Wall #2 begins	3-71	Contributing	This feature has been present since the early 1900's and plays a major role in the definition of the edge of Bathhouse Row and the Mountain Sidegrounds.
Satellite Dishes behind Lamar Bathhouse	3-72	Non-contributing, impacting	Appearance is distracting to the historic setting.
Retaining Wall #1	3-71	Contributing	This feature has been present since the early 1900's and plays a major role in the definition of the edge of Bathhouse Row and the Mountain Sidegrounds.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Buckstaff Bathhouse Entrance	3-73	Contributing	This feature has been present since the construction of the bathhouse. Modifications non-compatible including painting of the concrete.
Perimeter Concrete Walks	3-74, 3-75	Contributing	This feature has been present since the construction of the bathhouse.
Basement Stairs	3-76	Contributing	This feature has been present since the construction of Buckstaff Bathhouse in 1911/1912.
Remnant Concrete Piers behind Buckstaff Bathhouse	3-77, 3-78	Contributing	Remnant features from the cooling towers in the early 1900's.
Retaining Wall #2 between Buckstaff and Ozark Bathhouses	3-79	Contributing	This feature has been present since the early 1900's and plays a major role in the definition of the edge of Bathhouse Row and the Mountain Sidegrounds. This portion of the wall shows remnants of entrance two.
Sandstone base		Contributing	Remnant of the south exedra walls for entrance two.
Ozark Bathhouse Entrance	3-80, 3-81	Non-contributing, impacting	This feature has been modified from the original entrance. The original entrance was a ramp in lieu of the existing stairs. Style and Materials are not compatible with historic character.
North side of Ozark Bathhouse	3-81, 3-82	Basement stairs: contributing Ramp: Non-contributing, impacting	This feature has been present since the original construction of the Ozark Bathhouse. The stairs are compatible with the historic architecture. Constructed in 2005. Materials and style are not compatible with historic character.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Concrete Walk to Men's Comfort Station	3-83	Non-contributing, impacting	This feature is not consistent with the historic patterns along Bathhouse Row.
Quapaw Bathhouse Entrance	3-84	Contributing	This feature has been present since the construction of the bathhouse. Modifications non-compatible including painting of the concrete and non-historic handrails.
Basement Stairs at Quapaw Bathhouse	3-85, 3-86	Contributing	These features have been present since the construction of Quapaw Bathhouse in 1921/1922.
Concrete walk to Women's Comfort Station	3-87	Non-contributing, impacting	This feature is not consistent with the historic patterns along Bathhouse Row.
Wood fence	3-88	Non-contributing, impacting	Appearance is distracting to the historic setting.
Wood Bench	3-89	Non-contributing, impacting	Appearance is distracting to the historic setting. Materials and style are non-compatible with historic character.
Fordyce Bathhouse Entrance	3-90, 3-91	Entrance and ramp on north side: Non-contributing, impacting	The entrance has been modified from the original entrance. The original entrance included a central ramp in lieu of the existing stairs. Style and Materials are not compatible with historic character. North side ramp: Appearance and location is distracting to the historic setting.
Visitor Center Sign in front of Fordyce Bathhouse	3-92	Non-contributing, impacting	Appearance is distracting to the historic setting.
Basement Stairs At Fordyce Bathhouse	3-93	Contributing	These features have been present since the construction of the Fordyce Bathhouse in 1915.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Display Spring	3-94, 3-95	Display Spring is contributing. Plaza at Display Spring is non-contributing, impacting	Display Spring including stone walls are historic features. The plaza renovated in the 1980's? is inconsistent with historic patterns. The appearance is distracting to the historic setting due to the use of materials that are not compatible with historic character.
Maurice Bathhouse Entrance	3-96, 3-97	Non-contributing, impacting	The entrance has been modified from the original entrance. The original entrance included a central ramp in lieu of the existing stairs. Style and Materials are not compatible with historic character.
Maurice Historic Spring	3-98, 3-99, 3-100, 3-101, 3-102	Contributing Drinking Fountain: Non-contributing, impacting	This historic feature plays a major role in defining the space between the Maurice and Hale Bathhouses. Modification that are not compatible with historic character is the replacement of the stone steps with concrete. Drinking fountain: Appearance is distracting to historic setting.
Hale Bathhouse Entrance	3-103	Contributing	This feature has been present since the construction of the Hale Bathhouse in 1915.
Concrete Walk/Steps between Hale and Superior Bathhouses	3-104	Contributing	This feature has been present since the construction of the Hale and Superior Bathhouses.
Cooling Tank Remnants Behind the Hale Bathhouse	3-105	Contributing	These remnant features define the historic character and use of the hot springs in the bathhouses.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Superior Bathhouse Entrance	3-106, 3-107	Entrance: Contributing South side Ramp: Non-contributing, impacting	The entrance has been present since the construction of the bathhouse. Modifications non-compatible including painting of the concrete and non-historic handrails. Southside Ramp: Style and Materials are not compatible with historic character.
Concrete steps with tufa stone cheek wall	3-108	Noncontributing/ Compatible	These steps were installed during the early 1900's.
Arched Brick Reservoir behind Superior Bathhouse	3-109	Contributing	This reservoir was installed in the late 1800's/early 1900's for holding water for the bathhouse.
Abandoned Concrete Building behind Superior Bathhouse	3-110	Contributing	Constructed in the early 1900's as a cooling tank.
Concrete Channel at Superior Bathhouse	3-111	Non-contributing, impacting	Appearance is distracting to the historic setting.
Mortared Stone Rubble Wall behind Bathhouses	3-112	Contributing	Historic wall from the original supply road behind the bathhouses.
Ornamental Lights poles and fixture	3-113	Contributing	This feature defines the historic lighting style.
Trash receptacle	3-114	Non-contributing, impacting	Style and Materials are not compatible with historic character.
Pedestrian light signal	3-115	Non-contributing, compatible	This feature is necessary for the safe crossing of pedestrians on Central Avenue.
Uplights	3-116	Non-contributing, impacting	Style and Materials are not compatible with historic character.
Interpretive Signs	3-117	Non-contributing, impacting	Style and Materials are not compatible with historic character.
Directional Signs	3-118	Non-contributing, impacting	Style and Materials are not compatible with historic character.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Rules & Regulation Signs	3-119	Non-contributing, impacting	Style and Materials are not compatible with historic character.
Handrails	N/A	Non-contributing, impacting	Appearance is distracting to the historic setting. Style and Materials are not compatible with historic character.
Electrical Transformers	3-120	Non-contributing, impacting	Appearance is distracting to the historic setting.
Electrical disconnect boxes	3-121	Non-contributing, impacting	Appearance is distracting to the historic setting.
Air Conditioning and Heating Units	3-122	Non-contributing, impacting	Appearance is distracting to the historic setting.

Landscape Analysis - South Park

Boundaries of the South Park

The South Park consists of the southern-most portion of the Mountain Sidegrounds, located south of the intersection of the service drive and the Grand Promenade. It lies to the east of the Ozark, Buckstaff, and Lamar Bathhouses, and the Park Administration building (see Figure 4-10). It is bounded on the east by the retaining wall at the Rehabilitation Center, and on the south by Reserve Street.

Description and Analysis of Integrity of the South Park

The South Park was described by Robert Stevens as a “hillside park, with a drive and walks connecting entrances, and with natural planting of shrubbery and lawns.”¹⁷ Figure 4-8 illustrates the area in 1896, as indicated on a plan drawing submitted with Superintendent Little’s annual report. The alignment of the existing Grand Promenade is overlaid with the 1896 drawing, illustrating the relationship of this feature compared to the 1896 plan. In 1896, the South Park was bounded by the Government Free Bathhouse on the north and the Imperial Bathhouse on the south. Entrances one, two, and three were in place, providing pedestrian access to the South Park from Bathhouse Row and Reserve Street. The bathhouse supply road defined the western edge of the park and the retaining wall at the Army and Navy Hospital defined the eastern edge. Illustrations of the area indicate that as early as the turn of the century and continuing into the late 1920s there were shade trees and lawn along the sloped park between the bathhouse supply road and the retaining wall (see Figures 2-85, 2-87, 2-89, and 2-95).

Although not mentioned in Stevens’ text, the area west of entrance two was indicated as a potential building site for a bathhouse on the 1896 plan. It is difficult to know if Stevens intended for this to be a building site, although it seems unlikely, since a bathhouse on the site would detract from the character of the “hillside park” he described (see Figure 4-13).

Today, the most prominent feature of the South Park is the pavement of the Grand Promenade. The red and yellow brick pedestrian route defines the linear space, dividing it along a north/south axis. Although the route of the Grand Promenade generally reflects the historic pleasure drive/service drive present during Stevens’ tenure, the alignment, width, materials, workmanship, and scale of the Grand Promenade do not reflect Stevens’ intent, as he did not describe the route through the area as being the main feature.

A plan prepared in 1917-1918 by Mann and Stern moved from Stevens’ concept of natural planting on a hillside park to an Italian renaissance style garden with ornate, symmetrical, formally arranged spaces and plants. The design retained the supply road and pedestrian entrances one and two. Entrance three was eliminated, along with the Government Free Bathhouse that the entrance approached. Although the Mann and Stern design for the

¹⁷ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894, 4.

South Park was never implemented, it did influence the eventual design for this portion of the park. Figure 4-14 illustrates the Mann and Stern design overlaid with the current alignment of the Grand Promenade. The alignment of the promenade closely reflects the alignment of the park proposed by Mann and Stern.

The first portion of the Grand Promenade was constructed in the area of the South Park in the 1930's based on a design prepared by the National Park Service. Drawings prepared in the early 1930s illustrate the still-present supply road and the intended alignment for the promenade. The supply road was located directly to the east of the rear facades of the bathhouses providing direct connections to the Quapaw, Buckstaff, and the cooling tanks behind the New Imperial. The proposed route of the promenade was shifted to the east of the supply road, straightened, and aligned with the promenade-level landing at the formal entrance. Although these early plans retained the New Imperial Bathhouse, by 1937 the building was demolished and a new concept for the southern entrance of the Grand Promenade included a series of terraced plazas reached by steps from Reserve Street (see Figure 4-15).

Today, the location, design, setting, materials, and association of the South Park closely reflect the 1930s design prepared by the National Park Service. The Grand Promenade is intact as constructed during the 1930s, although the addition of mortar in 2001 changed the feeling and workmanship of this feature. Also in the 1950s, bench pads were added along this section of the promenade.

Changes to the vegetation have also altered the feeling of the park. By the 1970s the vegetation in the South Park included dense woody plants including pin cherries, honeysuckle, hackberry, nandina, hollies, cedar and magnolia, many of which were volunteers. In the 1980s and 1990s the vegetation was thinned to open views. Currently the majority of the landscape is made up of sparse turf and exposed dirt. A few mature trees and shrubs are scattered through the area along with some young, leggy woody plants. The vegetation does not reflect the original design intent to create a character of "natural plantings" suggested by Stevens or the character present in the 1930s (see Figure 4-16).

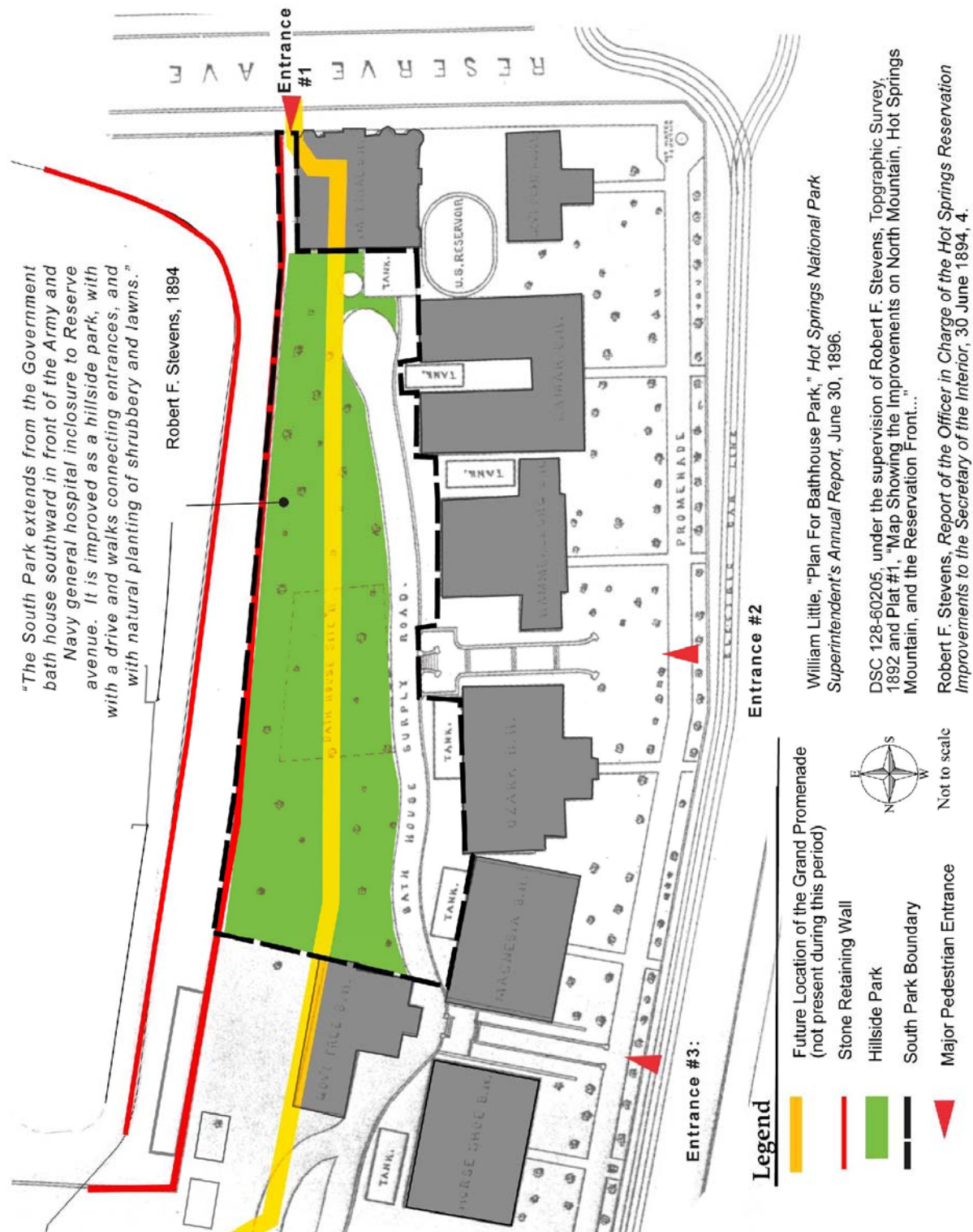


Figure 4 - 13: South Park: Stevens' Original Intent

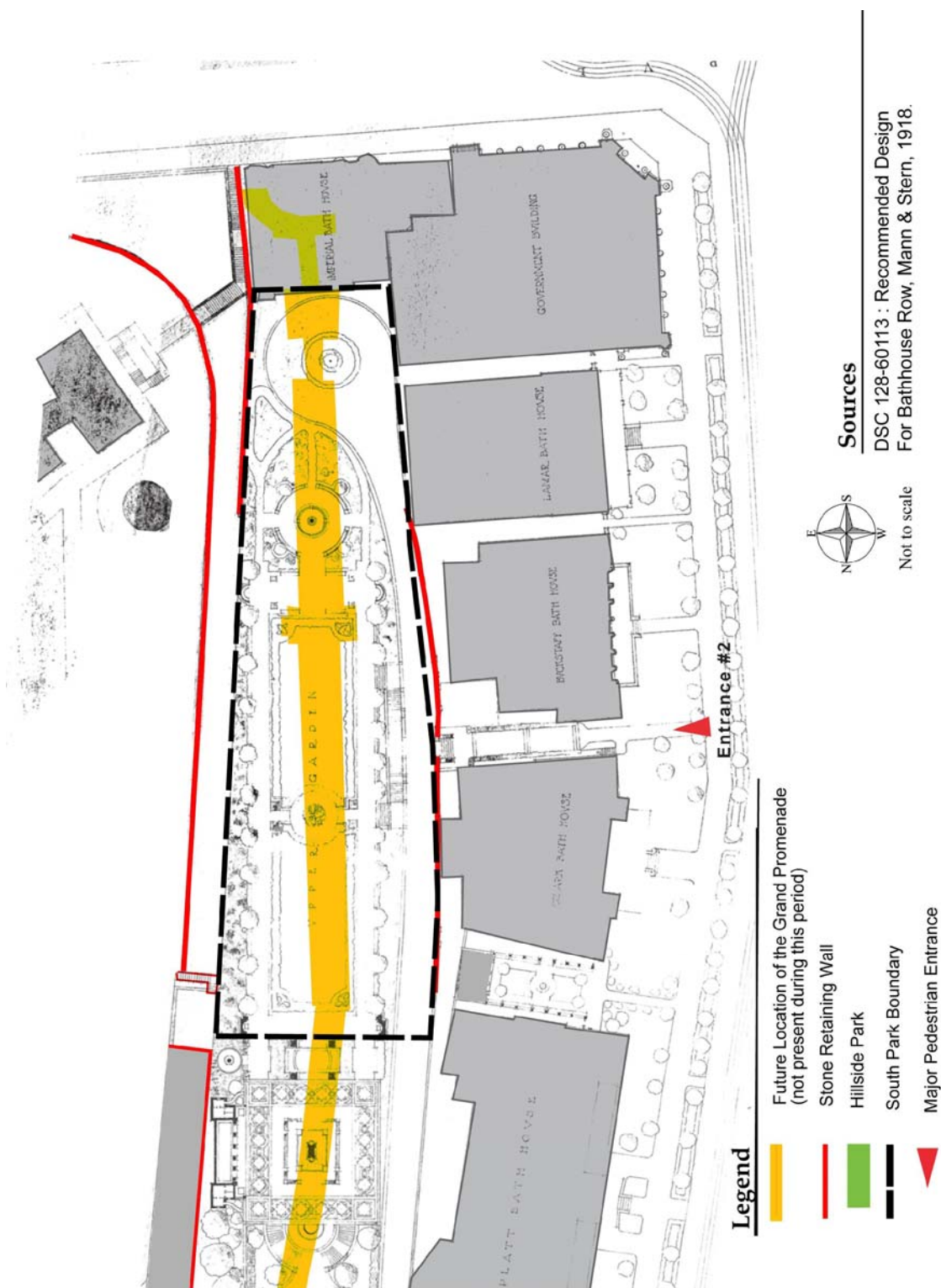


Figure 4 - 14: South Park: Mann and Stern

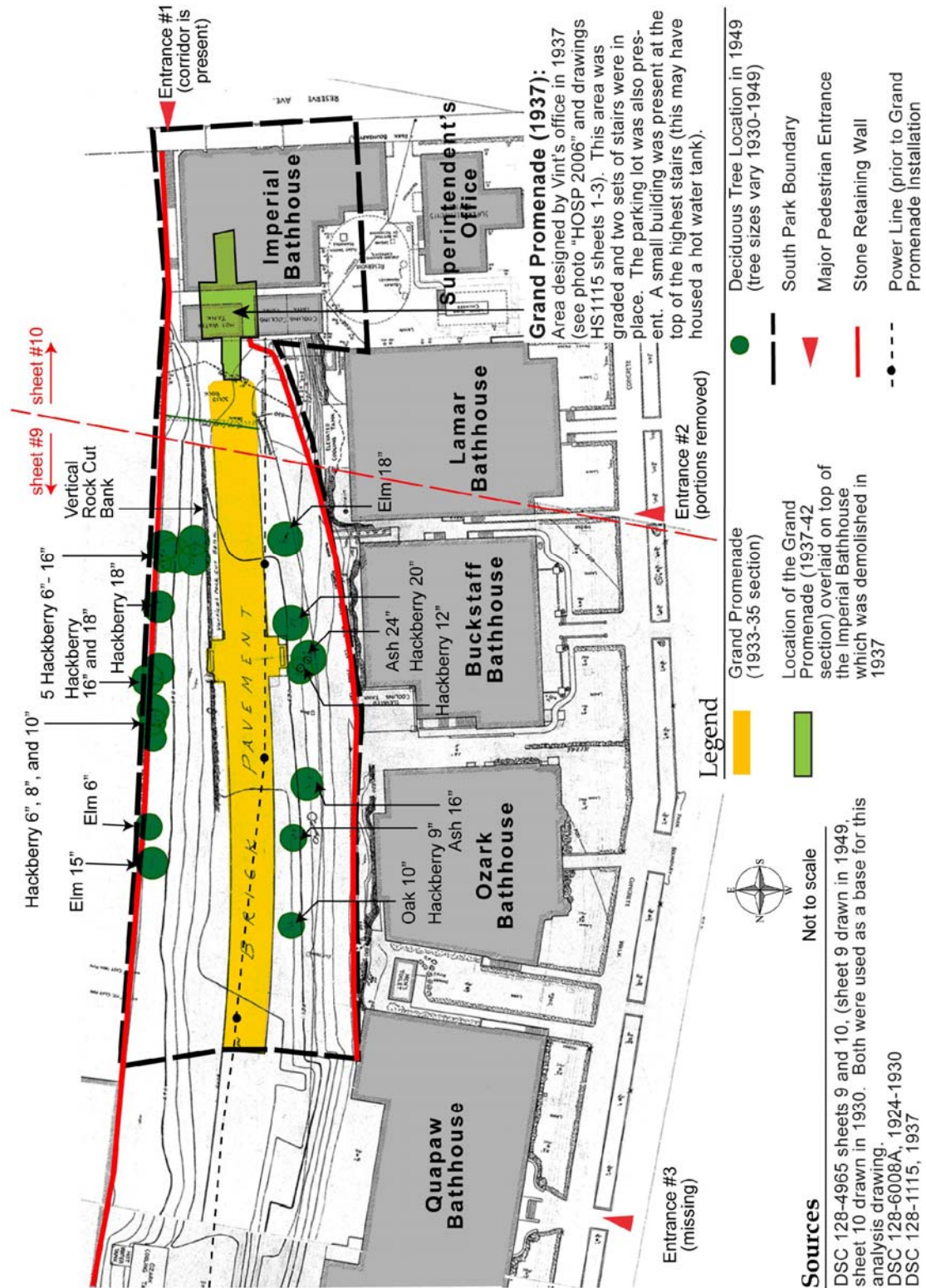


Figure 4 - 15: South Park, 1930s

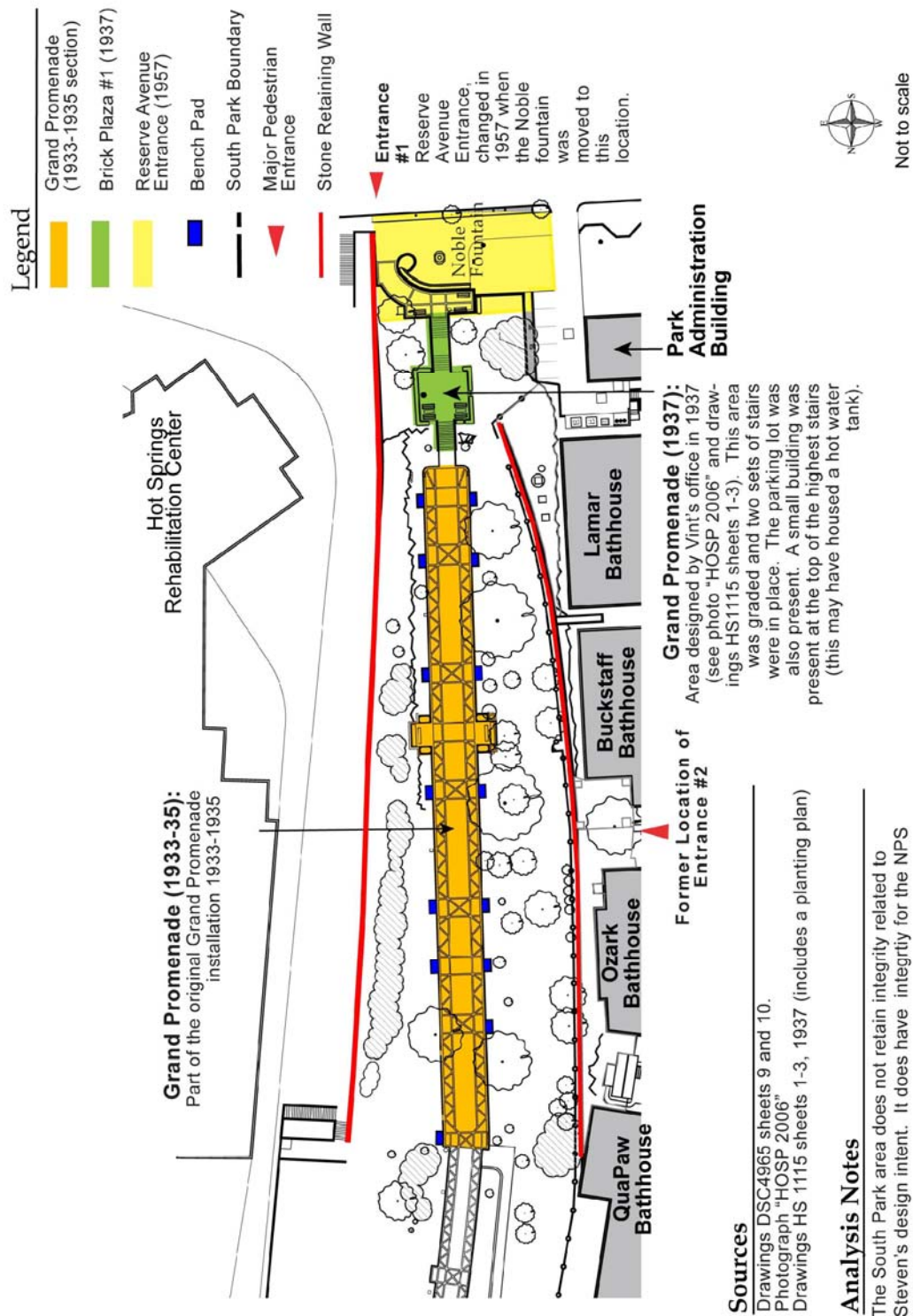


Figure 4 - 16: South Park: Existing Conditions Analysis

Table 4-3: Contributing and Non-Contributing Buildings and Features, South Park

<i>Building</i>	<i>Figure Number</i>	<i>Contributing/Non-contributing</i>	<i>Rationale</i>
Utility Building	3-37	Building is non-contributing, but the spring it covers is contributing.	Constructed ca. 1985-1986. The building covers a spring/well that is a contributing feature.
<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/Non-contributing</i>	<i>Rationale</i>
Noble Fountain	3-123	Contributing	Although this historic feature was completed in 1895, it has been moved twice. It was sited in its present location in 1957.
Curved Stone wall with fence at Reserve Street entrance	3-123 3-124	Non-contributing, wall is compatible, fence is impacting	Constructed late 1950s. Materials and workmanship of the fence do not reflect historic character of the promenade.
Brick pavement and stairway at Reserve Street entrance	3-123 3-124	Non-contributing, compatible	Constructed late 1950s. The brick pavement is consistent with treatments to the promenade that were made during the 1950s.
Interpretive sign at Reserve Street entrance	3-123 3-124	Non-contributing, impacting	Constructed post-1970s. Materials and style are not compatible with historic character.
Lower Stone Retaining Wall with fence at Rehabilitation Center	3-123 3-124	Contributing	This feature has been present since the 1890s and plays a major role in the definition of the edge of the South Park.
Brick Plaza #1	3-125	Contributing	Constructed in 1937 based on design by National Park Service.
Light poles and fixture	3-125	Non-contributing, compatible.	These features are distinctly different from historic features, but do not detract from the historic character of the park.
Fence	3-123	Non-contributing, impacting	Appearance is distracting to the historic setting.
Brick Seating Area #1	3-126	Contributing	Part of 1930s National Park Service design for the Grand Promenade.
Brick Seating Area #2	3-127	Contributing	Part of 1930s National Park Service design for the Grand Promenade.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Upper Stone Retaining Wall with fence at Rehabilitation Center	3-127	Contributing	This feature has been present since the 1890s and plays a major role in the definition of the edge of the South Park.
Stairs from Reserve Street to Rehabilitation Center	3-128	Contributing	This feature has been present since the 1890s and plays a major role in the definition of the edge of the South Park.
Remnants of entrance one	3-128	Contributing	Two retaining walls (and possibly other elements between the two retaining walls) adjacent to the left of the stairs to the rehabilitation center are remnant of entrance one.
Stairs to Rehabilitation Center and Brick Utility Structure	3-129	Contributing (this feature is not within the park boundary)	Although not within the park boundary, this feature has been present since the 1890s and plays a major role in the definition of the edge of the South Park.
Stone/Concrete Retaining Wall	3-129 3-131	Contributing	A portion of it may be the remnants of a former building foundation. The stucco-surfaced brick wall was a portion of the west wall of Building 8 (built 1901, demolished 1985).
Brick bench pads	3-131	Non-contributing, compatible.	Although not a part of the original South Park design, these were added by the NPS in the 1950s when the Grand Promenade was completed.
Drain Inlets	N/A	Contributing	Part of NPS design for the Grand Promenade.

Landscape Analysis - Foreground Park

Boundaries of the Foreground Park

The Foreground Park is the central portion of the Mountain Sidegrounds. It is the transitional space that connects the South Park with the Tufa Park, and the Formal Entrance with Bathhouse Row. It is bounded on the west by Central Avenue, on the east by the old carriage road to the Army/Navy grounds, and on the north by the northern edge of the formal entrance. The bend in the Grand Promenade where the width narrows is the southern boundary (see Figure 4-11).

Description and Analysis of Integrity of the Foreground Park

Lieutenant Robert F. Stevens originally planned for eight entrances to connect the formal park landscape bordering Central Avenue, Reserve Street, and Fountain Street with the informal Mountain Sidegrounds. Stevens intended for entrance four to be the “main entrance,” so as to serve as the central and most prominent connection between these two distinct landscapes. Stevens designed the Formal Entrance using a formal architectural language of regulating lines, sequencing of spaces and quality materials. His intent was to give the Formal Entrance a presence that would equal that of Bathhouse Row. Stevens arranged the entrance symmetrically along a center line, oriented east/west that extended from Central Avenue up the mountainside to the old carriage road. He used the natural topography to elevate its presence. Figure 4-17 illustrates the distinct alternating pattern that characterized the architectural center. A center space (B, B₁, B₂) was flanked on both sides by smaller equally sized spaces (A, A₁, A₂).

At Central Avenue, two limestone columns, “massive stone column(s) surmounted by sculptured bronze eagles, the marking pieces of the entrance,”² centered on regulating lines (1), and defined the central space (B). Low limestone walls extended out from each column creating two equally sized spaces (A) that symmetrically flanked the central space. This pattern, regulating lines, and spatial organization, continued up to and through the Stevens Balustrade, where it concluded at a tall limestone wall. A recessed niche and fountain in the wall was aligned on the centerline and provided a focal point, effectively enclosing the lower space.

At the top of Stevens Balustrade, a broad, open terrace extended for the full width of entrance four (A to A). The pattern continued as the sequence of spaces stepped up Hot Springs Mountain. The next space had a narrow central space (B₁) that was flanked by two wider, equally sized spaces (A₁). A central staircase (B₁) aligned on the centerline, provided the focal point for the Formal Entrance, and was flanked by two planters built as limestone walls. This space fit between the regulating lines (1).

The most prominent feature of the Foreground Park was the Bandstand Pavilion that was situated at the apex of entrance four. It made the final connection at the carriage road (that accessed the Army Navy Hospital). The formal composition continued with the narrow central staircase (B₁) accessing a broad terrace that in turn accessed two staircases (A₂). The pattern alternated again with the pavilion as the central space (B₂) and the prominent focal point. The pavilion completed the formal composition. It presented a visual icon or focal point high above Central Avenue, drawing visitors into the Mountain Sidegrounds. The view from the pavilion to Central Avenue was also impressive, and provided an important visual connection.

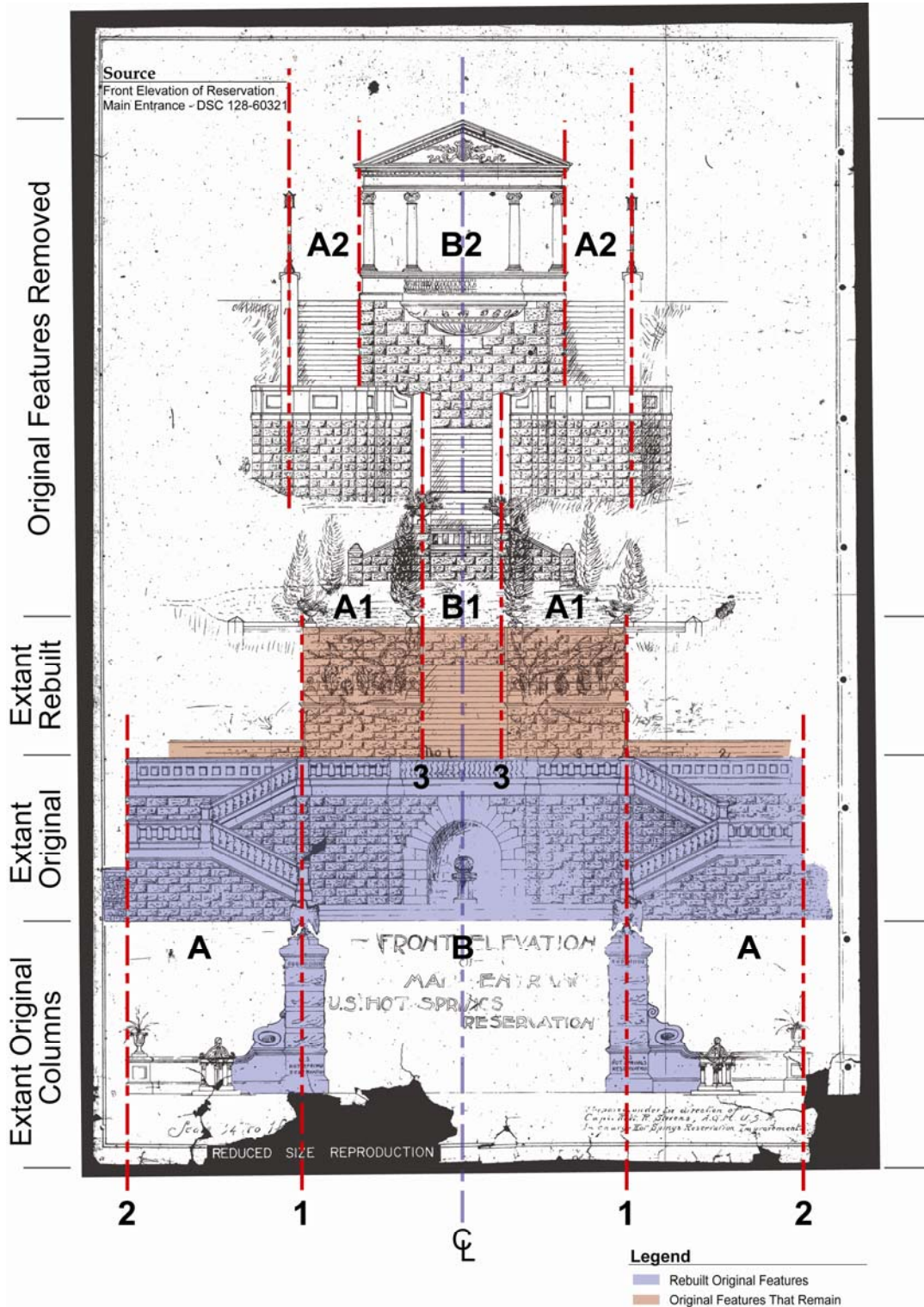


Figure 4 - 17: Foreground Park / Formal Entrance: Original Intent

The central staircase and flanking stone planters remain from Stevens' original design, however recent repairs to the stone walls including mortar replacement and patching, and capstone replacements have diminished its historic integrity. The mid-level terrace is a newer feature installed during the 1950s with the extension of the Grand Promenade (it was originally the alignment of the service road that crossed between the planters and the lower balustrade). It has brick paving that is similar to the paving of the Grand Promenade. The mid-level terrace is not consistent with the quality of material and formal expression of the rest of the Formal Entrance.

A 1989 renovation of Bathhouse Row resulted in another major modification to the Formal Entrance and the Foreground Park. A sloping concrete walk was replaced (the original gravel drive had been removed at an earlier time) and the addition of two planting beds adjacent to the Fordyce and Maurice bathhouses narrowed the broad approach to the Stevens Balustrade. The two limestone columns remained to mark the entry, but the original exedra that extended to Central Avenue was extensively modified, when new fluted concrete fountains, concrete paving and a vehicular drop-off area were installed.

The construction of the Grand Promenade in the mid-1950s traversed the Formal Entrance and resulted in the modification of the original circular stairs that connected to the pavilion. The alignment of the space remains intact; however, the steps were re-built and are not original.

The plantings in the Foreground Park originally consisted of natural hillside vegetation with an ordered arrangement of trees that framed the terraces of the Formal Entrance. A mass of trees provided a backdrop behind the original pavilion. Most of this vegetation has been removed. The existing vegetation consists of a few of trees, not consistent with the historic tree patterns, and manicured lawn.

The lower portion of the Foreground Park and the Formal Entrance (between Central Avenue and the Grand Promenade) retain integrity of location, design, setting, materials, feeling, and association related to Lieutenant Robert F. Stevens' 1890s design. The original sequence of spaces oriented along the east/west centerline remains, as does the original topography of the mountainside. The Formal Entrance fulfills its original intent as the central, most prominent entrance of the park, creating a clear physical and visual connection between Bathhouse Row and Hot Springs Mountain. The majority of this portion of the Foreground Park retains the original material, however the newer materials installed in 1989 detract from the formal composition.

The upper portion of the Foreground Park (above the Grand Promenade) retains integrity of location, feeling, and association related to Lieutenant Robert F. Stevens' 1890s design. The integrity of this portion of the Foreground Park is diminished since the architectural components of the Formal Entrance have been removed. However, the original topography and remnants of the original tree plantings remain, as does a portion of the staircase (now at the edge of the Grand Promenade). The area no longer displays the historic naturalistic character, as mown lawn and masses of vinca cover the mountainside.

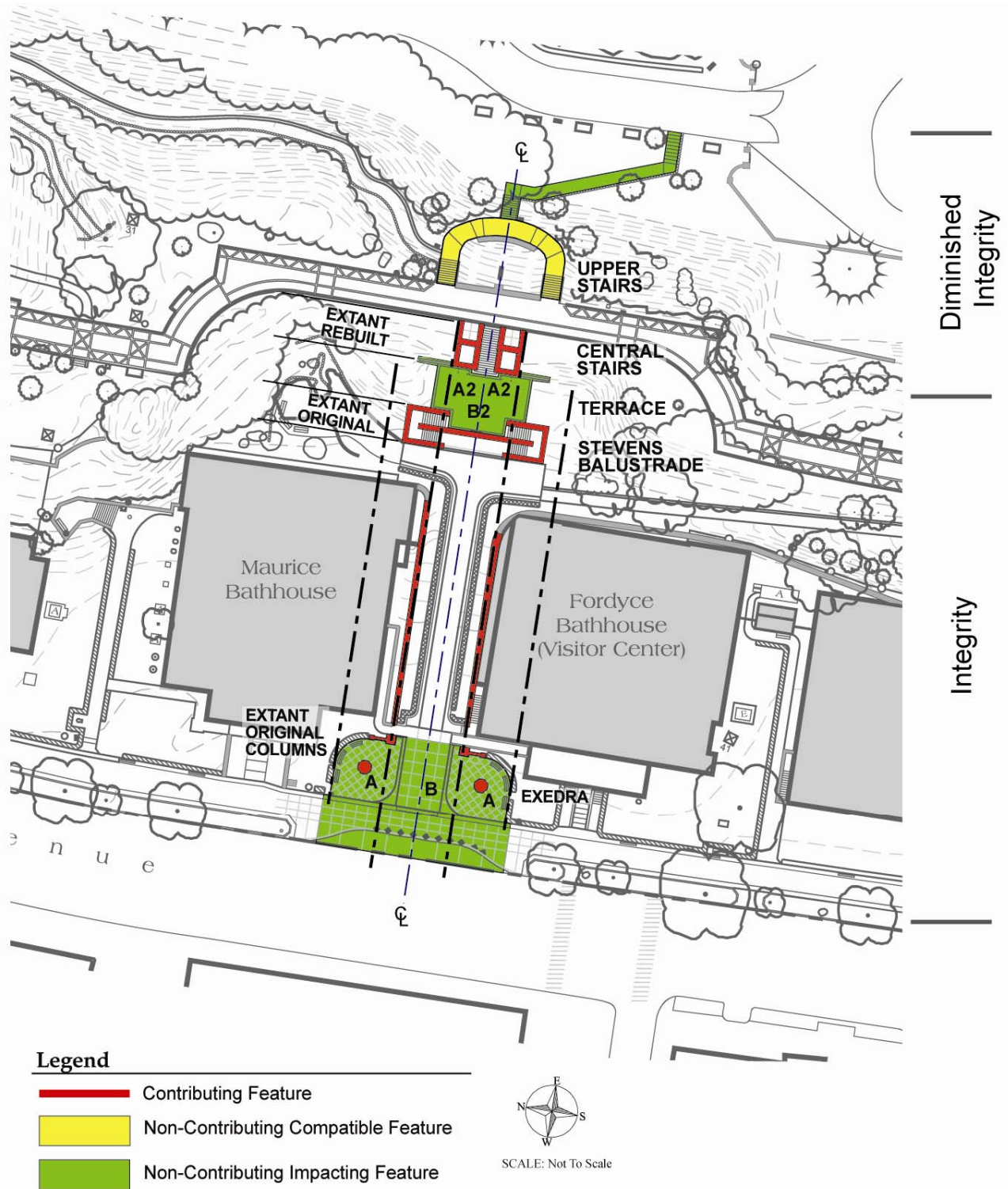


Figure 4 - 18: Formal Entrance: Existing Conditions Analysis

Table 4-4: Formal Entrance (Stevens Balustrade)

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
1. Entry/Gateway at Central Avenue			
Entry Columns	3-146 3-148 3-149	Contributing	Two original limestone columns, completed in 1895, a bronze eagle on top Constructed in 1895, these features play a major role in defining the Formal Entrance.
Exedra Fountains and Plaza	3-150 3-151	Springs - contributing, Fountains and plaza are non-contributing, impacting	Concrete plaza, and two round, fluted pre-cast concrete basins with central jets (circa 1989) The springs are a historic component of the original landscape. The plaza was renovated in the late 1980's. Style and materials is not compatible with the historic character. The appearance is distracting from the historic character.
Concrete Benches	3-150 3-151	Non-contributing, impacting	Six pre-cast concrete benches (circa 1988) These features were added in the 1980's. The appearance is distracting from the historic character.
Bollards	3-147	Non-contributing, impacting	Ten (10) square, fluted pre-cast concrete bollards, 1989 These features were added in late 1980s with the modifications to the Formal Entrance. The appearance is distracting from the historic character.
Drop-off / Driveway	3-147	Non-contributing, impacting	Vehicular drop-off and access These features were added in 1989 with the modifications to the Formal Entrance. The appearance is distracting from the historic character.
2. Sloping Walk			
Concrete Walk with Curb Edge	3-152	Non-contributing	Linear concrete walk with low concrete curb

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
3. Stevens Balustrade			
Lower Stair and Terrace	3-152	Contributing	Original Stevens Balustrade, 1895, is part of the original Formal Entrance design.
	3-153	Non-contributing, impacting	Red-brick terrace paving in a basket-weave pattern with a running bond blonde brick border. Materials and style are not compatible with the historic character of the park.
	3-152 3-153	Non-contributing, impacting	Low stacked limestone wall. Appearance is distracting from the historic character.
Upper Staircase	3-155	Central Staircase is non-contributing, compatible; stone walls and planters are contributing	Original central staircase flanked by rough cut stone walls and planters are part of original Formal Entrance Design
4. Connection to the Grand Promenade			
Connection	3-130	Refer to Grand Promenade	
5. Staircase between Grand Promenade and Old Carriage Road			
Staircase	3-155	Non-contributing, impacting	Appearance is distracting from the historic character.
Stone Wall	3-155	Contributing	A low stone wall built of large random stones with a hammered stone cap defines the landing. This wall appears original.
Sign	3-155	Non-Contributing, impacting	Interpretive sign is mounted in the center of the wall. Appearance is distracting from the historic character.
Stone Wall	3-155	Contributing	Another low stone wall built of large random stones with a hammered stone cap defines the landing. This wall appears to be original.
6. Pavilion site			
Pavilion site	3-25	Contributing	The location of the original pavilion

Landscape Analysis - Tufa Park

Boundaries of the Tufa Park

The Tufa Park consists of the portion of the Mountain Sidegrounds that lies to the north of the Formal Entrance, east of the Superior and Hale Bathhouses and Arlington Lawn, south of the intersection of the Grand Promenade and entrance six, and west of the Hot Springs Mountain Road and the Old Carriage Road (see Figure 4-25 for the Tufa Park boundary).

Description and Analysis of Integrity of the Tufa Park

The Tufa Park was described by Stevens as follows:

As the ground recedes to the northward from the main entrance the hot water formation stands out more upon the mountain, and at one section the rock shown unbroken hot-water deposit. The upper portion of this ground is entirely of exposed tufa, the surface having a slightly rounded form and moderate incline. It is left mainly as a tufa park to show the natural features of the hot-water deposit. Some planting of the ground in shrubbery and grass has been made and has shown good results, unexpectedly, considering an existing impression that the tufa soil is not favorable to vegetation. In this park is located the upper reservoir and the highest group of hot-water springs. The springs bordering the drive have been arched with white rustic stone, and are finished around with planting of vines and shrubbery. This vicinity is the northern limit of the outcropping tufa.¹⁸

Figure 4-23 illustrates the area in 1896, as indicated on a plan drawing submitted with Superintendent Little's annual report. In addition, the image illustrates the locations of springs designated by surveys conducted in 1892 and 1900. The discrepancy in spring locations may be due to inaccuracies in surveying or to naturally occurring shifts in the native materials surrounding the spring openings. The figure also includes the alignment of the existing Grand Promenade overlaid with the historic drawing, illustrating the relationship of this feature compared to the 1896 conditions. In 1896 the Tufa Park contained the main alignment of the bathhouse supply road and a lower branch that provided access to the Arlington Bathhouse. The park was bounded on the west by the steep slopes behind the Hale and Superior Bathhouses, and by the immense back of the Arlington Hotel. Pedestrian entrance six was in place and selected springs had been accentuated with added stone and vegetation to serve as "display springs." Entrance five was constructed before 1911.

Although Stevens' description indicates an area of natural tufa outcrops and free-flowing springs, the landscape had been manipulated extensively by the 1890s. The creation of the bathhouse supply road required significant alteration of the topography and retaining walls were necessary to achieve an alignment allowing access to the backs of the buildings. In Figure

¹⁸ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894, 5-6.

2-94 a retaining wall can be seen behind the Superior and Hale Bathhouses. In addition, reservoirs and cooling tanks utilized underground pipes that would have necessitated modifications to the surface. Previous to the construction of underground pipes, wooden troughs were built above the surface to transport spring water.

The “natural features of the hot-water deposit” described by Stevens are no longer visible features of the landscape. The hot springs have been captured and piped underground and the tufa outcrops covered with fill material, turf, pavement, and vegetation. Historic photographs of the natural features around the springs (see Figures 2-12 and 2-14) illustrate a landscape character that was informal, irregular, and rugged. Exposed rock outcrops and seeping, steaming hot water dominated the scene. Vegetation appears to have grown where it could get a foothold. Stevens noted that some plants were added, indicating that they should enhance the naturalistic character he describes.

The extant paths in the Tufa Park that lie to the east of the Grand Promenade appear to reflect Stevens’ design intent. Although their construction dates have not been clearly established, they were in place well before 1933 when the National Park Service prepared a design for the Grand Promenade. The concrete footbridge is dated November 1913. The paths were used for strolling.

By the 1910s, NPS designers were actively involved in design decisions for Hot Springs. Their influence eventually affected the development of the entire park, and continues today. Many NPS planning and design efforts for Hot Springs have been closely aligned with Stevens’ plans while others have reflected opportunities and constraints unforeseen by Stevens. The latter have resulted in several designs related to later periods that have developed significance in their own right. Three of these designs are represented by extant landscapes within the Tufa Park. These include the Grand Promenade, the Hot Water Cascade, and Lower Tufa Terrace Trail. During the period from 1912 to 1930, major changes to Bathhouse Row provided the opportunities for the development and implementation of the new designs. As the former generation of bathhouses was replaced with new structures, the relationships between the backs of the buildings and the Mountain Sidegrounds changed, providing an opening for considering a new layout of the Mountain Sidegrounds. In 1923 the Arlington Hotel burned to the ground and was reconstructed across Fountain Street from its former location in the park. The absence of the massive building provided an opportunity for a landscaped park (Arlington Lawn) at the northern end of Bathhouse Row, and for a large open space between the Mountain Sidegrounds and Central Avenue.

Today Stevens’ Tufa Park is spatially divided by the Grand Promenade. Although the route of the Grand Promenade reflects the historic pleasure drive/service drive present during Stevens’ tenure, the alignment, width, materials, workmanship, and scale of the Grand Promenade reflect the NPS designs prepared in the 1930s. The design is described in Chapter II in the section titled: *Mountain Sidegrounds/Grand Promenade, Landscape Characteristics, 1931-1940*. In the area of the Tufa Park the implementation of the promenade alignment required extensive alterations to topography. Design drawings dated August 1934 indicate that the National Park Service planned to take advantage of the alterations, as well as the opportunity to utilize Arlington Lawn as a new entrance to the Mountain Sidegrounds (see Figures 4-21 and 4-22).

The historic drawings provide two alternative designs for an elaborate pedestrian entrance including two sets of symmetrical staircases, balustrades, landings, and elaborate spring water cascades and pools. These were to be oriented toward the intersection of Central Avenue and Fountain Street, and connected with pedestrian paths to the trails on Hot Springs Mountain (see Figure 4-19). The same drawing set includes sections and elevations of the Grand Promenade, indicating that seatwalls were to line the western edge of the promenade and planters and seatwalls were to be alternated on the eastern wall. A plan prepared in 1935 indicated that deciduous trees were to be planted at regular intervals in tree grates along the eastern side of the promenade (see Figure 4-20).

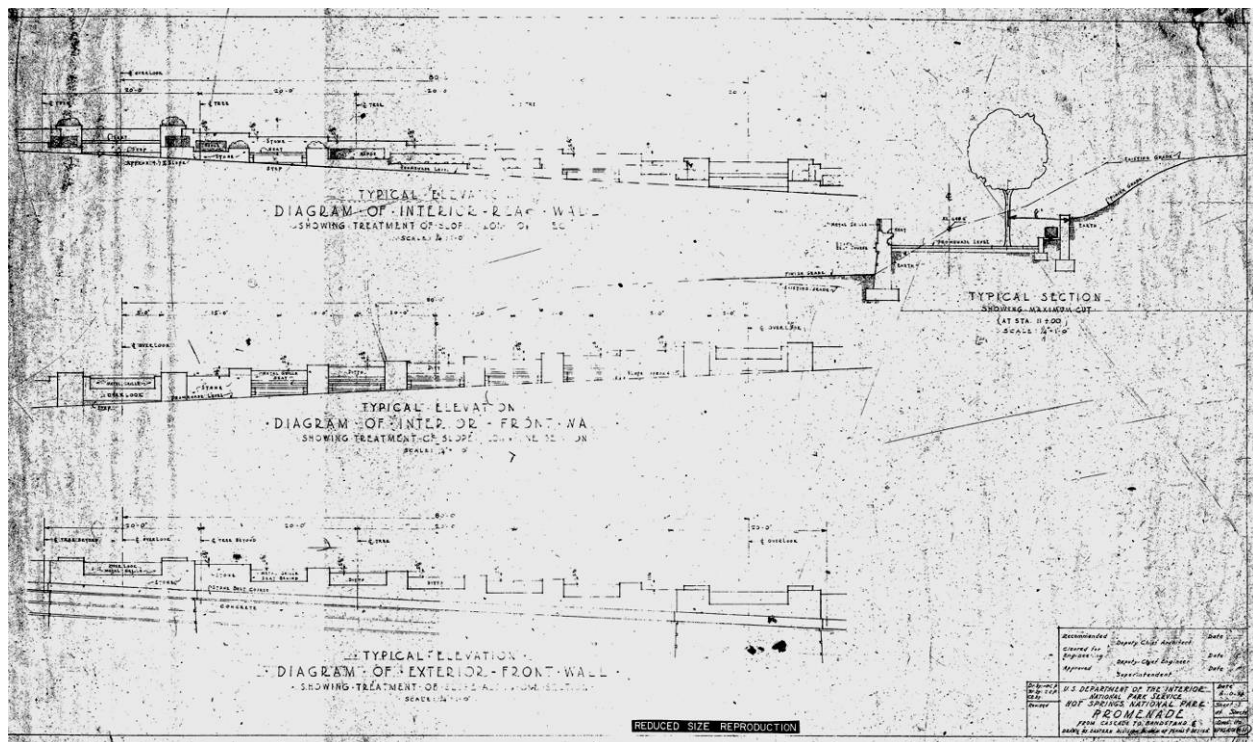


Figure 4 - 19: Seatwall design for Promenade, 1934 (source: 128-1001, page 1 of 3)

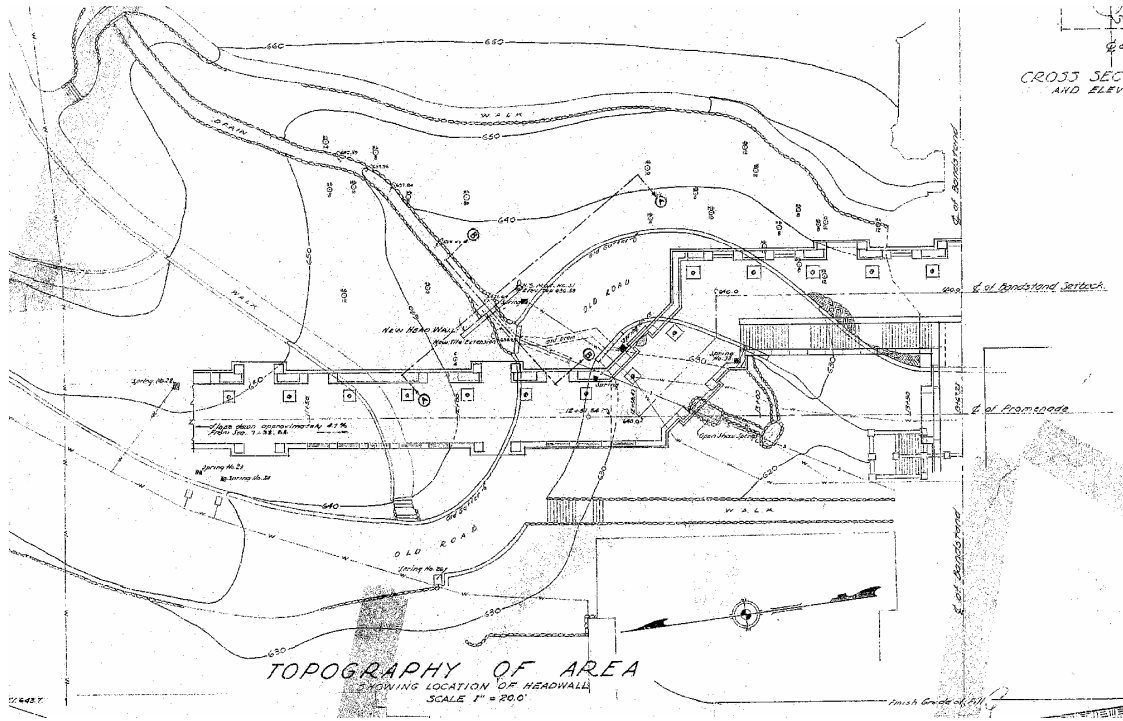


Figure 4 - 20: Plan design for Grand Promenade at Display Springs, 1935 (source: excerpt from 128-1052)

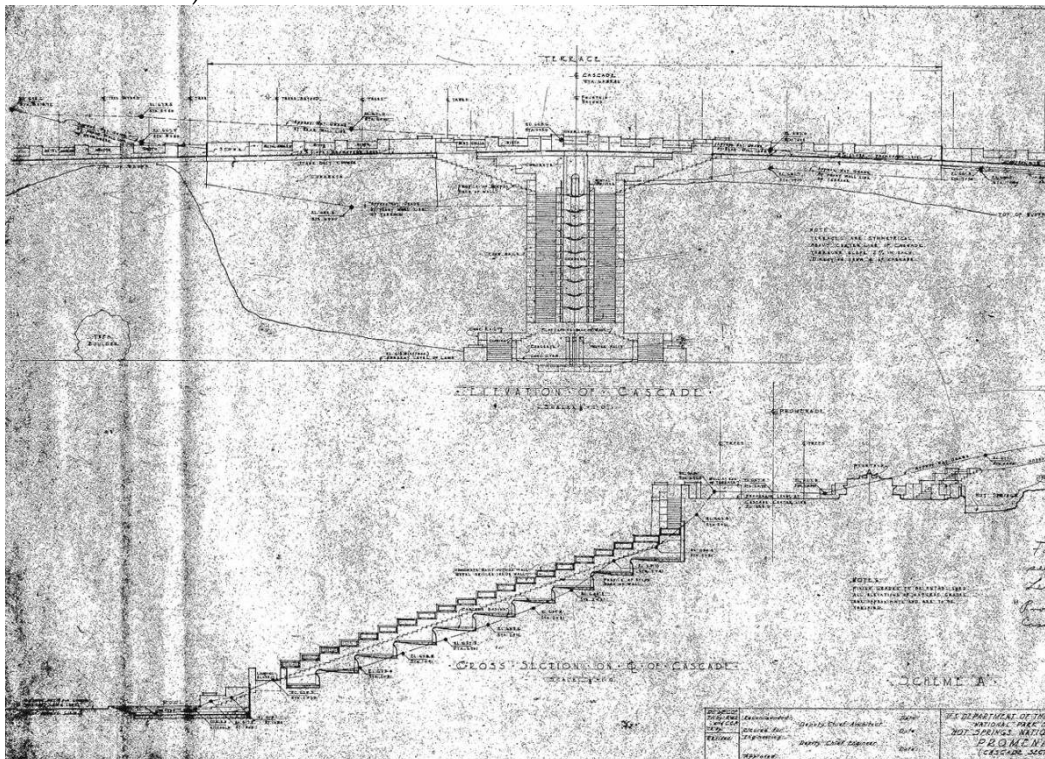


Figure 4 - 21: Scheme A, Promenade design by National Park Service, 1934 (source: 128-1001, page 2 of 3)

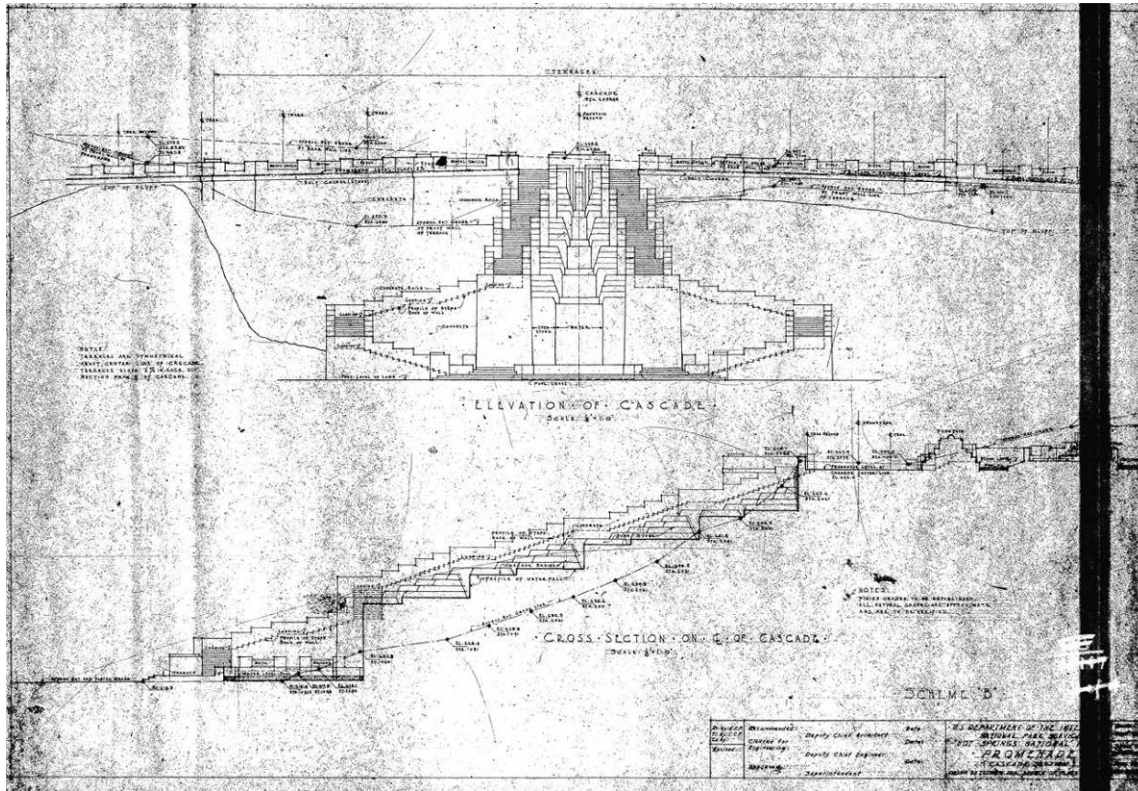


Figure 4 - 22: Scheme B, Promenade design by the National Park Service, 1934(source: 128-1001, page 3 of 3)

The portion of the Grand Promenade that extends from the Formal Entrance to Fountain Street was implemented in 1957-1958. Although the implemented promenade lacked the seatwalls, planters, and regularly spaced canopy trees indicated in the 1930s plans, the alignment followed the design developed by the NPS in the 1930s. In place of the elaborate cascade and entrance at Arlington Lawn, a simple set of steps led to a terraced lawn surrounded by shrubs and trees. In 1982 it was replaced with a more naturalistic water feature, the Hot Water Cascade. In 1989-1990, fluted concrete geometric pools were added at the cascade's base. The pools were designed by the NPS Denver Service Center Staff. A narrow winding path that leads from Arlington Lawn up the steep slope to the Grand Promenade was substituted for the formal stairways, balustrades and landings. Today, the path is referred to as the Lower Tufa Terrace Trail.

The portion of the Tufa Park indicated as the "historic character area" in Figure 4-25 retains integrity related to Stevens' design intent, as well as reflecting plans developed by the NPS during the 1930s. The "historic character area" retains integrity of location, design, setting, materials, and association, workmanship and feeling. The trails, topography, drainage features, and spring boxes combine to create a strong sense of historic character in this area. In some portions the Tufa Park, the vegetation no longer displays the naturalistic character present historically. Portions of the park contain sparse turf and formally pruned shrubs. In addition, many of the rock outcrops present historically were removed during grading for various projects or have been hidden by turf and vegetation.

Within the Tufa Park, the Grand Promenade retains integrity of location, design, materials, and association related to the NPS designs developed during the 1930s. Although the implementation of the design did not include the seat walls, planters, or trees indicated in the 1930s design, the alignment and general character of the promenade is consistent with the earlier design. The plazas and seating areas adjacent to the Grand Promenade do not reflect the 1930s design intent to create a major entry and overlook above the Arlington Lawn. Although the bench pads reflect the concept of providing seating opportunities along the route, they are not arranged in a pattern that creates a rhythm or symmetry indicated in the 1930s design, and therefore they are non-contributing features. The use of mortar throughout the promenade does not seem consistent with the 1930s design intent – which was evident in the original construction of the dry-laid pavement in the South Park.

"The tufa park forms the last of these special grounds. As the ground recedes to the northward from the main entrance the hot water formation stands out more upon the mountain, and at one section the rock shown unbroken hot-water deposit. The upper portion of this ground is entirely of exposed tufa, the surface having a slightly rounded form and moderate incline. It is left mainly as a tufa park to show the natural features of the hot-water deposit. Some planting of the ground in shrubbery and grass has been made and has shown good results, unexpectedly, considering an existing impression that the tufa soil is not favorable to vegetation. In this park is located the upper reservoir and the highest group of hot-water springs. The springs bordering the drive have been arched with white rustic stone, and are finished around with planting of vines and shrubbery. This vicinity is the northern limit of the outcropping tufa."

Robert F. Stevens, 1894

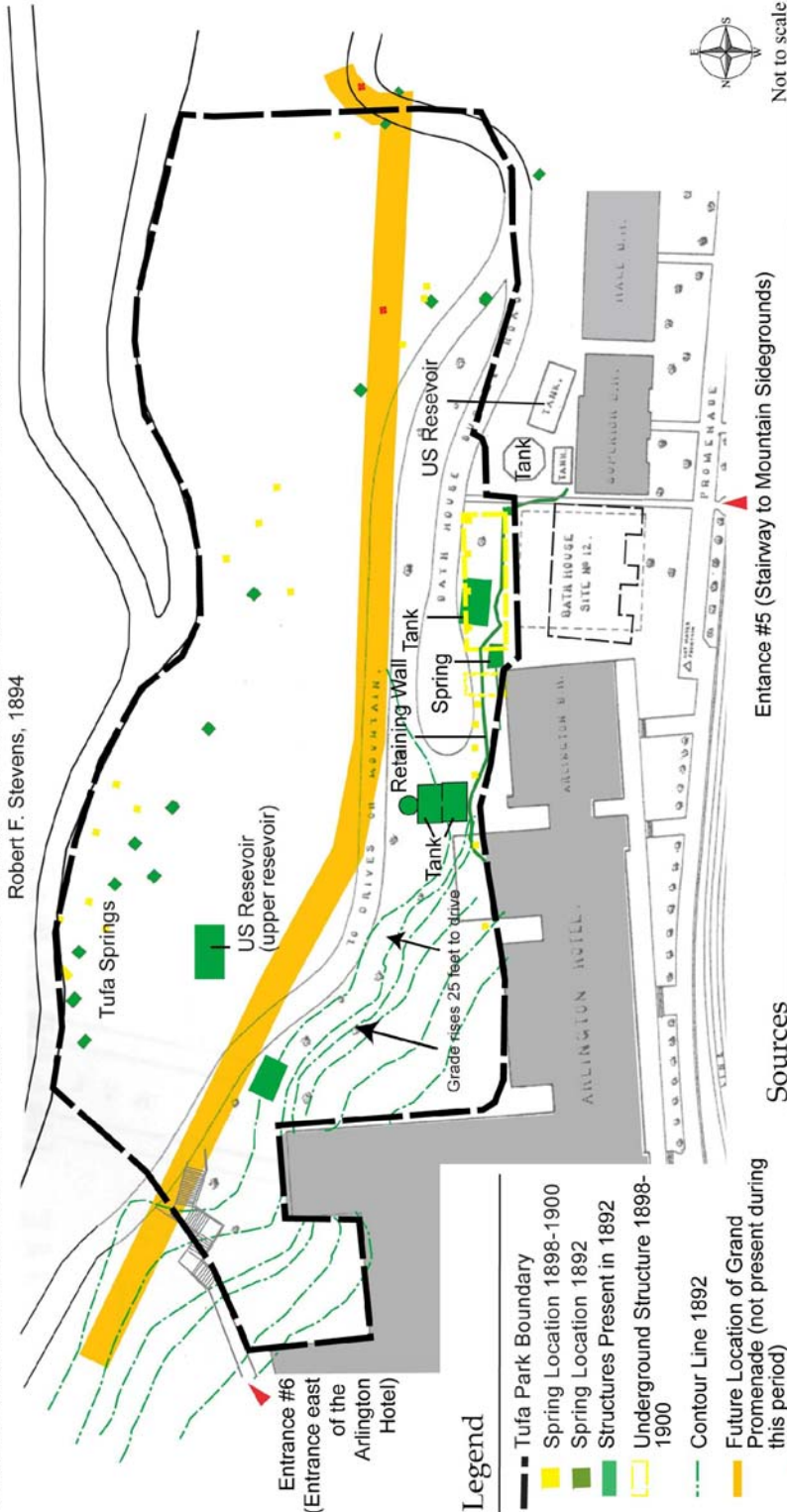


Figure 4 - 23: Tufa Park: Stevens' Original Intent

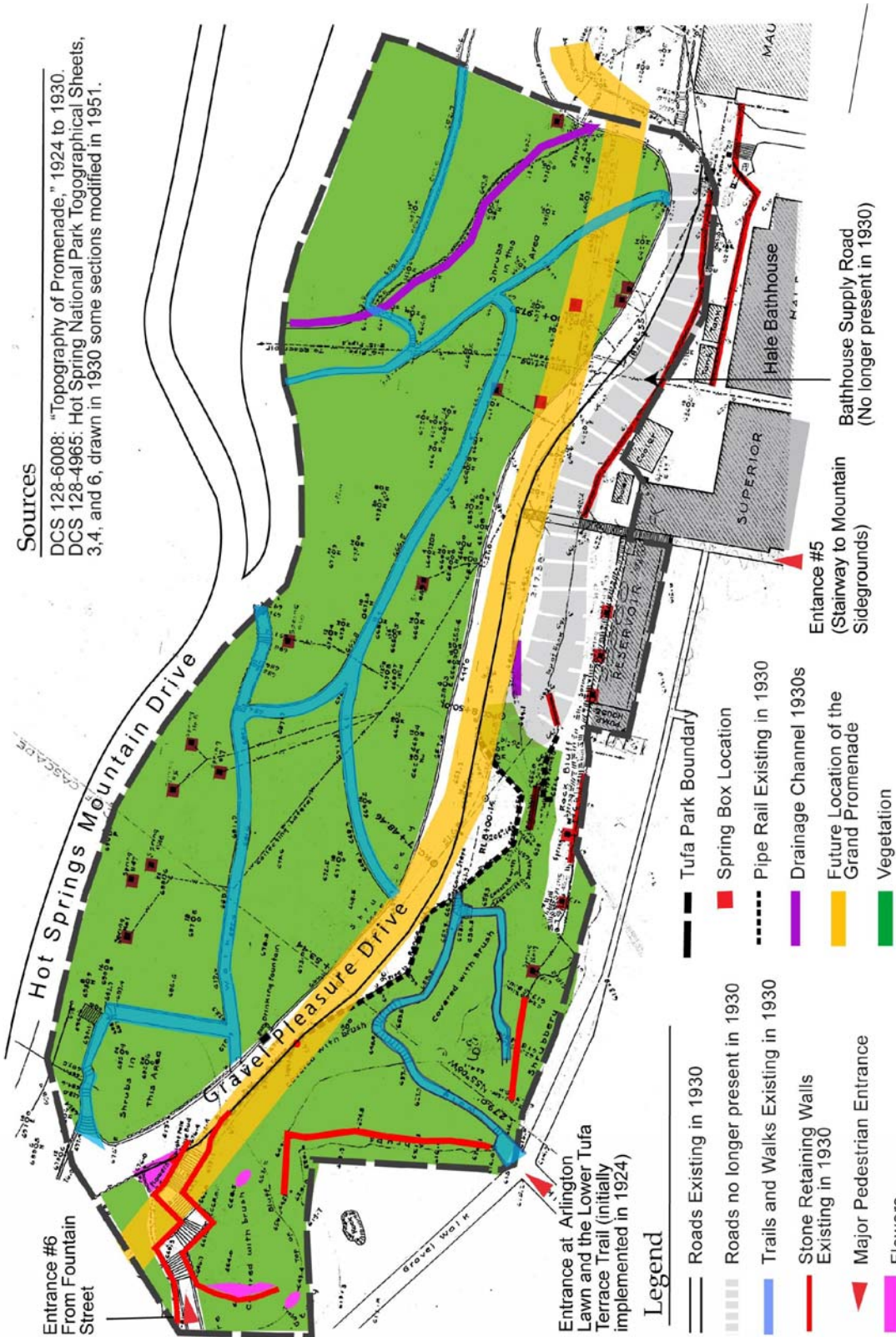


Figure 4 - 24: Tufa Park: 1930s

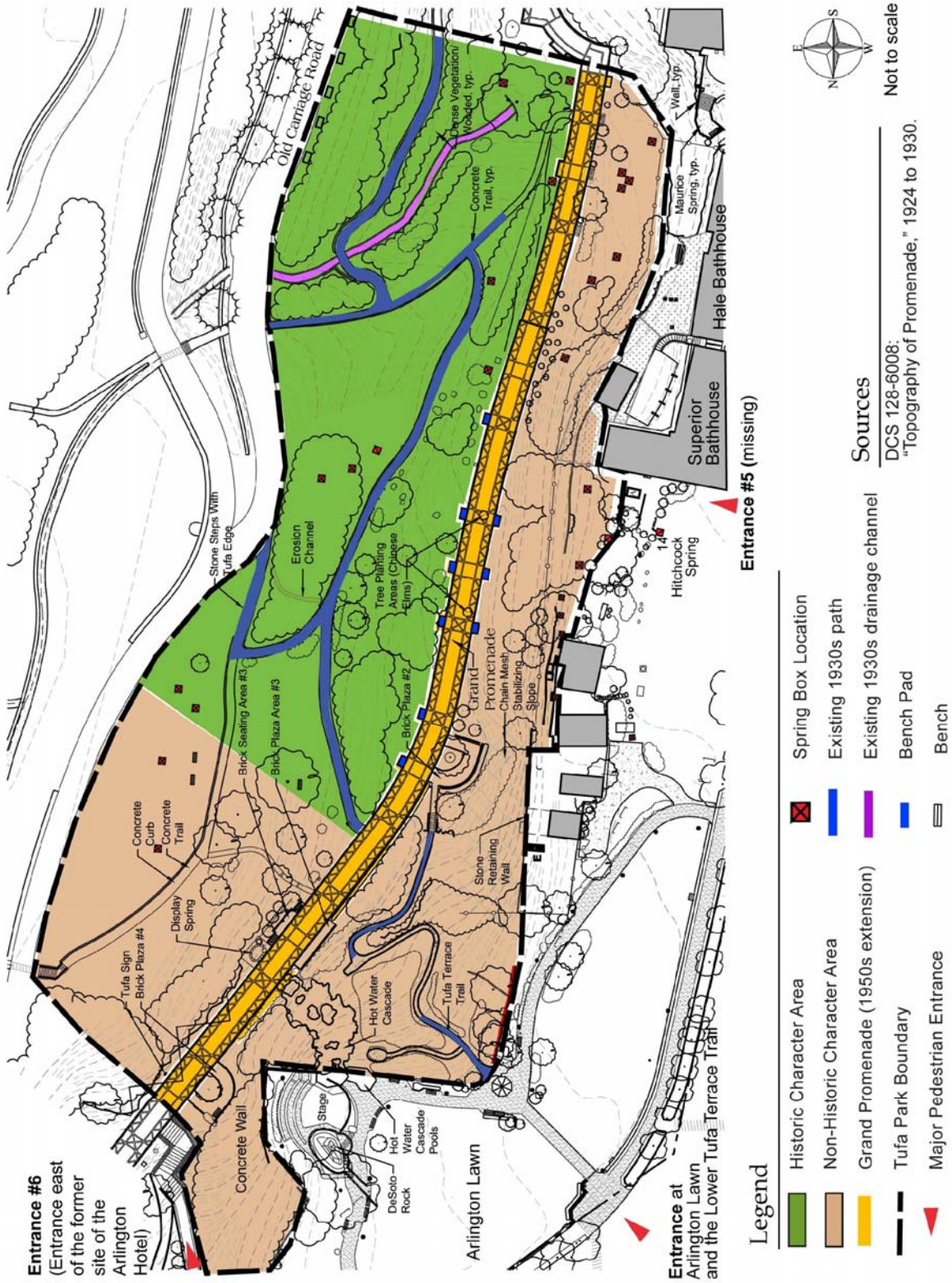


Figure 4 - 25: Tufa Park: Existing Conditions Analysis

Table 4-5: Small Scale Features Tufa Park

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Stone drainage channel Tufa Park	3-134	Contributing	Constructed by the 1930s reflecting the rugged character described by Stevens and the 1930s NPS design.
Stone headwall in Tufa Park	3-134	Contributing	Constructed by the 1930s reflecting the rugged character described by Stevens and the 1930s NPS design.
Concrete paths and stone edges		Contributing	Reflects the 1930s NPS design intent.
Stone retaining wall and culvert in Tufa Park	3-134	Contributing	Constructed by the 1930s reflecting the rugged character described by Stevens and the 1930s NPS design.
Brick steps with stone edge walls	3-135	Non-contributing steps, edge walls are contributing	The bricks on the steps are not the same as those on the promenade. The walls may reflect the design for this area prepared in 1935.
Two circular Tree planting areas	3-136	Non-contributing, impacting	The planting areas are not aligned with the paving pattern of the promenade.
Brick Plaza #2	3-137	Non-contributing, impacting	The plaza does not relate to the historic design of the promenade.
Brick Plaza #3	3-138	Non-contributing, impacting	The plaza does not relate to the historic design of the promenade.
Lower Tufa Terrace Trail	3-156	Non-contributing, compatible	The Lower Tufa Terrace Trail appears to be consistent with a trail that was present during the 1940s.
Upper Tufa Terrace Trail	3-156	Contributing	Portions of the Upper Tufa Terrace Trail were implemented in the late 1890s and early 1900s. The trail reflects the rugged character described by Stevens.
Footbridge	3-156	Contributing	The concrete footbridge was constructed in November 1913 and reflects the rugged character described by Stevens.
Brick Seating Area #3	3-139	Non-contributing, impacting	The seating area does not relate to the historic design of the promenade.
Tufa Cascade Pool/Hot Water Display Spring	3-140	Non-contributing, compatible (fence is non-contributing, non-comp)	Implemented in the 1980s, the feature reflects Stevens' design intent for the Tufa Park.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Thermal Water Cascade	3-158 3-159	Non-contributing, compatible	Implemented in the 1980s, the feature reflects Stevens' design intent for the Tufa Park.
Brick Plaza #4	3-141	Non-contributing, impacting	The plaza does not relate to the historic design of the promenade.
Tufa outcrop	3-142	Contributing	The native feature reflects Stevens' design intent for the Tufa Park.
Tufa sign	3-142	Non-contributing, compatible	The sign does not impact the character of the Tufa Park.

Landscape Analysis - Wooded Park

Boundaries of the Wooded Park

The Wooded Park consists of the portion of the Mountain Sidegrounds that lies to the north of the Tufa Park and Arlington Lawn, east of Fountain Street and south and west of Hot Springs Mountain Road (see Figures 4-26 through 4-28 for the Wooded Park boundary).

Description and Analysis of Integrity of the Wooded Park

The Wooded Park was described by Stevens as being “*finished as a wooded park, with natural walks leading, by ramps, to the main drive.*”¹⁹ In addition to the elements mentioned by Stevens, the park included the residence of the superintendent, a barn used for maintenance purposes, and the Pagoda Spring Pavilion (also known as the Cold Spring Pavilion). The landscape around the buildings contained lawn and ornamental plants by the 1890s. In addition, a driveway led from Fountain Street to the residence and another led from the bathhouse supply road to the barn. Also, a sidewalk led from Fountain Street to the entrance of the residence. Several retaining walls were in place to accommodate the buildings, driveways, paths and sidewalks in this steeply sloped portion of the park. The natural walks indicated by Stevens included two leading from the Pagoda Spring Pavilion. One led to Hot Springs Mountain Road, and the second led to the gravel pleasure drive. The Arlington Hotel served as a distinct boundary to the Wooded Park until 1923 when it burned and Arlington Lawn was developed as a park.

In the 1920s and 1930s the main features of the Wooded Park continued to be the wooded slope, trails, sidewalks, buildings and a plant nursery (see Figure 4-27). The barn had been expanded to create a larger maintenance facility, referred to as “shops” on plans. A small building near the shop is shown on plans labeled alternately as a paint shop and a house. A greenhouse was destroyed in the 1923 Arlington Hotel fire then replaced within the year with a new one. Eventually the area contained three greenhouses, and the slope was terraced to serve as a plant nursery. The location of one greenhouse is indicated in Figure 4-27. The exact locations of the other greenhouses have not been verified, but they were located near the park barn. A sidewalk was added between entrance six leading to the southwest side of the assistant superintendent’s residence, and the area southwest of the Pagoda Spring Pavilion (Fountain Street Pavilion) was used for a horseshoe court and flower garden. By 1951 a greenhouse was erected on the site of the horseshoe court.

During the 1920s, rose bushes were planted in the area surrounding the superintendent’s residence, and elms, hackberrys and maples were planted along Fountain Street in the lawn border. A stone drainage channel was installed between Hot Springs Mountain Road and the Pagoda Spring Pavilion. Trails were in place between Fountain Street and the steep curve at

¹⁹ Stevens, *Report of the Officer in Charge of the Hot Springs Reservation Improvements to the Secretary of the Interior*, 30 June 1894, 6.

Hot Springs Mountain Road near entrance eight, as well as from the Pagoda Spring Pavilion to the bathhouse supply road and another to Hot Springs Mountain Road.

A drawing prepared ca. 1924-1930 (128-6008A) indicates that the alignment for the Grand Promenade had been determined. The alignment is illustrated in Figures 4-26 and 4-27. In the area of the Wooded Park, the alignment was to continue in a straight line perpendicular from the center line of the entrance cascade planned for Arlington Lawn and the Tufa Park. The alignment cut through the upper steps at entrance six, through the shop (the enlarged barn was slated for removal) and intersected with a new entrance at Fountain Street, centered on the Pagoda Spring Pavilion. The intersection point of the two was to be about seventy-seven feet from the curb.

The portion of the Grand Promenade that traverses the Wooded Park was the last part to be implemented in 1958. As in the South Park and Tufa Park, the alignment of the promenade in the Wooded Park closely follows the configuration indicated in the historic plans. Today, the pedestrian plaza at the northern end of the promenade is approximately seventy-eight feet from the curb at Fountain Street, almost exactly as the plans indicated. However, the northern entrance to the promenade is not in the former location of the Pagoda Spring Pavilion as indicated on the plans. Instead, the line of the promenade was extended to intersect with Fountain Street. The intended end of the promenade is indicated by a circular plaza that includes a fountain as a focal point. From that point to the north, the promenade pavement changes from the pattern of the rest of the alignment to a simple running bond with red bricks and a cream brick soldier bond edge.

The Wooded Park retains integrity of location, design, setting, materials, feeling and association related to the 1930s National Park Service design for the Grand Promenade. With the exception of the Fountain Street entrance, the Grand Promenade installed in the 1950s utilized the alignment and paving pattern indicated in the 1930s design. The area to the east of the Grand Promenade retains the steep topography and dense wooded vegetation indicated by Stevens and inherent to the 1930s design. The area to the west of the Grand Promenade retains a pastoral quality created with the installation of the promenade in the 1950s. The trails indicated by Stevens and present in the 1930s, leading from Fountain Street to the Hot Springs Mountain trails are no longer extant, except for the Fountain Trail that is still present and being used (see Figure 4-28).

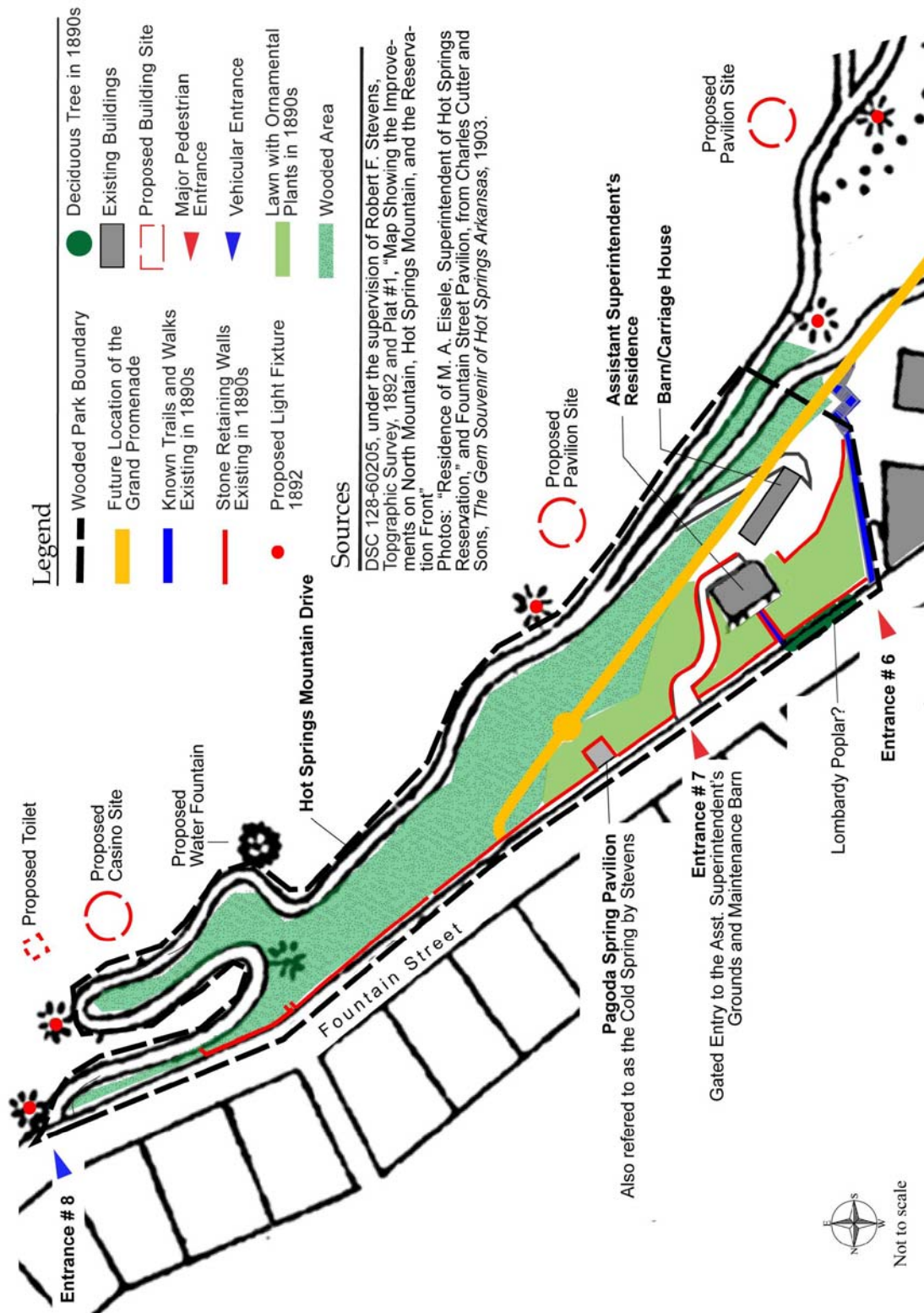


Figure 4 - 26: Wooded Park: Stevens' Original Intent

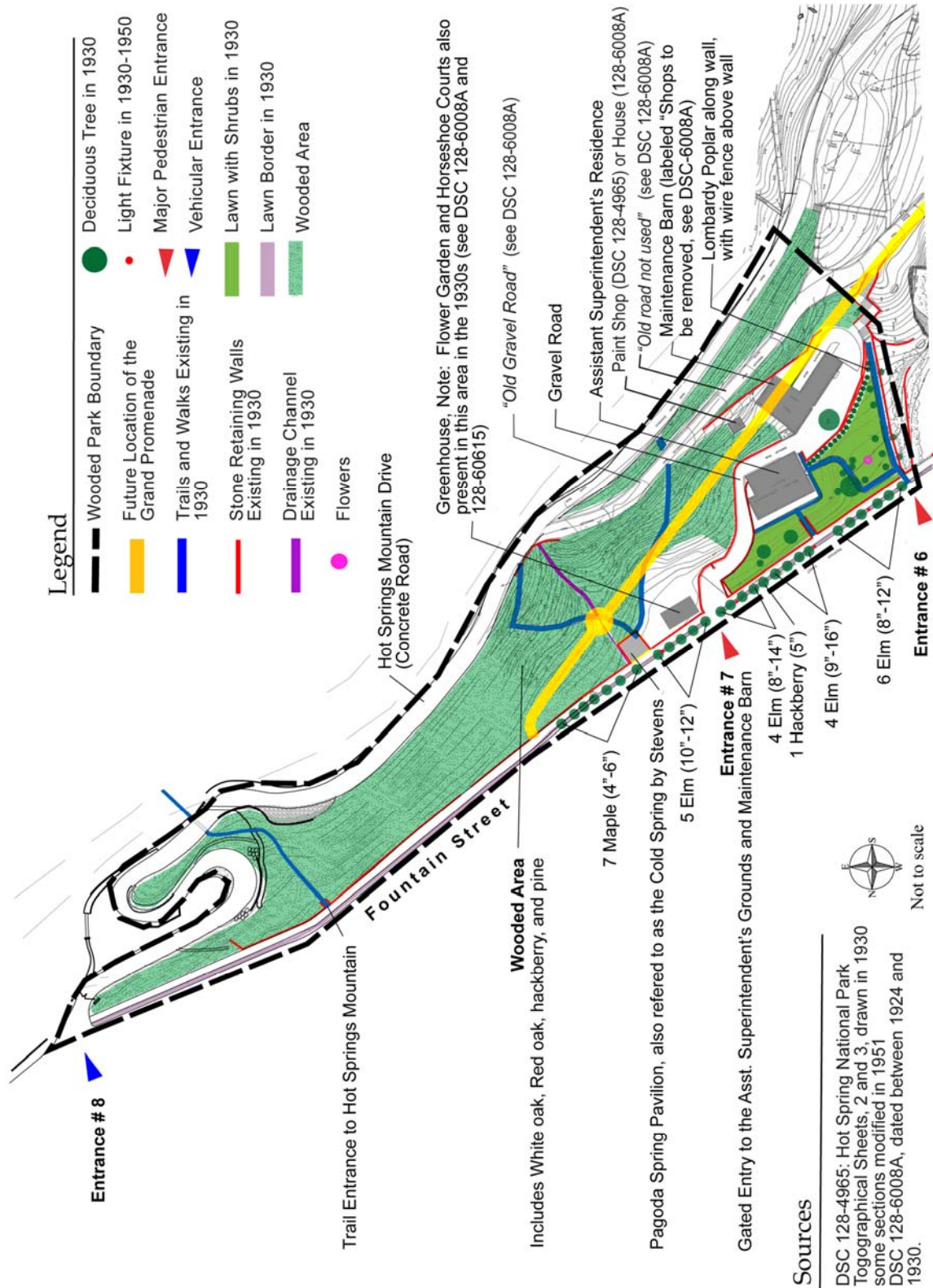


Figure 4 - 27: Wooded Park, 1930s Design



Figure 4 - 28: Wooded Park: Existing Conditions Analysis

Table 4-6: Small Scale Features Wooded Park

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Tufa outcrop	3-142	Contributing	Reflects Stevens' design intent.
Tufa sign	3-142	Non-contributing, compatible	Although not historic, the sign is not obtrusive and helps visitors understand what the natural tufa outcrops are.
Concrete Steps	3-143	Contributing	Constructed before 1892, the steps and walkway were entrance six and have served a functional role in the park since that time.
Brick Plaza #5	3-144	Non-contributing, impacting	The seating area does not relate to the historic design of the promenade.
Simple Red Brick Pavement	3-145	Non-contributing, compatible.	Constructed in 1958, this section was not part of the 1930s design for the Grand Promenade.
72" Stone Retaining Wall at entrance six	3-162	Contributing	The wall created and defined the maintenance area when the barn and shops were in this area.
36" Stone Retaining Wall	3-162	Contributing	The wall was part of the system of terraces necessary for the residence and maintenance activities in this area during Stevens' tenure and until the buildings were removed.
Stone Retaining Walls at Fountain Street Sidewalk	3-163	Contributing	Present before 1892 the walls have defined the edge of the park at Fountain Street since their construction.

Landscape Analysis - Arlington Lawn

Description and Boundaries of the Arlington Lawn

Arlington Lawn is defined on the south by the north side of the Superior Bathhouse, on the west by Central Avenue and Fountain Street, on the north by entrance six at the Wooded Park, and on the east by the base of the slope adjacent to the Tufa Park (see Figures 4-29 through 4-32).

Analysis of Integrity of the Arlington Lawn

The Arlington Lawn related to Stevens' Design Intent

Throughout its existence as a park, the Arlington Lawn landscape has been used for small and large gatherings, ceremonies, concerts, and passive recreation. The current site of the Arlington Lawn was the location of the Arlington Hotel when Lieutenant Robert Stevens developed plans for Hot Springs Reservation in the 1890s (see Figure 4-29). The hotel was the largest along Bathhouse Row, and neither Stevens' plans nor the designs by Mann and Stern (1917-1918) contemplated its removal. The massive structure dominated the intersection of Fountain Street and Central Avenue and portions of the irregularly shaped building projected into the base of the slope to the east. Several large retaining walls were constructed to accommodate the building and remnants of these are visible on the site today. It was not until the hotel burned for a third time, in 1923, that the site became available for the development of a park. The hotel was replaced in a new location—across the street—and plans for a park at the former hotel site were prepared and implemented within the year. Today, the basic structure of Arlington Lawn reflects the 1924 design, although changes were made to the park in the 1940s and 1950s, and again in the 1980s, that altered the features related to specific areas in the park.

The 1924 design took advantage of the large level space created by the hotel by transforming it into a large lawn park. The street edge features were treated as an extension of the Magnolia Promenade (see Figure 4-30). A simple lawn was defined by two sidewalks that paralleled Central Avenue and Fountain Street. For the purposes of analysis, these will be referred to as the exterior sidewalk and the interior sidewalk. The exterior sidewalk was close to the roads, and the interior sidewalk was parallel to it at the base of the slope. The wide sidewalk, lawn border and street trees that characterized the Magnolia Promenade were extended with the exterior sidewalk to the intersection of Fountain Street and Central Avenue. Beyond the juncture, the lawn border and sidewalk were reduced in width and continued along Fountain Street to the edge of Arlington Lawn at entrance six.

At the intersection of Fountain and Central, a new entrance to the park and Mountain Sidegrounds was created. The pavement was widened and extended to the curb and a sidewalk extended across the lawn intersecting with the interior sidewalk at a perpendicular angle. The intersection was slightly enlarged, and marked with four plants—one at each corner. This juncture corresponded to one of the corners of the former Arlington Hotel, marked by the enduring retaining walls (compare Figure 4-30 to Figure 4-32). The Lower Tufa Terrace Trail

was developed from this point up the steep slope to the Tufa Park (for more information, see the landscape analysis section for Tufa Park). By the 1940s the base of the Lower Tufa Terrace Trail was a semi-circular lawn with terraces rising toward the wooded slope. A stairway led up the side of it and a path continued around one of the lower terraces toward the Lower Tufa Terrace Trail (see Figure 2-189 and Figure 2-190).

The space between the largest retaining wall and the Desoto rock was utilized as an informal stage, with onlookers gathering on the nearby lawn. The slopes surrounding the eastern and northern sides of the park were enclosed by dense vegetation.

Two additional cross-sidewalks helped to further define the form of the lawn. These were also perpendicular to the two main parallel sidewalks, and were located equidistant from the northern and southern ends of the park. The far southern boundary of the park was marked by entrance five at the Superior Bathhouse.

In the 1930s, the National Park Service prepared designs for the Grand Promenade that included the creation of a major formal entrance and hot water cascade between the Mountain Sidegrounds and Arlington Lawn (for more information, see the landscape analysis for the Tufa Park). Although the design was not implemented, the concept of creating a major focal point and entrance in this location was eventually developed in a different way. In the 1980s designs were implemented that created the Hot Water Cascade and terraced lawn stage at Arlington Lawn. The interior sidewalk and north and south connecting walks were modified to be more curvilinear and hug the base of the slope. A gazebo was erected at the intersection of the crosswalk at the corner and the interior sidewalk and masses of ornamental shrubs were added along the curving walks.

When the park was originally developed, a large reservoir was situated at the base of the slope to the north of the Superior. In the 1950s additional structures were present directly north of the reservoir and it appears that the area began to serve some maintenance needs of the park. By the 1980s, four maintenance-related buildings were clustered along the base of the slope in this area. Currently, the buildings are enclosed by a chain link fence that also defines a small work area and is accessed by a service driveway that extends from the southern curve of the park sidewalk.

Today, the location, setting, and association of the Arlington Lawn clearly reflect the 1924 design for the park. Alterations made during the 1980s impacted the historic design, materials, workmanship and feeling of the landscape. Changes to the alignment of the sidewalks reduced their ability to reflect the original lawn design, with its simple spaces defined by parallel lines. The addition of non-compatible materials and workmanship, such as the fluted concrete walls and the gazebo, impact the historic feeling of the landscape.

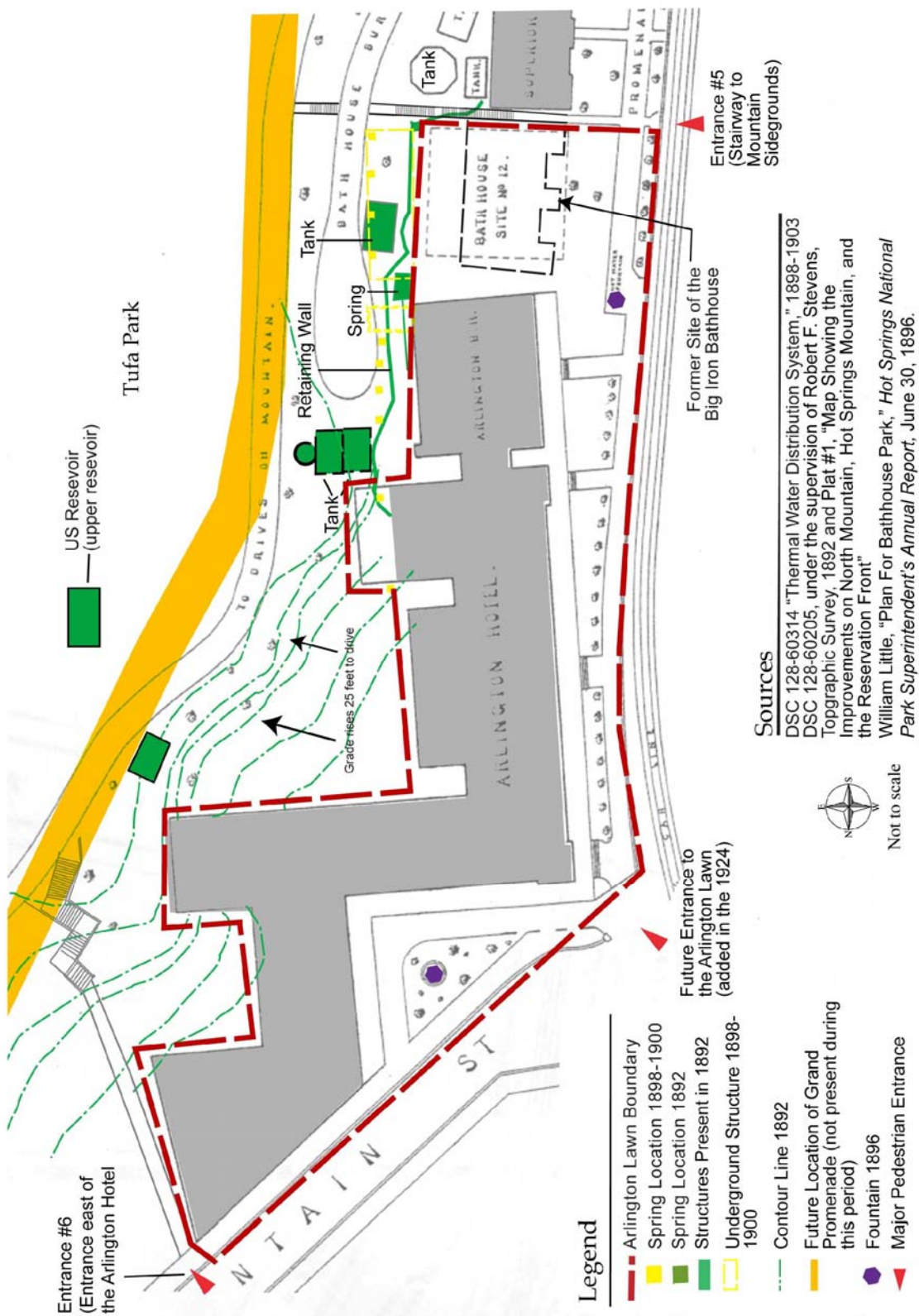


Figure 4 - 29: Arlington Lawn: Stevens' Original Intent

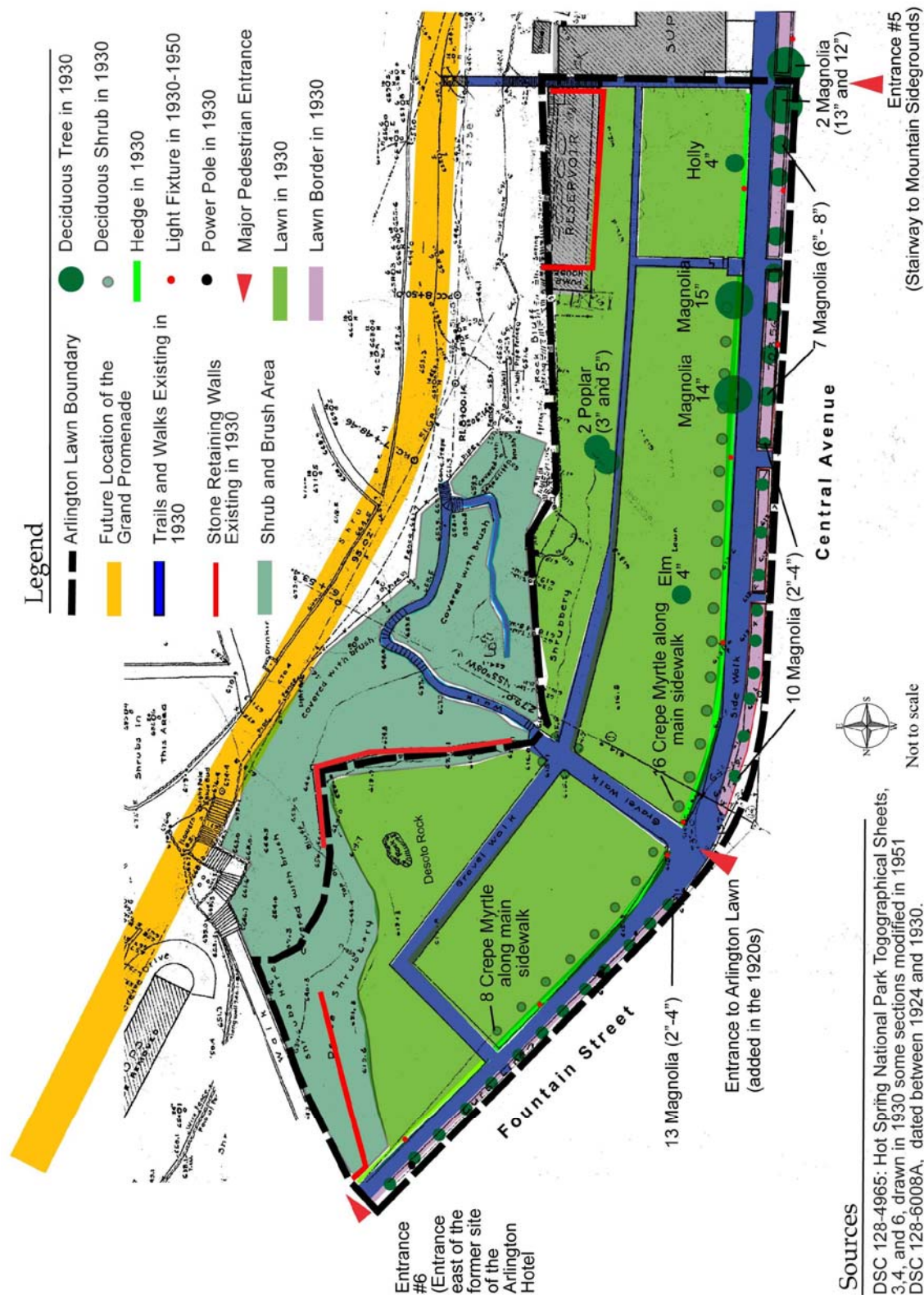


Figure 4 - 30: Arlington Lawn: 1924-1930 Design

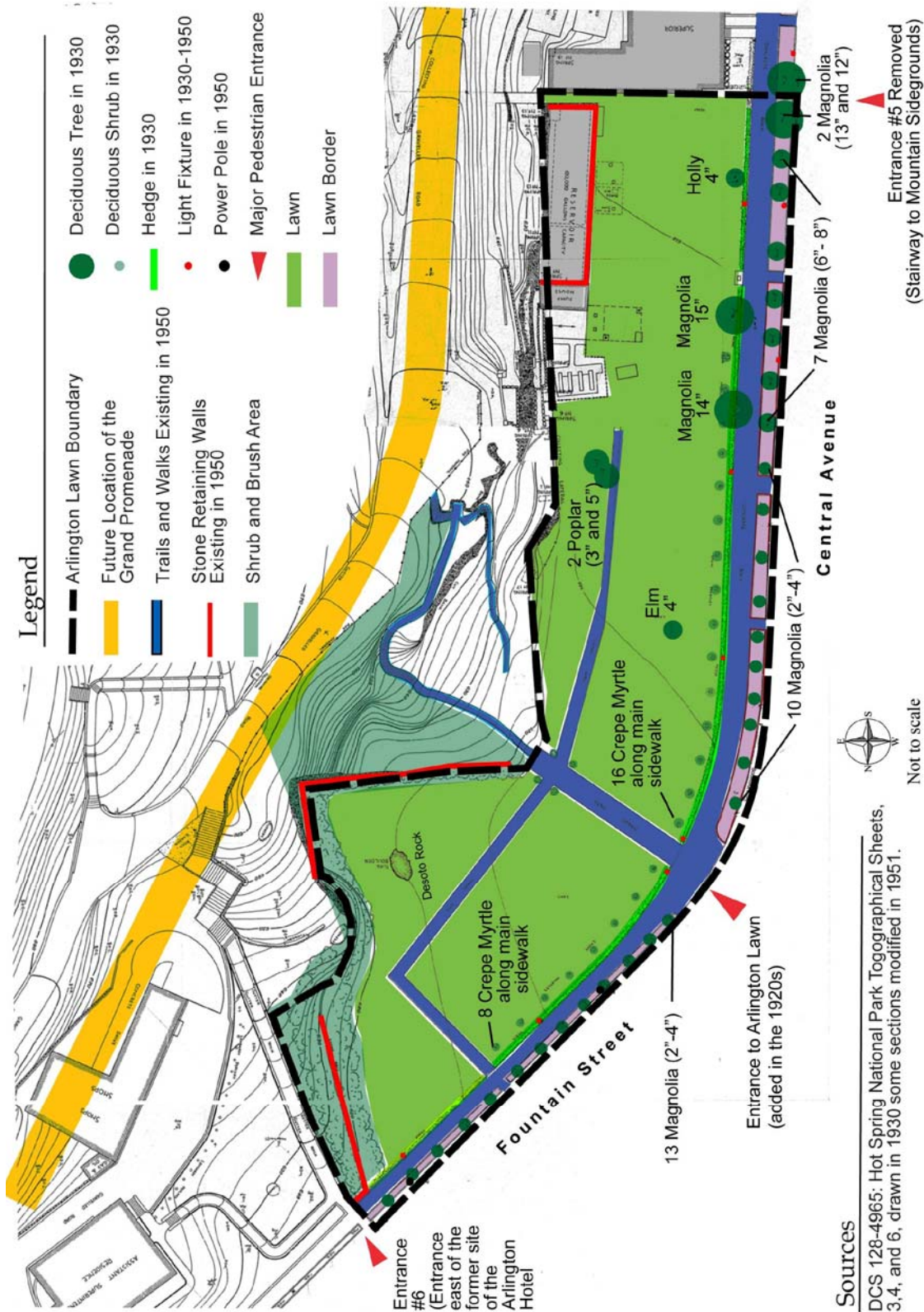


Figure 4 - 31: Arlington Lawn, 1950s Design



Figure 4 - 32: Arlington Lawn: Existing Conditions Analysis

Table 4-7: Buildings: Arlington Lawn

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Gazebo	3-38	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.
Sweeper Building	3-39 3-40	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.
Air Conditioning Fans	3-39 3-40	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.
Cool Water Exchanger Building	3-39 3-40	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.
Pump Building	3-39 3-40	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.

Table 4-8: Small Scale Features: Arlington Lawn

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Stone Wall South of the Lower Tufa Terrace Trail	3-157	Contributing	Likely to have been associated with the Arlington Hotel.
Thermal Water Cascade	3-158 3-159	Non-contributing, compatible except the fluted concrete walls that are impacting	Reflects Stevens' design intent for the Tufa Park by exposing rock outcrops and providing a hot spring water display.
Desoto Rock	3-159	Contributing	Present on the site since before the Arlington Hotel was removed.
5-Globe Light Fixtures	3-157	Located along Fountain Street and Central Avenue sidewalks; also along the walkways within the Arlington Lawn area. The globe light fixtures along Fountain Street are much older than the ones along the Lawn sidewalks.	The globe fixtures in the park lawn area are a different style. The globe fixtures along Fountain Street are not within the park boundary.
Chain mesh over rock outcrop	3-160	Non-contributing, compatible	Installed in 2001-2002. The fence is barely visible due to the vegetation that is growing over it.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Stone Rubble Retaining Wall at Arlington Lawn	3-161	Contributing	Present by 1896.
6' Mortared Stone Retaining Wall at Maintenance Area	3-164	Non-contributing, compatible	The wall cannot be seen from Arlington Lawn.
Chain link Fence at service area.	3-164	Non-contributing, impacting	Does not reflect the historic character of the area.
Two Thermal Pools	3-158 3-159 3-165	Non-contributing, impacting	The character of the fluted concrete walls distracts from the naturalistic character of the Hot Water Cascade, which is consistent with Stevens' design intent for the Tufa Park.
30' high concrete retaining wall	3-165	Contributing	The wall was built for the second Arlington Hotel in April 1916.
Terraced Stone Retaining Walls	3-158, 3-159	Non-contributing, compatible	Although constructed in 1982, the stone façade on the walls blends with the naturalistic character of the Hot Water Cascade, which it consistent with Stevens' design intent for the Tufa Park.
18" Mortared Stone Retaining Wall and turf stage	3-158	Non-contributing, compatible	Although constructed in 1982, the stone façade on the wall blends with the naturalistic character of the Hot Water Cascade, which it consistent with Stevens' design intent for the Tufa Park.
Interpretive Sign	3-167	Non-contributing, compatible	The sign interprets the history of the landscape.
Concrete Entry Wall with Sign	3-168	Non-contributing, impacting	The character of the fluted concrete walls and sign distracts from the historic character of the Magnolia Promenade and Arlington Lawn.
Wood Benches	3-158	Non-contributing, impacting	Appearance is distracting to the historic setting. Materials and style are non-compatible with historic character.
Metal trash receptacle	3-167	Non-contributing, impacting	Does not reflect the historic character of the area.
Curvilinear sidewalks	3-157	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Straight concrete sidewalk from intersection of Fountain and Central to Gazebo	3-168	Contributing	Part of the 1924 design for the park.
Lawn	3-6, 3-20	Contributing	Although changes to the sidewalk alignments have altered the spatial organization of the lawn, it continues to reflect the 1924 design for the park.
Masses of vegetation along the sidewalks	3-157	Non-contributing, impacting	Does not reflect the 1924 design and detracts from the historic character of the park.
Street trees and lawn border along Central Avenue and Fountain Street	3-6, 3-21	Contributing	Part of the 1924 design for the park.

Landscape Analysis - Mountains

Description and Boundaries

The Mountains anchor the eastern and western sides of the Reservation Front. The term “Mountains” is used herein to indicate the portion of Hot Springs National Park that includes West Mountain, Hot Springs Mountain and North Mountain (see Figure 1-1: Study Area and Landscape Components).

Analysis of Landscape Characteristics

Lieutenant Robert F. Stevens’ naturalistic design for the mountains was intended to contrast with the formal composition he was creating for Bathhouse Row, the Formal Entrance, and Whittington Park. Roads, trails, shelters, and overlooks were to supplement the amenities associated with the bathhouses, so as to develop a holistic national spa resort. As noted in Stevens’ report on 30 June 1893, the Secretary of the Interior directed him to develop plans and estimates for the “*public grounds of Hot Springs Mountain, and West and North mountains, by the construction thereon of parks, roads, walks, and other features of a health resort.*”²⁰

Stevens’ design for an interconnected roadway and trail system marked the first time that the mountains were thought of as a part of the spa experience. His interconnected roadway was comprised of several existing dirt roads and including Hot Springs Mountain Drive to which were added scenic loop sections and additional roads to take full advantage of the mountain topography.²¹ He also proposed bridal trails and pedestrian trails to enhance the mountain experience (see Figure 4-33). Stevens wanted visitors to be able to get to the high points and enjoy the beautiful views of the valley and surrounding countryside. Stevens’ original design intent as noted in his report on 30 June 1894, was to develop roads on both Hot Springs and West Mountain: “*The road plan for the reservation on each side of Hot Springs Valley is designed for a purpose beyond that of a mere ascent of the mountain. It has in view the opening up of the mountain side and extension of the means of access from one portion of the valley to the other.*”²² He indicates that improvement of the views should be achieved by thinning vegetation in selected areas: “*Vistas are cut through the trees, timber thinned to give alterations of open views and dense growth, and shrubbery and vines are planted to give effects with rocks and in recesses on the mountain side. Shelter buildings and drinking fountains are added at central or lookout points.*”²³

Documentation indicating which trails were originally intended by Stevens is limited. It is assumed that trails also followed the alignments of earlier paths and dirt roads, and that the majority of the original trails used and built during the Stevens era were on Hot Springs Mountain, extending from the Mountain Sidegrounds up the mountain. Stevens includes trails in his reports, but trails are not delineated on his plan (see Figure 4-33).

²⁰ Stevens, *Superintendent’s Annual Report, Hot Springs National Park, 1893*, 3-4.

²¹ The paving of Hot Springs Mountain Drive was not completed until 1927.

²² Stevens, *Superintendent’s Annual Report, Hot Springs National Park, 1894*, 8.

²³ Ibid.

The development in the late 1890s of roads and trails on Hot Springs and West Mountains appeared to be a success. In Superintendent Little's report on 30 June 1898 he states: *"I have uniformly stated in my reports that the roads and drives seemed to be more appreciated by the visitors than almost any other class of improvement made by the Government, the particular reason being that many of them while taking the baths and medical treatment are advised to take considerable outdoor exercise, and the means for doing this is greatly facilitated by the drives and walks over the reservations."*²⁴

By 1914 the park's trail system had become more formalized and was now an integral part of the overall health regime promoted by the spa resort. The Oertel System of Graduated Exercise was incorporated into the trail experience. Each trail was designated with a level of difficulty and labeled for trail users.

The National Park Service, established in 1916, advocated a philosophy of park design and planning ethics based on the principles of landscape preservation and harmonization. This design ethic would influence the aesthetics of the entire park, but would have its greatest influence on the character of the mountains. Between 1915 and 1926 many improvements were made to roads on Hot Springs and West mountains including the rubble stone mortared walls, rubble stone walls, and stone and concrete gutters. Trails were built including a few that followed earlier road alignments (see Figure 4-34). Other changes included improvements made to existing structures. However the major change was the construction of five new shelters and comfort stations that were built between 1924 and 1929, all designed in the naturalistic, rustic style that was characteristic of the National Park Service design philosophy at that time. The buildings were constructed from indigenous materials, local stone and timber, to minimize their intrusion on the mountain landscape.

Today, the design, location, setting, feeling, materials and workmanship of the historic landscapes associated with Hot Springs, West, and North mountains reflect the design by Stevens in the 1890s and further developed by the National Park Service between 1914 and 1930. Although some elements are present that detract from the historic character of the mountains, these are minor and do not significantly impact the overall integrity of the landscapes (see Figures 4-36). The overall arrangement of the roads on the mountains is consistent with Stevens' design intent. The materials and workmanship of the mountain features including roads, walks, and buildings reflect the National Park Service design aesthetic. Pleasure drives continue to circle the mountains and ascend to the high points with views of the valley. Most of the roads currently on Hot Springs Mountain were developed by 1925. Some of the original roads have been converted to trails. The Arlington Trail was a road prior to the construction of the Arlington Hotel in its current location. The original road alignment for West Mountain changed dramatically from the original design due to erosion problems experienced during construction. A portion of the existing Oak Trail was originally a road. One access point to the trail from Exchange Street closed. The trail access from the downtown area is located off of Central Avenue. The Arlington Trail and the Dogwood Trail (Lower Loop) were original roads on Hot Springs Mountain. Portions of the roads within Stevens' original design intent were never built.

²⁴ Little, *Superintendent's Annual Report, Hot Springs National Park, 1898*.

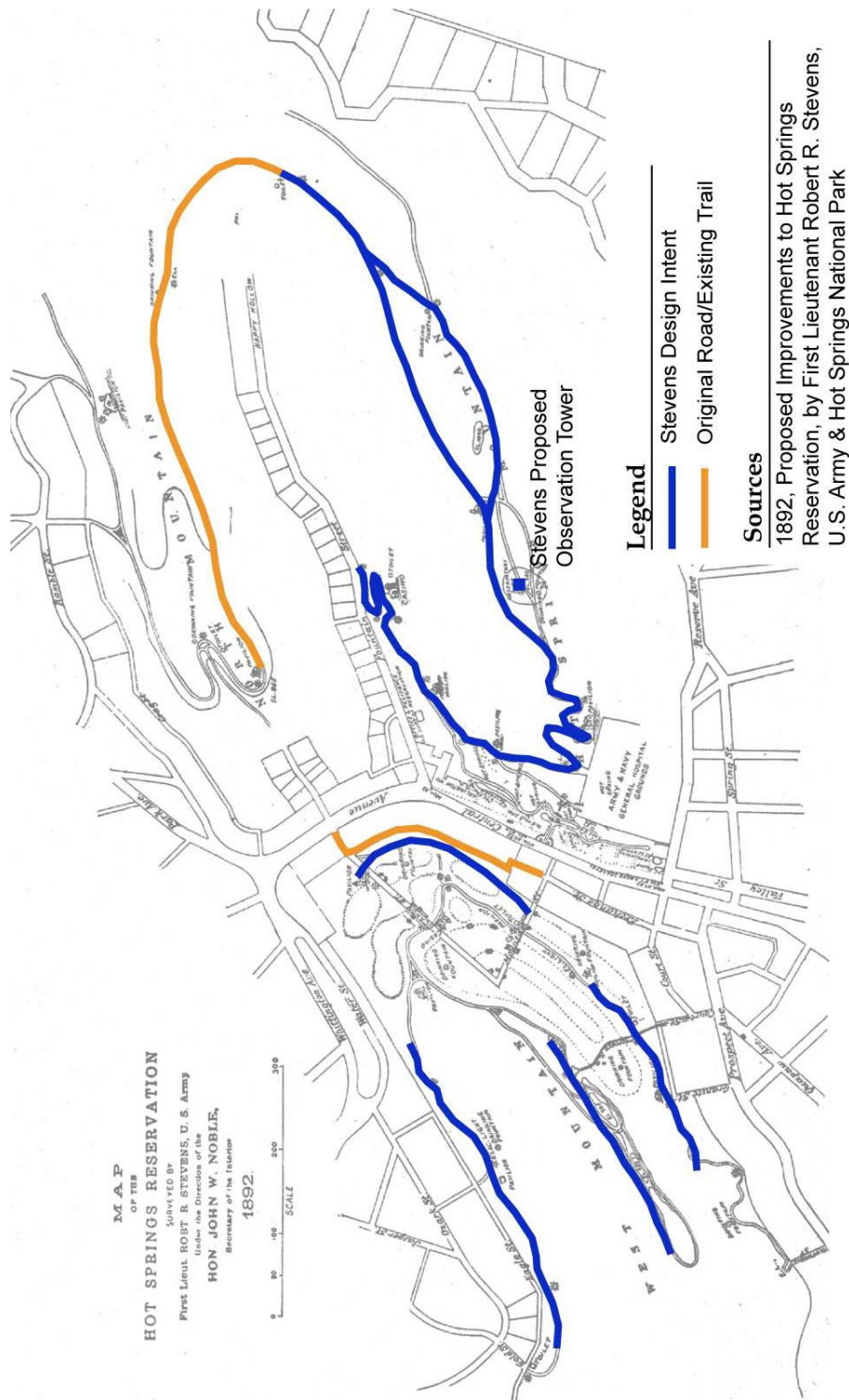


Figure 4 - 33: Mountains: Original Intent/Stevens

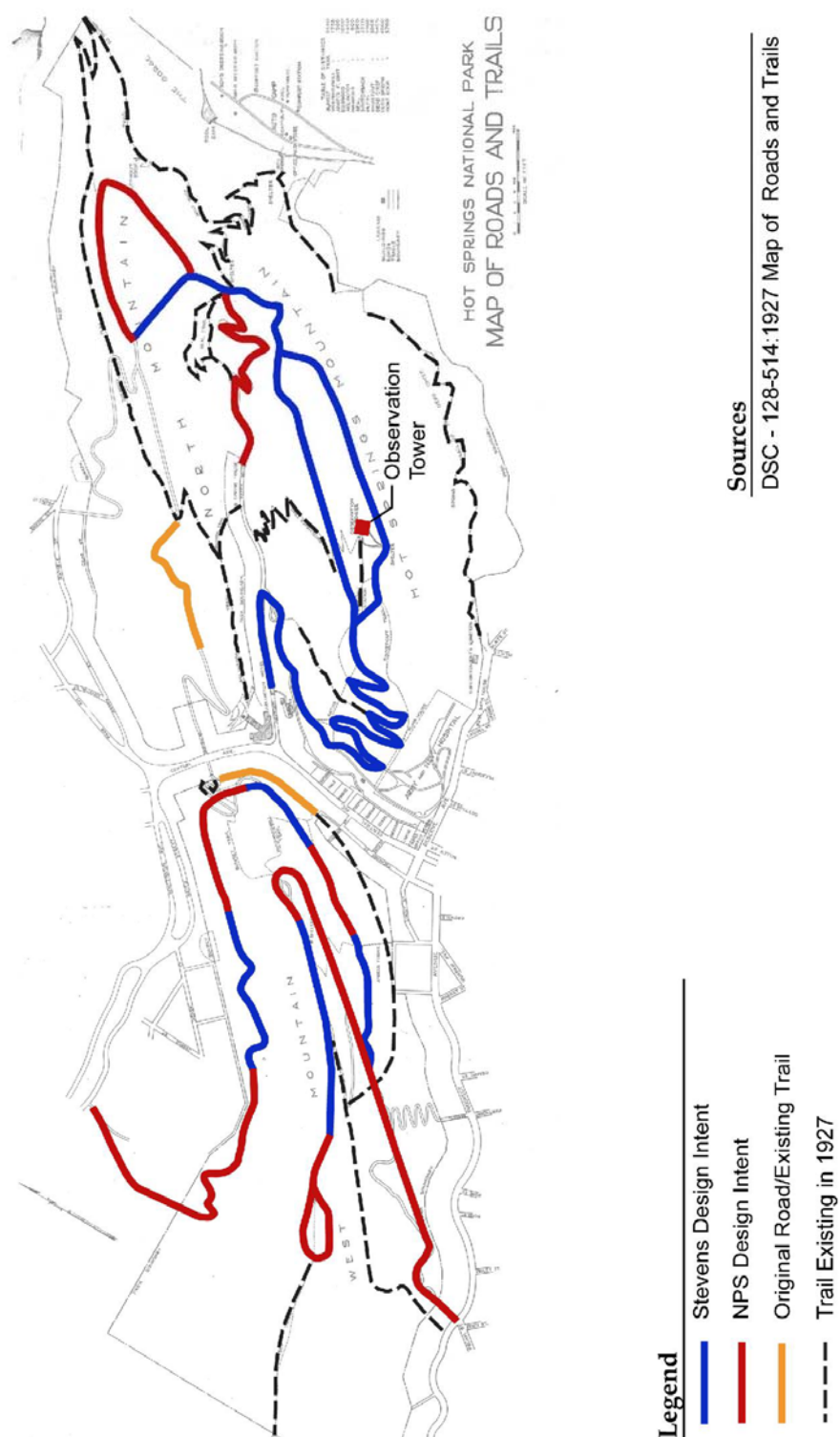


Figure 4 - 34: Mountains: 1927

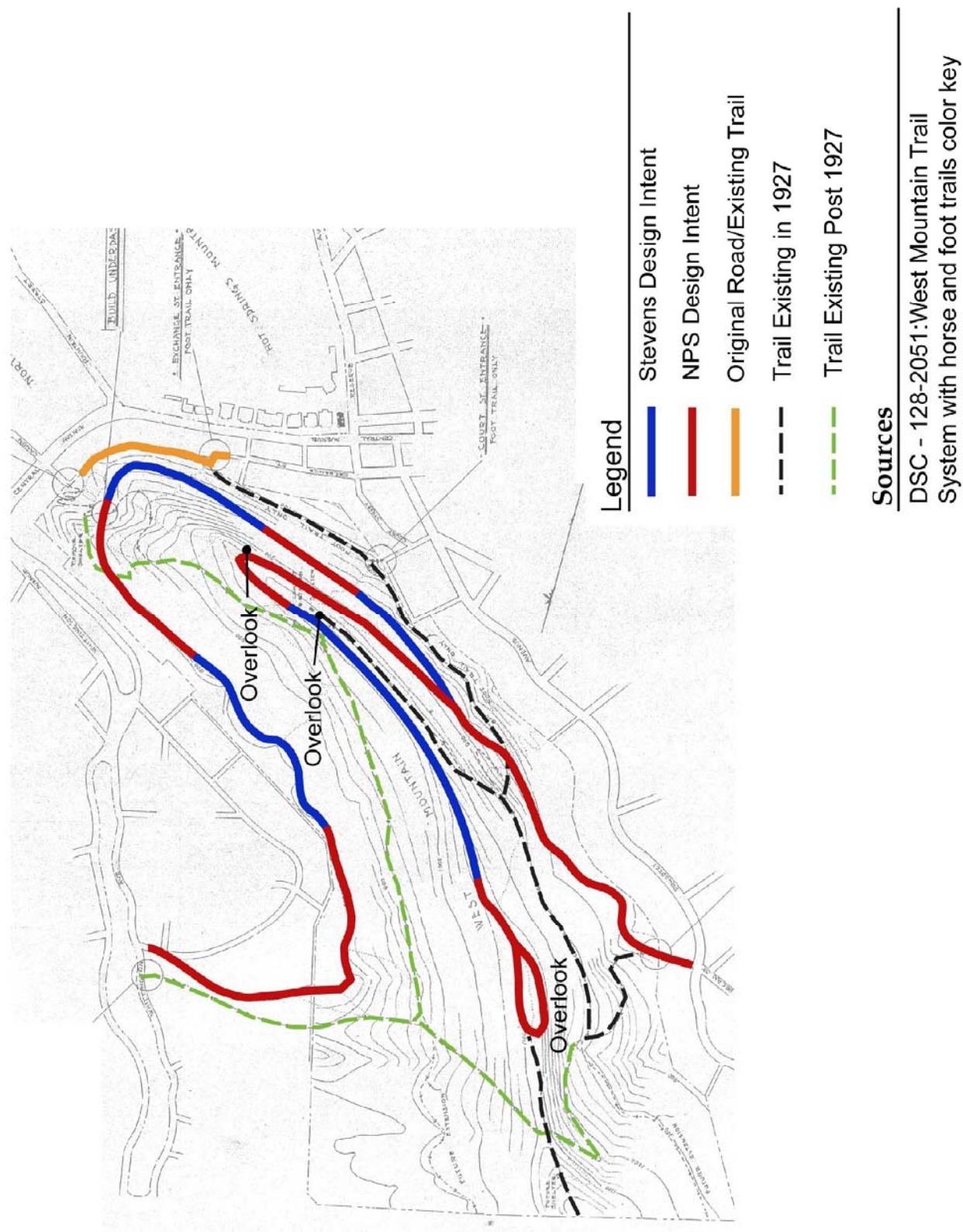


Figure 4 - 35: Mountains: 1938

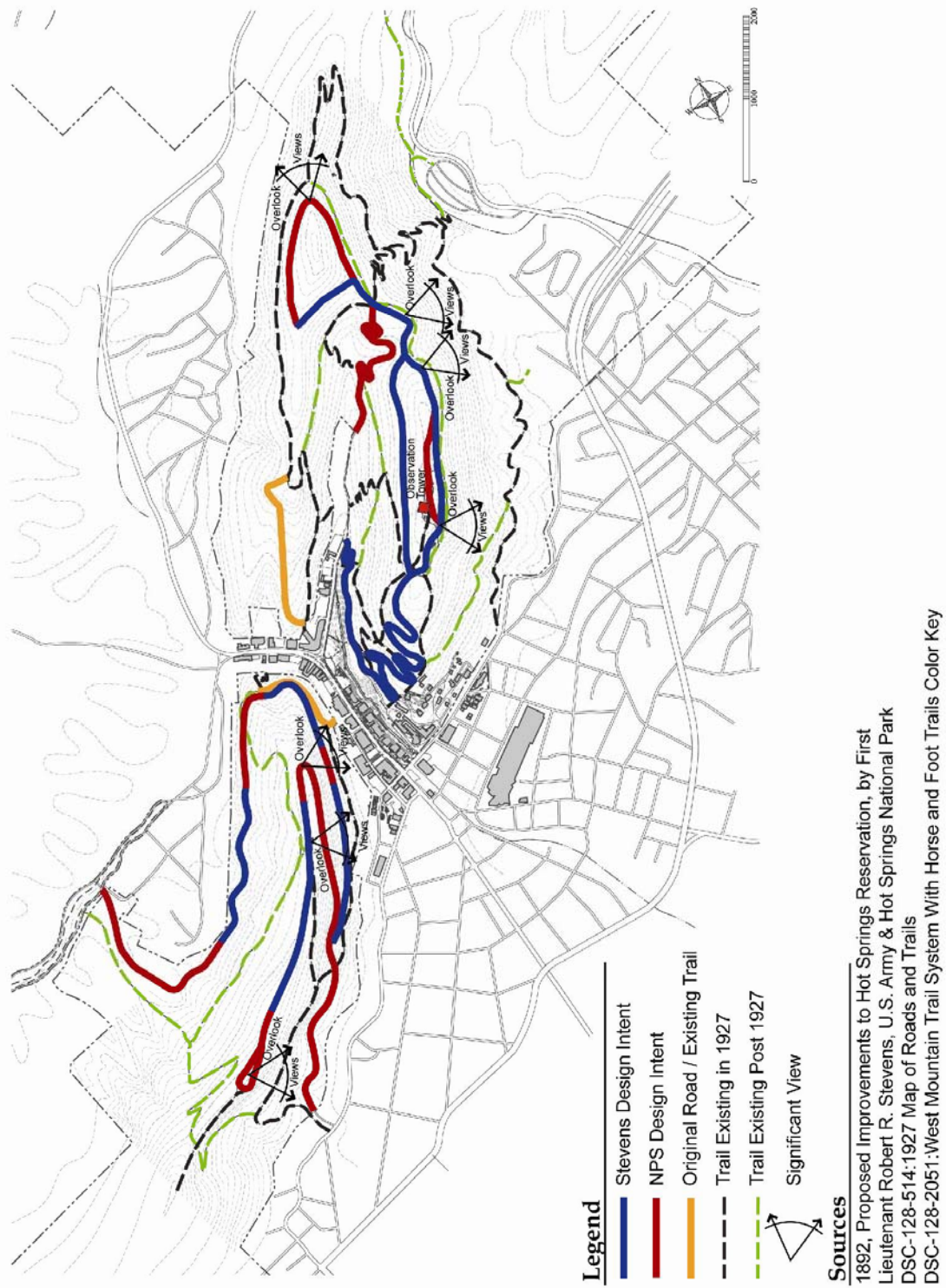


Figure 4 - 36: Mountains: Existing Conditions Analysis

Table 4-9: Buildings: Mountains

<i>Building</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
West Mountain			
Stone Shelter on West Mountain	3-47	Contributing	West Mountain stone and timber shelter is shown in this location in the mid 1920's. The structure appears to have been built in 1924.
Hot Springs Mountain			
Comfort Station at picnic area	3-41	Non-contributing, impacting	Materials and workmanship do not reflect the historic character.
Pagoda Pavilion	3-42	Contributing	Reflects historic design.
Gulpha Gorge Campground Trail Shelter	3-43	Contributing	Reflects historic design.
Hot Springs Mountain Tower	3-44 3-45	Non-contributing, compatible	Constructed of steel in a modernistic style, the tower is clearly visible from long distances. An observation tower has been part of the Hot Springs Mountain experience throughout the history of the park. Therefore, the function is appropriate, but the physical appearance of the current tower is not ideal.
Stone Utility building at Hot Springs Mountain Tower	N/A	Contributing	Reflects historic design.
Trail Shelter at intersection of the Floral and Honeysuckle trails	3-46	Contributing	Reflects historic design.

Table 4-10: Small Scale Features: Mountains

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
West Mountain			
West Mountain Roads	3-206	Contributing	Constructed in the early 1900's, the existing road layout is similar to the original Stevens' intent.
Prospect Avenue Entrance	3-206 3-207	Entrance location: Contributing Signs: Non-contributing, impacting Stone gutter/median: Contributing Crosswalk: Non-contributing	Location of original Stevens' intent. Design and materials are inconsistent with the historic character. This feature was Materials/construction consistent with historic character Materials are inconsistent with historic character.
Whittington Avenue Entrance	3-209	Entrance location: Contributing Signs: Non-contributing, impacting Stone gutter: Contributing	This entrance location is the original entrance from the 1920s. Design and material are inconsistent with the historic character. Stone gutter appears to be an original feature.
Stone Retaining Wall at Road	3-210	Contributing	These are original features from the early 1920s. Materials and style are compatible with historic character.
Mortared Stone Gutter at Road	3-211	Contributing	These are original features from the early 1920s. Materials and style are compatible with historic character.
Mortared Stone Shoulder/Gutter at Road	3-212	Contributing	These are original features from the early 1920s. Materials and style are compatible with historic character.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Concrete Inlet	3-214	Non-contributing, compatible	Distinctly different from historic features, but does not detract from the historic character.
Wood Guardrail	3-215	Non-contributing, impacting	This feature is not original. Materials and style are not compatible with historic character.
West Mountain Overlook #1	3-216 3-217 3-218	Location and Views: Contributing Stone curb, stone retaining wall, concrete walk: Contributing	Original intent to have overlooks with views of the surrounding area. Materials and style compatible with historic character.
West Mountain Overlook #2	3-219 3-220 3-221 3-222	Location and Views: Contributing Stone curb, stone retaining wall: Contributing Wrought Iron Guardrail: Non-contributing, impacting Mortared stone planters: Non-contributing, impacting Site furnishings: Non-contributing, impacting Trail access points: Contributing	Original intent to have overlooks with views of the surrounding area. Constructed in the 1920s, materials and style maintain historic character. This feature is not original. Materials and style are not compatible with historic character. Planters are not consistent with historic character. Materials and style not compatible with historic character. Trail access locations are original from the 1920s.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
West Mountain Overlook #3	3-223 3-224 3-225 3-226	<p>Location and Views: Contributing</p> <p>Parking Area: non-contributing, compatible</p> <p>Mortared stone curb, concrete walk: contributing</p> <p>Red brick paving: Non-contributing, impacting</p> <p>Mortared stone retaining wall: Contributing</p> <p>Black steel guardrail: Non-contributing, impacting</p> <p>Site furnishings: Non-contributing, impacting</p>	<p>Original intent to have overlooks with views of the surrounding area.</p> <p>This feature is distinctly different from historic features, but does not detract from the historic character.</p> <p>Constructed in the 1920s/1930s, this feature maintains the historic character.</p> <p>This feature was constructed post 1970s. Materials and style are not compatible with historic character.</p> <p>Constructed in the 1920s/1930s, this feature maintains the historic character.</p> <p>This feature was constructed post 1970s. Materials and style are not compatible with historic character.</p> <p>Materials and style detract from the historic character.</p>
West Mountain Trails	3-227 3-228 3-229	Contributing	Existing trail infrastructure completed by 1938.
Mortared Stone Retaining Wall on Oak Trail	3-230	Contributing	This feature was constructed in 1935.
Mortared Stone Bridge Culvert on Oak Trail	3-231	Contributing	This feature has been present since 1890s/early 1900's.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Mortared Stone Spillway on Oak Trail	3-232	Contributing	Built in 1890s/early 1900s.
Mortared stone gutter on Trails	2-233	Contributing	These features appear to remain from early trail construction in the 1920's/1930's.
Stone Water Bars on Trails	2-234	Non-contributing, compatible	These features are distinctly different from historic features, but do not detract from the historic character.
Mortared Stone Steps on Oak Trail	2-235	Contributing	Original to trail location
Mortared Stone Steps on Mountain Top Trail	2-229	Contributing	Constructed by the YCC, date unknown.
Trail Signs	3-236	Non-contributing, non-compatible	Material and style detract from the historic character.
Concrete Bench	3-237	Non-contributing, compatible	These features are distinctly different from historic features, but do not detract from the historic character.
Concrete gutter on Trail	3-238	Non-contributing, compatible	These features are distinctly different from historic features, but do not detract from the historic character.
Painted Pedestrian Crosswalk	3-239	Non-contributing, compatible	These features are distinctly different from historic features, but do not detract from the historic character.
Hot Springs Mountain			
Fountain Street Entrance	3-169	Contributing	
Mortared Stone Retaining Wall	3-169 3-170 3-171 3-176 3-185	Contributing	Reflect Stevens' design intent and design details prepared by NPS in the 1930s.
Mortared stone drainage channel	3-182 3-183	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Mortared stone gutter	3-171 3-174 3-175 3-176	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Mortared stone shoulder	3-201	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/Non-contributing</i>	<i>Rationale</i>
Concrete drain inlets and headwalls and Masonry drain inlets and headwalls	3-173 3-174 3-175 3-176	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Concrete Steps and Iron Railing	3-177 3-178	Contributing	Part of the historic trail system for Hot Springs Mountain. The steps are contributing, but the railings were probably added later and are compatible.
Mortared Stone Wall and Arched Culvert	3-180 3-181	Contributing	Part of the historic trail system for Hot Springs Mountain.
Mortared Stone Gutter with Concrete Extension	3-184	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Concrete Pedestrian Bridge	3-189	Contributing	Part of the historic trail system for Hot Springs Mountain.
Mortared Stone Slope and Stone Culvert	3-190 3-191	Contributing	Part of the historic trail system for Hot Springs Mountain.
Stone Retaining Wall with English Ivy	3-192 3-193	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Stone Wall with Drainage	3-194 3-195	Contributing	Reflect design details prepared by NPS in the 1920s and 1930s.
Mortared Stone Gutter at picnic area	3-198	Non-contributing, compatible	Modern detail that reflects historic materials without trying to look historic.
Stone Water Fountain	3-197	Non-contributing, compatible	Consistent with NPS design for rustic picnic areas.
Accessible Water Fountain	3-199	Non-contributing, impacting	Not consistent with historic character.
Trail Signs	3-200	Non-contributing, compatible	The simple signs do not detract from the historic character of the trails.
Stone Stairway and Path (Peak Trail)	3-202	Contributing	Part of the historic trail system for Hot Springs Mountain.
Metal Cap over Mortared Stone Drainage Channel	3-203	Non-contributing compatible	Near the Goat Rock Overlook, part of the drainage system for the overlook parking area.
Goat Rock Overlook	3-204	Contributing	Reflects design details prepared by NPS in the 1920s and 1930s.
Painted Pedestrian Crosswalk	3-205	Non-contributing, compatible	The painted lines are a safety precaution for pedestrians using the trails.

Landscape Analysis - Whittington Park

Boundaries of Whittington Park

Whittington Park is bounded on all sides by Whittington Avenue, and is located on the north side of West Mountain. Whittington Park provides the entrance into West Mountain and connects the mountain with the remainder of Hot Springs National Park.

Description and Analysis of Integrity of Whittington Park

In his final superintendent's report, filed on 15 September 1895, Lieutenant Robert Stevens officially transferred the administration of improvements at Hot Springs reservation to Superintendent Little. In the same report he explained his intent for Whittington Park to serve as one of the "*two main centers for improvements as finished parks – Hot Springs Mountain front and the lake reserve in Whittington Avenue Valley.*"²⁵ Stevens described the intent of the two proposed finished parks, Bathhouse Row and Whittington Park, as anchors for the overall design: "*The construction of two representative parks at opposite locations on the reservation...will afford a finish and balance to the entire work...*"²⁶ Figure 4 –37 illustrates the proposed park design on a drawing submitted with Superintendent Little's 1896 annual report. The figure also illustrates the existing features that remain from this original design of which the first phase of construction was built by the end of 1897.

The original park composition was a long linear park, arranged along a central axis, oriented east to west, and formed by the curvilinear alignment of Whittington Avenue. The park was divided into two equal segments by a carriage road that bisected the park. Whittington Creek created the central axis in the western half of the park. The predominate features of the eastern half were two similarly sized lakes oriented along the central axis and separated by a small formal lawn. Mortared stone walls defined the eastern and western edge of the westernmost lake, and the western edge of the easternmost lake. By 1905, the shallow lakes were filled to alleviate health concerns and were replaced by open lawns and the open channel of Whittington Creek.

Stone retaining walls were built along the creek banks in 1913, along with grading for lawns and planting of trees. Whittington Park's role in conveying stormwater was acknowledged by the 1914 construction of a major culvert that connected to the city's storm water system.

By the 1930s, the character of Whittington Park was influenced by the rustic naturalistic design style of the National Park Service, most notably with the construction of the park maintenance complex on its southern edge. Located in front of the maintenance complex, Whittington Spring was formalized for public use.

²⁵ See Chapter II, *Landscape History*, 98.

²⁶ See Chapter II, *Landscape History*, 99.

The park originally had two bandstands. The larger bandstand, located in the eastern section of the park, was removed in 1932. The smaller bandstand, located west of the existing road connection to West Mountain, was removed in 1945. The 1942 park master plan by the NPS's "landscape division" rebuilt the western portion of the Whittington Creek stone walls in a more naturalistic style of stepped boulders. The West Mountain access roads at Whittington Park (and at Prospect Street) were built in 1941 and further improved in 1958. By 1951, active recreation facilities were promoted and construction included a plant nursery and courts for croquet and shuffleboard.

Today, the majority of the park's original topography remains including the topography of the original two lakes in the eastern half of the park. The original creek channel, the stone channel walls and mature trees from the initial 1905 construction and the NPS construction remain as well. The small formal park space that originally divided the two lakes is now a vehicular road that connects the easterly and westerly branches of Whittington Avenue.

The curvilinear shape of Whittington Avenue remains, defining the spatial arrangement of the park's composition and expressing the romantic garden style of its design. The original creek channel and its stone channel walls remain, continuing to define the central axis for the entire length of the park.

Figure 4-38 illustrates the 1941 master plan showing the proposed modifications to the original 1896 design, including the original carriage road that bisected the park that was converted to a trail and the new road that was built as the entry to West Mountain. This modification changed the original two-part composition into three segments.

All of the original park structures and buildings, including the 1896 bandstand, pavilions, and tennis courts, have been removed. Trees have been planted in their place. Other park features including the wrought iron fence that originally surrounded the park and the original stone columns that defined the park entry have also been removed. Some of the plantings remain for the original park installation. Historic plantings dating over thirty years in age are located along the creek and in areas where original park features were removed. Over the past ten years, non-historic tree species have been planted by park maintenance staff (Figure 4-40).

Whittington Creek is channelized through the park, flowing through concrete and mortared stone wall sections that are original park features, built between 1905 and 1913. The western segment of the channel was reconstructed in the early 1940s as a stepped boulder wall, in the rustic style characteristic of National Park Service construction.

Three of the four concrete bridges date to the original 1896 design. A soft-surface loop trail is a characteristic feature of Whittington Park, crossing Whittington Creek at four points. The fourth crossing is thought to have been built during the early 1900s beautification project (see Figure 4-39).

A remnant topographic bench is still evident from the bridle trail that originally surrounded the park perimeter. The park's topography generally slopes inward from

Whittington Avenue on all sides to the center (Whittington Creek) of the linear park. Remnant areas of level topography exist where the original gardener's house once stood, which was replaced with the park residence. Remnants of level topography also exist where the tennis courts once stood. A small parking area was established at the south side of the park, across from Boulder Street after the original design was developed. The remnant topography of this area is still visible (see Figure 4-39).

Stevens intended for Whittington Park to be a *forest* of native trees providing large amounts of shade for visitors to rest.²⁷ The 1896 plan shows alternating open lawns and masses of vegetation (mostly trees). Today, many of the original open lawns contain trees, blurring the distinction between openings and masses throughout the park. Whittington Park has a diversity of tree species that provide an arboretum feel to the park. Many of these trees are mature, including several that are of specimen quality (see Figure 4-40).

Whittington Park retains integrity of location, design, setting, materials, workmanship, feeling and association related to both the 1896 design and the later National Park Service design. Although the architectural components of the park, including the caretaker's residence, bandstand and pavilions, have been removed, the characteristic form and arrangement of Whittington Park remains. Stevens' original intent of a *forest* character is evident in the many mature trees that remain from the initial 1896 plantings. Other historic trees, those planted during the National Park Service design era, also remain and have gained significance in their own right. The stone walls of Whittington Creek are extant, as are the concrete bridges.

²⁷ Stevens used the term forest to refer to a collection of native shade trees, rather than the contemporary definition which denotes a type of ecological system.

Following pages:

Figure 4 -37: Whittington Park: Original Intent/Stevens/Little

Figure 4 -38: Whittington Park: NPS/Stevens/Little 1941

Figure 4 - 39: Whittington Park: Existing Conditions Features Analysis

Figure 4 -40: Whittington Park: Existing Conditions Vegetation Analysis

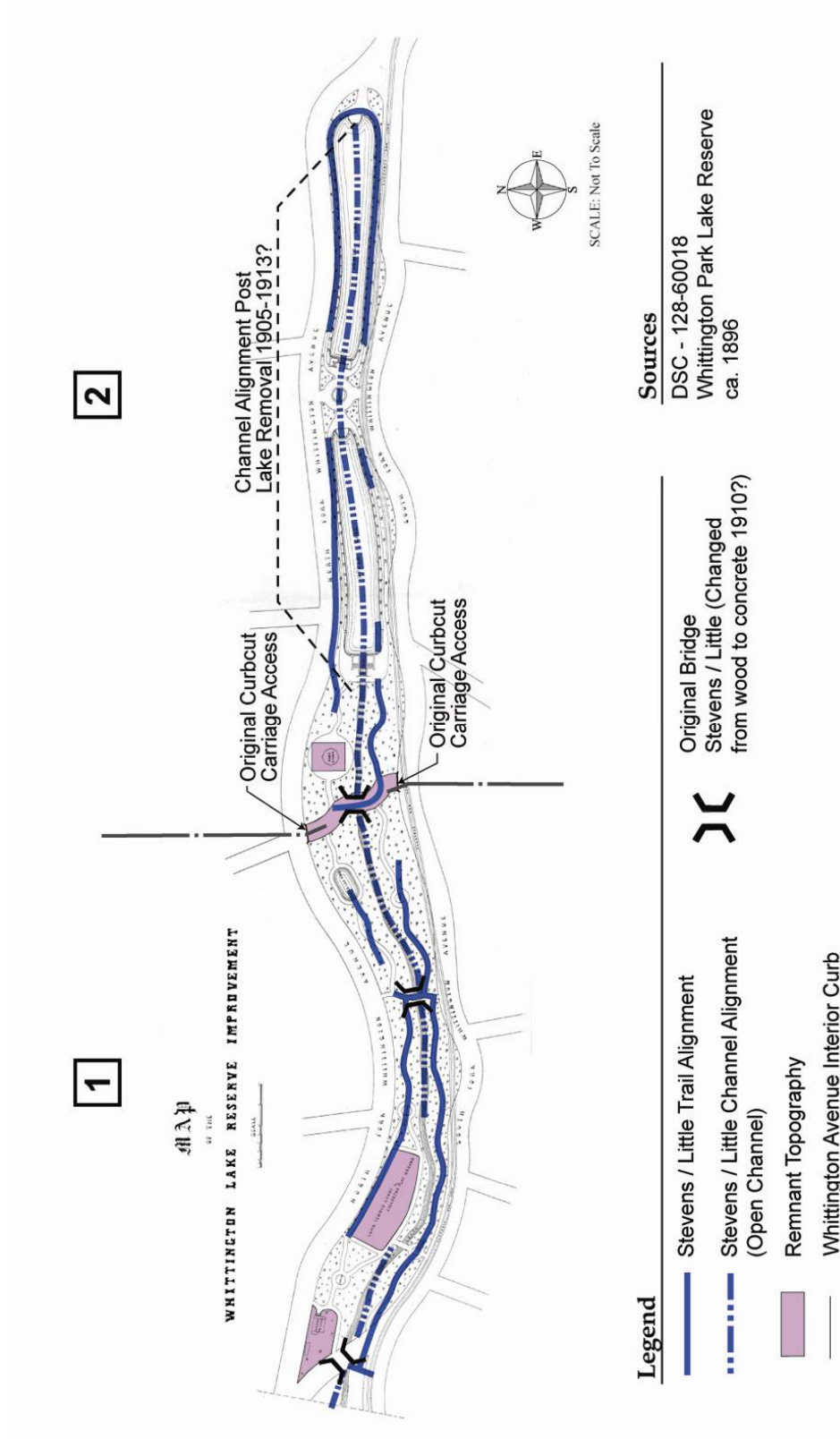
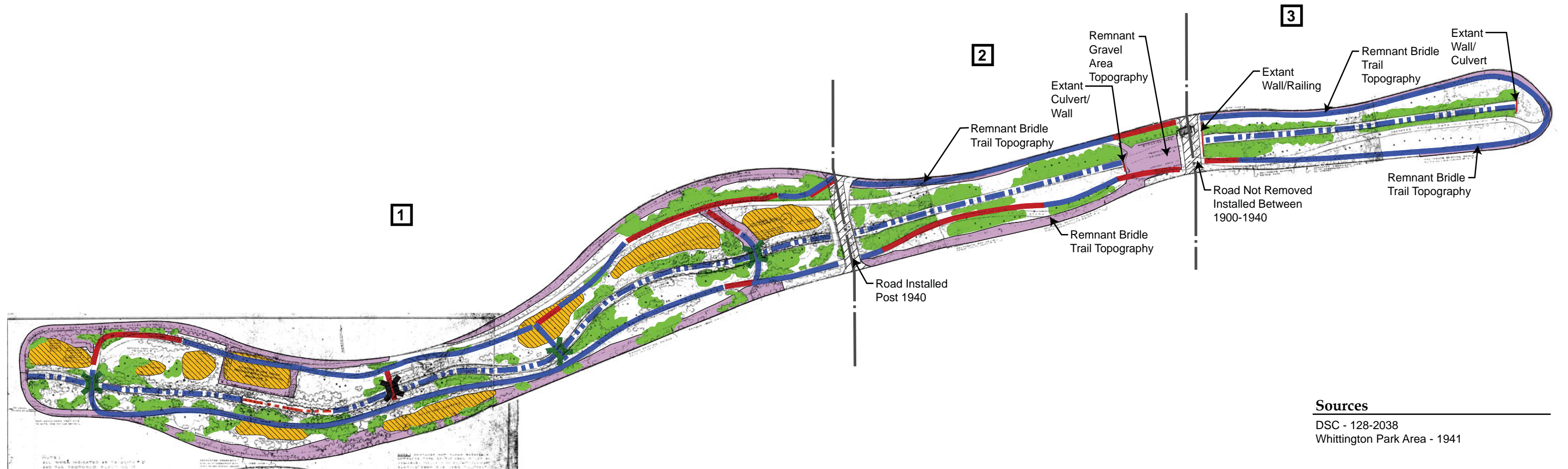
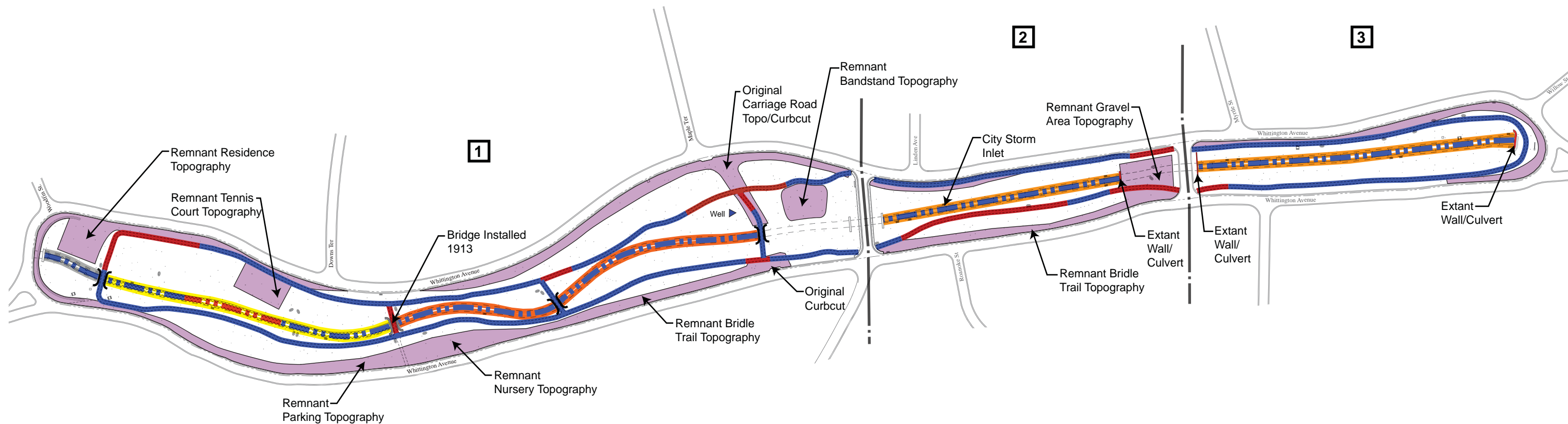


Figure 4 - 37: Whittington Park: Original Intent/Stevens/Little





Legend

	Stevens / Little Trail Alignment		Boulder Channel Wall (1940?)
	NPS Trail Alignment		Masonry Channel Wall (1913?)
	Stevens / Little Channel Alignment		Concrete Channel Wall (1898 Extant)
	NPS Channel Alignment		Original Bridge (Stevens / Little)
	Remnant Topography		Existing Bridge
	Existing Plantings		
	Well		
	Extant Feature		
	Stevens/Little Whittington Park Interior Curb		




SCALE: Not To Scale

Whittington Park: Existing Conditions Features Analysis



Legend

-  Original Plantings
-  Historic Plantings
-  Recent Plantings



SCALE: Not To Scale

Whittington Park Existing Conditions Vegetation Analysis

Cultural Landscape Report/Environmental Assessment

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Table 4-11: Small Scale Features: Whittington Park

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Channel Section One	3-240 3-241 3-242	Contributing	Original concrete retaining wall built in 1897
Channel Section Two	3-243 3-245	Contributing	Sloped boulder retaining wall built in the early 1940's, located on both sides of Whittington Creek.
Channel Section Three	3-245 3-246	Contributing	Sloped boulder retaining wall built in the early 1940's located on the north side of Whittington Creek and original concrete retaining wall built in 1897 located on the south side of Whittington Creek.
Channel Section Four	3-247 3-248 3-249 3-250	Contributing	Concrete and stone retaining wall built in the early 1900's located on both sides of Whittington Creek.
Concrete Bridge #1	2-251 3-252 3-253	Contributing	A monolithic concrete bridge built in 1910
Concrete Bridge #2	3-254 3-255 3-256	Contributing	A monolithic concrete bridge built in 1910
Concrete Bridge #3	3-257 3-258 3-259	Contributing	A monolithic concrete bridge built in 1910
Concrete Bridge #4	3-260 3-261 3-262	Contributing	A monolithic concrete bridge built in 1910
Stone Arch Culvert	3-263 3-264	Contributing	Original stone culvert built in the 1890s
Steel Culvert at West Mountain Road	3-265	Non-contributing, impacting	Steel 1900 culvert Culvert material is inconsistent with historic materials.
Stone Arch Culvert at Myrtle Street	3-266	Contributing	Original stone and mortar culvert built in the 1890s

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
Stone Arch Culvert – at East end of Park	3-267	Contributing	Original stone and mortar culvert built in the 1890s
Stone/Concrete Outfall	3-268 3-269	Contributing	Concrete/stone outfalls are original features and are integral to the storm water delivery system from the adjacent neighborhood to Whittington Creek.
Corrugated Pipe Outfall	3-270	Outfall structures are contributing , but the materials are non-contributing, impacting	Corrugated PVC pipe outfall These features have been a historic component integral to the storm water delivery system from the adjacent neighborhood to Whittington Creek.
Boulder Outfall	3-271	Contributing	Boulder outfall in the boulder channel wall are original features and are integral to the storm water delivery system from the neighborhood to Whittington Creek.
Steel Pipe Outfall	3-272	Outfall structures are contributing , the materials are non-contributing , impacting	Steel pipe outfall Original features are integral to stormwater delivery system from the neighborhood to Whittington Creek. Materials are not compatible with the historic character.
Concrete Outfall	3-272 3-274 3-275	Contributing	Concrete Inlet Original features are integral to the stormwater delivery system from adjacent neighborhood to Whittington Creek.
Soft Surface Trail	3-276 3-277	Contributing	Soft-surface loop trail is an original feature beginning in 1896.
West Mountain Road connection	3-279 3-280 3-281 3-282	Non-contributing, compatible	The connection ties Whittington Park to West Mountain.

<i>Feature</i>	<i>Figure Number</i>	<i>Contributing/ Non-contributing</i>	<i>Rationale</i>
West Mountain Directional Sign	3-283	Non-contributing, impacting	Directional sign " <i>Hot Springs National Park West Mountain.</i> " Style and materials are not compatible with the historic character.
Well	3-283	Contributing	Steel well and steel grate
Driveway Curb cut	3-284 3-285	Contributing	Original 1897 curb cut for original carriage road
Concrete Curb Inlet	3-286	Non-contributing, compatible	Concrete curb inlet with manhole Curb inlets are integral in the storm sewer system.
Myrtle Street Road Connection	3-287	Non-contributing, impacting	Road access is not compatible with the park's original design intent.
Hot Springs National Park - Whittington Park Sign	3-288	Non-contributing, impacting	Park sign " <i>Whittington Park, Hot Springs National Park</i> " Style and materials are not compatible with the historic character.
Bench on concrete pad	3-289	Non-contributing, impacting	Style and materials are not compatible with the historic character.
Trash Receptacle	3-290	Non-contributing	NPS Standard bear proof trash receptacle
Picnic Table	3-291	Non-contributing, impacting	Style and materials are not compatible with the historic character.

Chapter V: Landscape Management Philosophy and Management Issues

Chapter V: Landscape Management Philosophy and Management Issues

Management Philosophy

The publication *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* provides professional standards and guidance for treatments to cultural landscapes listed in or eligible for the National Register of Historic Places. The document defines four types of treatment for historic landscapes including preservation, restoration, reconstruction, and rehabilitation.¹ Each of the philosophies is described herein and discussed in relation to the historic landscapes of Hot Springs National Park.

Preservation

Preservation involves applying measures to sustain the *existing* form, integrity, and materials of (the contributing features of) a historic property. This approach focuses upon stabilizing and protecting extant historic resources, rather than replacing missing elements. It is appropriate when a historic property is essentially intact and does not require extensive repair or replacement; depiction at one particular period of time is not appropriate; and when continuing or new use does not require additions or alterations.² Although a preservation management approach is appropriate for portions of the Hot Springs National Park historic landscapes, it is not the most suitable overall philosophy. An overall preservation philosophy would preclude the introduction of new elements that could reduce impacts on cultural and natural resources.

Restoration

Restoration is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period in time. This includes reconstruction of missing features from the restoration period, and removal of features from all other periods. The approach can be considered only when the property's significance during a particular period of time outweighs the loss of extant elements from other historical periods; and when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned.³ Although a restoration approach can be suitably applied to select elements within the Hot Springs National Park historic landscapes, it is not the most fitting overall philosophy. The significant extant features relate to more than one historic period, adequate documentary evidence does not exist to restore the property to one period, and contemporary needs require some alterations.

¹ Birnbaum, Charles A. and Christine Capella Peters, 1996. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Washington DC: Department of the Interior, National Park Service, 3-5.

² Ibid., 17-18.

³ Ibid., 89-90.

Reconstruction

Reconstruction is the act or process of using new construction to depict a non-surviving site, landscape, building, structure, or object as it appeared at a specific period of time in its historic location. The approach is appropriate only when the property's significance during a particular period of time outweighs the potential loss of extant features that characterize other historical periods. In addition, there must be substantial physical and documentary evidence for the work, and the work must be clearly identified as a contemporary re-creation.⁴ As a whole, the Hot Springs National Park historic landscapes are not eligible for reconstruction because significant extant features relate to more than one historic period, adequate documentary evidence does not exist to reconstruct the property to one period, and contemporary needs require some alterations. A reconstruction approach can be suitably applied to select elements within the historic landscapes of Hot Springs National Park.

Rehabilitation

The act or process of rehabilitation allows repairs, alterations, and additions necessary to enable a compatible use for a property as long as the portions or features which convey the historical, cultural, or architectural values are preserved. This approach is appropriate when depiction at one particular period of time is not appropriate; repair or replacement of deteriorated features is necessary; and alterations or additions are needed for a new use.⁵

Rehabilitation has been selected as the most appropriate overall management philosophy for the historic landscapes of Hot Springs National Park. This philosophy has been selected because of the existence of features that relate to more than one type and period of significance, the need for alterations to accommodate visitor services, and the need to protect the historic resources. This philosophy will allow for preservation, restoration, and reconstruction of selected features as appropriate. Four alternative rehabilitation treatment approaches have been developed.

⁴ Ibid., 127-129.

⁵ Ibid., 47-48.

Management Issues

Management concerns for the historic landscapes of Hot Springs National Park are summarized below:

Overall Park

- Desired future conditions of the landscape need to be identified.
- The landscape needs to be sustainable within the park's limited maintenance budget. For example, the current quantity of lawn to be mown is straining the park's maintenance budget.
- It is desirable to develop greater use of the park by the local population, such as bringing in events and activities that encourage locals to come to the park for recreation.
- It is desirable to develop greater use of all of the park's landscapes by the visitors to Hot Springs National Park.
- The park needs guidance regarding the control of invasive exotic species.
- In the future, it is possible that visual intrusions, including cell towers, could be developed within the views of the park landscape, which could negatively impact the views to and from the park. The CLR should provide a statement regarding potential impacts related to cell towers.
- It is desirable to explore the use of alternative energy and other sustainable practices throughout the park. The park has a goal to be completely energy self-sufficient by 2016. Guidance is needed regarding the use of solar energy and hot water heat for major buildings and for improved insulation, weather-stripping, and other energy conservation measures.

Reservation Front

Bathhouse Row/Formal Entrance

- The park needs guidance for treatment of the Formal Entrance / Stevens Balustrade including: recommendations regarding whether or not it is appropriate to reconstruct the pavilion and recommendations for treatment of the exedra entry terrace and the walk between the Fordyce and Maurice Bathhouses.
- The park needs guidance for treatment of the area in front of the Administration Building.
- Vehicle access to the bathhouses along Central Avenue needs to be for service, drop-off and universal access. When requests are made by leasees, the park needs to be able to

provide a definitive answer about parking, drop-off, service access, and deliveries along Magnolia Row. Guidance on additional curb cuts and their possible locations is needed.

- Traffic calming is needed on Central Avenue to slow traffic and to provide a better pedestrian experience.
- The city parking structure and pedestrian route between the parking structure and Bathhouse Row are underutilized.
- The park needs guidance regarding how the landscapes of leased sites along Bathhouse Row should be managed. In particular, whether or not the park should maintain these landscapes, or make the maintenance the responsibility of the leasees.
- Leasees may want to use the roofs of the bathhouse buildings for sunbathing, which may impact the views to and from the Mountain Sidegrounds and the Grand Promenade.

Mountain Sidegrounds/Grand Promenade

- The Mountain Sidegrounds parks are no longer clearly distinguishable as significant historic landscapes.
- Bathhouse Row and the Mountain Sidegrounds are no longer strongly connected by multiple “entrances.”
- Two comfort stations were recently removed from the Grand Promenade. The sites need landscape treatment plans.
- The park needs guidance for treatment of the southern and northern entrances to the Grand Promenade.
- Views between the Grand Promenade and the backs of the bathhouses include modern intrusions (air conditioners, transformers, chain link fence, and mechanical equipment).
- A safety barrier is necessary between the Mountain Sidegrounds/Grand Promenade and the backs of the bathhouses.
- The vegetation in the South Park is sparse and the area feels bare.
- The Formal Entrance lacks a visual focal point.
- The visual connections of the Display Spring to the Mountain Sidegrounds have been lost due to the growth of dense vegetation.

- The visual and physical connections of the Maurice Spring to the Mountain Sidegrounds and the trail connection have been lost due to overgrown vegetation above the spring, topography, and missing stone walls.
- The Tufa Park no longer displays the naturalistic character, with exposed rock out crops and native vegetation that was present historically.
- The Lower Tufa Terrace Trail includes extreme slopes, a railing that does not reflect the park's historic character, invasive ground covers, and graffiti.
- Exotic plants are impacting the Tufa Park and the Wooded Park.
- The plazas and seating areas along the Grand Promenade do not reflect the historic design, and do not relate to the Mountain Sidegrounds parks.
- It is desirable to have more open springs and pools so that visitors can experience the hot springs first hand. A site for a new open spring is the area where the spring building is currently situated in the South Park.

Arlington Lawn

- Non-contributing features are impacting the historic integrity of Arlington Lawn.
- The paths no longer reflect the historic design.
- The pavilion and fluted concrete walls do not reflect the historic character of the landscape.
- The service drive and maintenance area, as well as the plants that screen them, do not reflect the historic character of the landscape.
- The Arlington Lawn is used for numerous activities throughout the year including weddings and large community gatherings.

West and Hot Springs Mountains

- The roads and associated historic features need to be preserved.
- The trails and associated historic features need to be stabilized and preserved. Erosion is impacting some trails, and some historic masonry features are in need of repairs.
- Relatively recent maintenance treatments to the historic masonry features have impacted the materials and workmanship of these resources.
- Graffiti is an on-going problem.

- Vegetation along the roads and near the overlooks needs to be managed to maintain views.
- Non-contributing features are impacting the historic character of the mountains in some areas.

Gulpha Gorge Campground

- Soil erosion and drainage issues at the campground need to be addressed. These include: various exposed ground surface areas that are interspersed with lawn; patches of bare earth are exposed along the creek edge; the rock retaining wall along the creek edge is deteriorating; the drainage ditches along the road edges are deteriorating.
- There are vegetation management issues in the campground including: mature/dying, mature trees; overgrown and scattered shrub growth; insufficient screening between the campground and the highway; and inadequate understory vegetation around the camp sites.
- There are concrete and wood picnic tables that are in poor condition.
- The utility features are visible and unappealing.
- New uses such as recreational vehicle camping are being evaluated for the campground (in a separate project) and may require additional features.
- The historic structures need to be stabilized and preserved.
- The dam remnant / rock and concrete pedestrian crossing over the creek are need of repairs.
- There is not a good way for visitors to the site to learn about the historic significance of the landscape.
- The rock walls, benches, fire ring and other extant features in the campground need to be stabilized and preserved.

Chapter VI: Treatment Alternatives

Chapter VI: Treatment Alternatives*

Overview

A general management philosophy of rehabilitation has been identified as the most appropriate for the Hot Springs National Park historic landscapes. Rehabilitation allows repairs, alterations, and additions necessary for compatible use of a property as long as the characteristics or features which convey the historical, cultural, or architectural values are preserved. This philosophy has been chosen to enable preservation of contributing resources and specific alterations necessary to accommodate use and interpretation of the historic landscapes.

Four alternative treatments are presented herein for the Hot Springs National Park historic landscapes. The treatment alternative descriptions include the no action alternative and three action alternatives, Alternative #2, Alternative #3 and the Recommended Treatment (Alternative #4: Preferred Alternative). The no action alternative provides a baseline for evaluation of potential impacts from each treatment alternative and eventual comparison of all treatment alternatives.

*Selected portions of Chapter VI, including pages 2-4 and 15-37 include treatment alternatives that were not selected as the recommended treatment alternative. These pages are not included in the printed copy of the report, but may be viewed in digital format as a pdf file on the enclosed compact disk.

Treatment Alternative #1: Current Treatment (No Action)

The historic landscapes at Hot Springs National Park would continue to be managed as they are currently and no new policies would be implemented. The no-action alternative provides a baseline for evaluating changes and impacts associated with the three action alternatives (see fold-out drawing Sheet LR18).

With this alternative, the bathhouses along Bathhouse Row are emphasized as the primary resources of the park and the landscapes of the Grand Promenade and Arlington Lawn serve as recreational spaces associated with the park and downtown Hot Springs. West and Hot Springs mountains provide opportunities for hiking, biking, picnics and scenic drives. Whittington Park continues to serve local residents as a neighborhood park. Gulpha Gorge Campground serves as a picnic area and campground. This alternative emphasizes maintaining historic and non-historic existing features. The no-action alternative includes the following guidelines/actions:

Study Area Landscape Treatment Alternative #1, No Action

- Retain existing conditions including contributing and non-contributing features.
- Preserve contributing historic resources.
- Maintain entrance eight at Hot Springs Mountain Drive.
- Preserve trail, stone walls and vegetation between the north entrance to the Grand Promenade and the vehicular entrance (entrance eight) to Hot Springs Mountain Drive.

Reservation Front Landscape Treatment Alternative #1, No Action

Bathhouse Row Landscape Treatment Alternative #1, No Action

- Maintain Noble Fountain and entrance one at Reserve Street.
- Maintain existing entrance to the Park Administration building.
- Maintain the pedestrian node at the corner of Central Avenue and Reserve Street.
- Preserve the existing row of magnolia trees along Bathhouse Row/Central Avenue.
- Preserve the extant contributing features of the Formal Entrance, entrance two.
- Maintain the existing landscape at the men's comfort station.
- Maintain the existing landscape at the women's comfort station.
- Maintain the universally accessible entrance to the Fordyce Bathhouse.
- Maintain the lawn in the area north of the Superior Bathhouse.

Mountain Sidegrounds Landscape Treatment Alternative #1, No Action

- Preserve the extant contributing and non-contributing features of the Grand Promenade, including bench pads.
- Maintain the existing concrete ramp to the Grand Promenade (behind the Fordyce and Quapaw Bathhouses).

South Park Landscape Treatment Alternative #1, No Action

- Improve and maintain vegetation at South Park.
- Maintain landscape between Bathhouse Row and the Grand Promenade.
- Maintain entrance one at Reserve Street and the Noble Fountain at its current location.
- Preserve extant remnants of the historic entrance two.
- Stabilize the hot spring seep on the east side of the Grand Promenade.

Foreground Park Landscape Treatment Alternative #1, No Action

- Preserve the extant contributing features of the Formal Entrance, entrance two.
- Maintain the universally accessible entrance to the Fordyce Bathhouse/Visitor Center.
- Maintain the existing concrete ramp to the Grand Promenade (behind the Fordyce and Quapaw Bathhouses).
- Maintain the existing vegetation.
- Maintain the existing Display Spring and its extant contributing and non-contributing features including the terrace and plantings.
- Maintain the existing Maurice Spring.

Tufa Park Landscape Treatment Alternative #1, No Action

- Preserve vegetation and contributing features in the historic character area.
- Maintain the lawn north of the Superior Bathhouse.
- Maintain existing vegetation and features in Tufa Park.
- Maintain existing slope and vegetation between the Superior Bathhouse and the Grand Promenade.
- Retain the plaza on the Grand Promenade that overlooks the Arlington Lawn and the maintenance area.
- Preserve extant contributing features of entrance six.

Wooded Park Landscape Treatment Alternative #1, No Action

- Maintain vegetation and stabilize slopes where there are erosion problems.
- Preserve stone retaining walls at Fountain Street.
- Preserve extant contributing features of entrance six.
- Preserve the north pedestrian entrance to the Grand Promenade.

Arlington Lawn Landscape Treatment Alternative #1, No Action

- Maintain the lawn, vegetation, sidewalks, and all landscape elements at Arlington Lawn.
- Maintain the existing maintenance area and service drive.
- Maintain the existing hot water cascade, hot water pools, amphitheater, DeSoto rock, and the Lower Tufa Terrace Trail.

Hot Springs and West Mountain Landscape Treatment Alternative #1, No Action

- Continue maintenance of historic features is done presently.
- Maintain contributing and non-contributing features.
- No additional functional elements will be added.
- Maintain the Hot Springs Mountain Tower/Observatory.

Whittington Park Landscape Treatment Alternative #1, No Action

- Maintain existing park features and vegetation, and extant contributing features as is done presently.
- Maintain the non-historic channel walls at Whittington Creek.
- Maintain the existing form of the park.

Gulpha Gorge Campground Landscape Treatment Alternative #1, No Action

- Preserve the contributing historic resources associated with the campground, including historic masonry features.
- Maintain the campground facilities.
- Stabilize and maintain the rock retaining wall and roadside drainage ditches.
- Prune trees that are safety hazards.
- Maintain existing vegetation.
- Stabilize or replace the deteriorating concrete and wood picnic tables.
- Maintain existing utilities.
- Add new features where needed for functional purposes.
- Stabilize and preserve historic buildings and structures.
- Stabilize the dam remnant/rock and concrete pedestrian crossing over the creek.

Vision Statement for all Action Treatment Alternatives:

In the action alternatives, the formal design of the landscape and architecture of Bathhouse Row and the Magnolia Promenade contrast with the rugged features of the natural rock outcrops and bubbling hot springs of the Mountain Sidegrounds, revealing the essence of the significant historic landscape designs for the park. The Mountain Sideground parks serve as a transition from the formal architectonic Bathhouse Row to the rustic mountain features. Whittington Park serves as the western gateway to the overall park, providing a transition from the city and its neighborhoods to the formal Bathhouse Row to the east, and the rustic nature of West Mountain to the south.

Goals Common to all Action Treatment Alternatives:

- 1) Improve the ability of the landscape to convey and represent its significant historic designs including those by Lt. Robert Stevens, Mann and Stern, and the National Park Service.
- 2) Reveal the extant design vocabulary of landscape features related to the significant historic designs.
- 3) Improve the connectedness of all of the park historic landscapes to increase their ability to convey the role of the park as a historically significant National Spa Resort and as an example of early efforts related to the American Conservation Movement.
- 4) Improve the understanding and elevate the importance of the overall park cultural landscapes for both visitors and park staff.
- 5) Provide expanded opportunities for visitors to experience the park's cultural landscapes in context with their historical significance.

Objectives Common to all Action Treatment Alternatives:

- 1) Preserve cultural and natural resources within the boundaries of the historic landscapes including the springs, recharge areas, and contributing cultural landscape features.
- 2) Restore and stabilize significant cultural and natural resources.
- 3) Rehabilitate historic landscape spaces such as the Reservation Front inclusive of the South Park, Foreground Park, Tufa Park, Wooded Park, and the transitions between them.
- 4) Rehabilitate missing historic features that are important in telling the story of the park as a National Spa and as related to the American conservation movement.
- 5) Restore significant historic ornamental and indigenous plantings.
- 6) Restore historic physical and visual connections between historic landscapes such as those between Bathhouse Row and the Mountain Sidegrounds.
- 7) Restore the historic physical and visual connections between component landscapes and downtown Hot Springs, including views from the overlooks.
- 8) Emphasize a design vocabulary for the cultural landscape.
- 9) Preserve known and potential archaeological resources.
- 10) Provide sustainable solutions that include energy conservation measures.

Treatments Common to all Action Alternatives:

Treatments common to all action alternatives are listed here and repeated in the descriptions of alternatives two, three and four. When presented with alternatives two, three and four, the common treatments include a * to indicate the directive is the same for all of the action alternatives.

Study Area Treatments Common to all Action Alternatives:

- Preserve contributing historic resources through stabilization, rehabilitation and restoration.
- Allow specific additions or alterations that are compatible with the historic character of the landscape and that meet contemporary needs.
- Remove or modify non-contributing impacting features, or modify them to lessen their visual and physical impact so that they become, at minimum, non-contributing compatible.
- Retain non-contributing compatible features.
- Develop and apply a design vocabulary for buildings, site planning and site features that respects the historic character of each historic landscape. Develop three distinct design vocabularies for: 1) Reservation Front (including Bathhouse Row, Arlington Lawn and the Mountain Sidegrounds), 2) Mountains (including West Mountain, Hot Springs Mountain and Gulpha Gorge Campground), and 3) Whittington Park.
- Visually and physically connect the park with downtown Hot Springs.

Reservation Front Treatments Common to all Action Alternatives:

Bathhouse Row Treatments Common to all Action Alternatives:

- Preserve the scale and form of contributing landscape features.
- Rehabilitate the patterns and rhythm of the Architectural Park as defined by Stevens, including the lawn border, promenade and lawn park.
- Establish the boundaries of Bathhouse Row by extending the lawn border, promenade and lawn park organization and patterns from the intersection of Central Avenue and Reserve Street to the Superior Bathhouse.
- Re-configure the parking at the Administration Building, so that the area is reduced to accommodate three spaces, and so the edge of the parking lot is in alignment with the building setback from Reserve Street.
- Replace the existing Reserve Street paving with simple concrete paving. Remove existing brick paving and tree median to be consistent with historic design intent.
- Replace the fluted concrete walls at the Administration Building with a simple concrete wall that is compatible with the park's historic walls, particularly those at the Formal Entrance.
- Replace non-contributing impacting materials at the Administration Building terrace with materials consistent with the historic character: i.e., remove black traction tape along limestone steps, replace plaza concrete with simple concrete paving.

- Remove non-contributing trees and shrubs in the lawn park.
- Rehabilitate the holly hedge in historic patterns. Extend the hedge to the front entrances of the bathhouses along the walks. Extend the hedge along the walks to the comfort stations.
- Remove the existing hedges from the secondary side entrances of the bathhouses.
- Preserve all extant five-globe light fixtures. Rehabilitate the historic pattern by adding new light fixtures that match the existing fixtures.

Mountain Sidegrounds Treatments Common to all Action Alternatives

- Remove non-contributing impacting features.
- Preserve historic features through stabilization, rehabilitation and restoration.
- Rehabilitate vegetation, topography, and other natural elements to better convey the historic character of the Mountain Sideground parks, and to place the Grand Promenade within its historically intended context.
- Enhance natural features to provide visual and sensual cues to the historic character of the landscape.
- Replace the black chain link fence with a steel fence that is compatible with the historic character of the park.
- Replace the black steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.

South Park Treatments Common to all Action Alternatives

- Preserve desirable views to and from the South Park.
- Preserve the extant features of the Grand Promenade.

Foreground Park Treatments Common to all Action Alternatives

- Rehabilitate the Foreground Park as a contributing landscape space that is integral to the historic character of the Reservation Front.
- Rehabilitate the Foreground Park to emphasize a strong visual and physical connection between Bathhouse Row and the Grand Promenade.
- Preserve, stabilize and restore extant historic features including the Stevens Balustrade, the limestone entry columns, the alignment of the original service drive, the stone walls and the Display Springs.
- Replace non-compatible impacting topography and plantings (groomed slopes and lawns) with naturalistic topography and native vegetation the Grand Promenade and the Display Springs and the concrete ramp behind the Fordyce Bathhouse.
- Rehabilitate the Formal Entrance as entrance four – the primary pedestrian entrance to the mountainside grounds and Hot Springs Mountain.
- Replace non-compatible impacting features such as the brick terrace with compatible materials, such as simple concrete paving.

Formal Entrance Treatments Common to all Action Alternatives

- Complete the Formal Entrance so that it extends from Central Avenue to the Old Carriage Road (and the site of the original pavilion) as it did originally, following the original central axis and symmetrical arrangement to reestablish it as the primary pedestrian entrance to Hot Springs Mountain.
- Re-construct the original sequence of historic spaces that comprised the original Formal Entrance, including the topography that steps up the hillside towards Hot Springs Mountain. Follow the historic formal patterning of the spaces.
- Remove non-compatible impacting features including the low stacked stone walls at the Stevens Balustrade.
- Remove the visitor drop-off at the intersection of Central Avenue and the Formal Entrance.
- Orient the accessible route from the Fordyce Bathhouse to the south and the route from the Maurice Bathhouse to the north to allow for the Formal Entrance to be completed as a whole space.
- Rehabilitate the exedra entry terrace at Bath House Row and Central Avenue so that it extends from the historic columns to Central Avenue, and is of a similar form and scale to the original space.
- Re-construct the original low, limestone walls to frame the exedra entry terrace. Replace the existing non-compatible impacting fountains with simple concrete and stone basins that 'mark' the site of the original fountains. Use simple forms and compatible materials that will not detract from the adjacent extant historic elements.
- Expose rock outcroppings on the slope between the Stevens Balustrade and the Grand Promenade. Replace existing lawn with low growing native vegetation.

Display Springs Treatments Common to all Action Alternatives

- Rehabilitate the historic stone walls matching materials (including stone) and craftsmanship to the original construction. Thin vegetation to allow for the rehabilitation and to provide a visual connection between the Display Spring and the Grand Promenade.
- Remove the non-compatible impacting walls (low, stacked stone) at the edges of the historic stone walls.
- Replace the brick terrace and seating with a simple concrete terrace that has a simpler form, and a scale consistent with the Display Springs, and that has site furnishings that are compatible with the historic character.

Tufa Park Treatments Common to all Action Alternatives

- Preserve historic trails, rock outcrops, vegetation and other contributing elements in the Tufa Park.
- Preserve the historic character area in the Tufa Park.

Wooded Park Treatments Common to all Action Alternatives

- Stabilize areas where soil erosion is occurring.
- Preserve the woods on the eastern side of the Grand Promenade through stabilization and restoration.
- Remove invasive species that threaten the woodland plant community.
- Preserve extant historic features including historic drainage channels and historic stone retaining walls.
- Preserve entrance six.
- Maintain the north entrance to the Grand Promenade.
- Preserve the existing pedestrian trail located between the north entrance to the Grand Promenade and entrance eight.
- Preserve entrance eight.

Arlington Lawn Treatments Common to all Action Alternatives:

- Preserve contributing historic features.
- Remove the non-contributing, impacting pavilion.

West and Hot Springs Mountains Treatments Common to all Action Alternatives:

- Maintain historic masonry structures and features on the mountains utilizing personnel with experience in addressing historic stone and brick resources.
- Stabilize and repair extant historic resources including mortared stone gutters and headwalls using materials and craftsmanship that are consistent with the original construction.
- Replace site elements with more compatible materials and forms.
- Develop visual connections to downtown Hot Springs by maintaining selected views through pruning vegetation and/or planting vegetation that will not interfere with views from the road and trails.
- Remove non-contributing impacting features including brick paving, railings and planters on West Mountains.
- Build new parapet walls – add simple paving.
- Add new elements that complete the park as “major facilities to complement Bathhouse Row”
- Existing Mountain Buildings
 - Hot Springs Mountain Comfort Stations:
 - When the Hot Springs Mountain comfort station needs to be renovated or replaced, replace it with a structure that is more compatible with the materials, workmanship and scale of the historic structures on the mountains.
 - Reduce the impact of the Hot Springs Mountain Tower/Observatory development.
 - Reduce the size of the parking area.
 - Modify the structures associated with the tower to be more compatible with the materials, workmanship, and scale of the historic mountain structures.
- Mountain Roads
 - Preserve historic and extant features including road alignment and width, mountain road entrances, stone retaining walls, stone shelters, mortared stone gutters, stone headwalls, and concrete inlets through stabilization and restoration.
- Mountain Overlooks
 - Design new elements to be compatible with the form, scale, mass, materials and workmanship of the extant historic features.
 - West Mountain Overlook #1 – Preserve extant historic features, including views of the city of Hot Springs and surrounding areas, stone retaining wall, simple concrete walk and stone curb and gutter. Remove graffiti from landscape features.
 - West Mountain Overlook #2 - Preserve historic features, including views of the city of Hot Springs and surrounding areas, trail access to West Mountain Trail, mortared stone retaining wall, stone shelter, stone curb, simple concrete walk. Remove the steel guardrail, and extend stone parapet wall to create a guardrail. Remove the mortared stone planters, replace with simple concrete paving (see Figure 6-1).

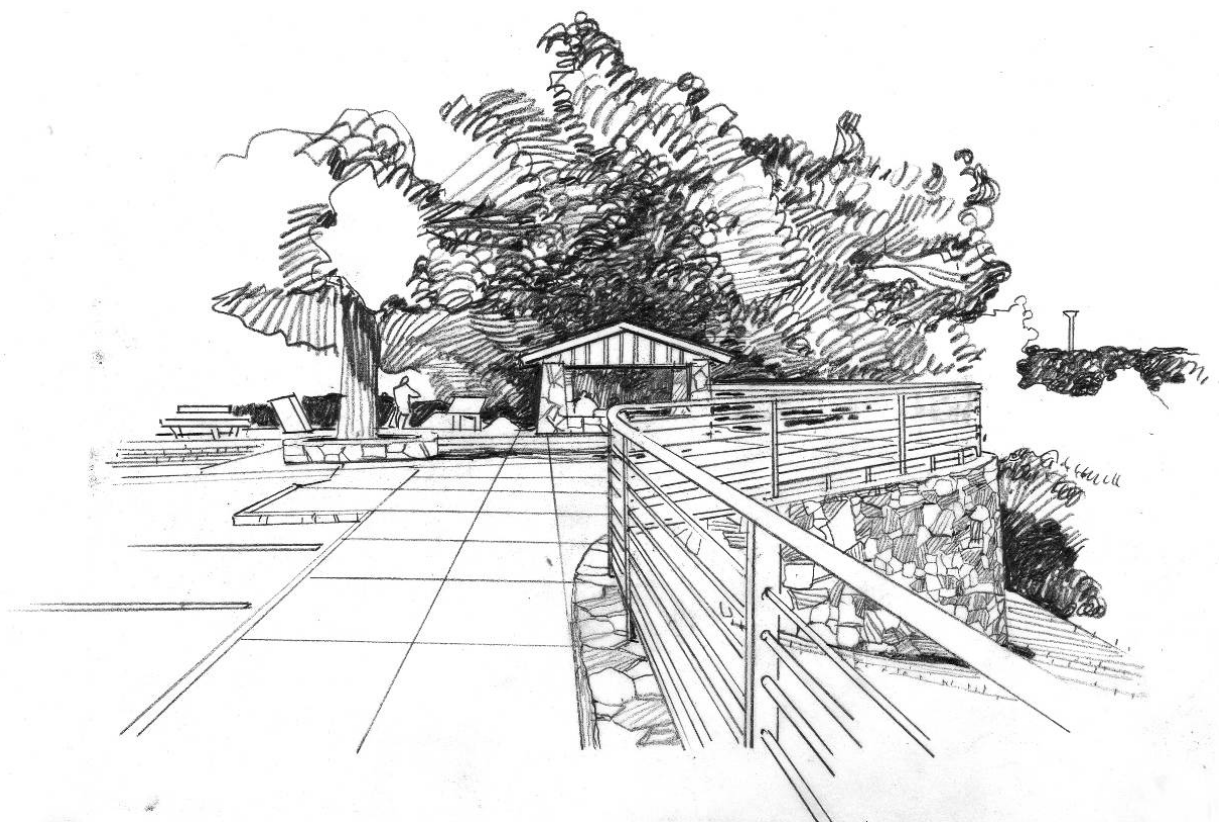


Figure 6-1: Renovated West Mountain Overlook #2



Figure 6-2: West Mountain Overlook #3: Addition of Shelter/Restroom Building

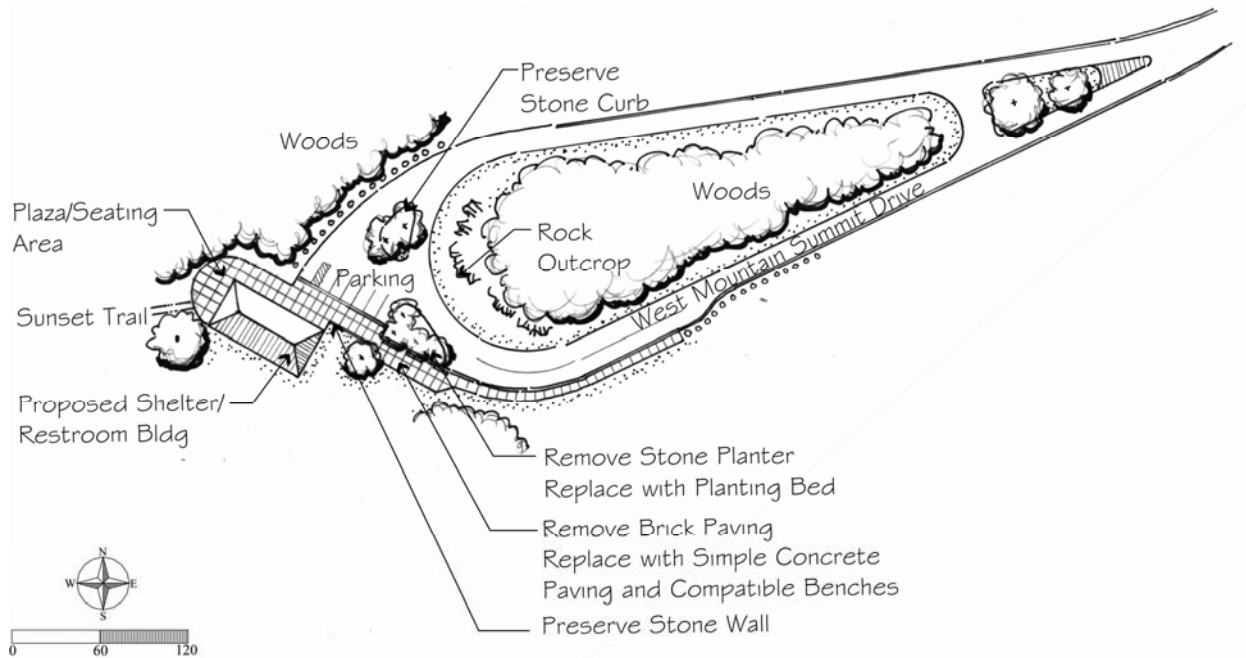


Figure 6-3: West Mountain Overlook #3: Site Plan

- West Mountain Overlook #3 - Preserve historic features, including, views of the city of Hot Springs and surrounding areas, mortared stone wall, access to Sunset Trail, stone curb, and concrete paving (see Figure 6-2). Remove the steel guardrail and extend the stone parapet wall to guardrail height or replace the existing railing with a simple guardrail that is compatible with the historic character. Remove red brick paving and replace with simple concrete paving (see Figure 6-3).
- Hot Springs Mountain Overlooks - Preserve historic features, including views of the surrounding area, stone walls, stone curbs, and concrete paving.
- Mountain Trails
 - Preserve, stabilize and repair historic features, including existing trail alignments, pedestrian crosswalk connections, mortared stone bridge/culvert, mortared stone retaining wall at Oak Trail, stone steps at Prospect Avenue and Mountain Top Trail, mortared stone spillways, mortared stone gutters, mortared stone steps on Mountain Top Trail at West Mountain Drive, and stone water bars.
 - Use materials and craftsmanship that is consistent with the original construction in the repair.
 - On West Mountain, maintain trails at a minimum width of three feet, clearing debris and vegetation from edges. Restore trail surfaces that have been eroded.
 - Replace concrete gutter with stone gutters that are compatible with the character of the historic stone gutters when replacement is necessary.

Whittington Park Treatments Common to all Action Alternatives:

- Rehabilitate Whittington Park as a formal entrance to West Mountain. Provide park uses and a formal style that is similar to original design intent.
- Preserve and stabilize extant park features, including the existing topographic bench, concrete/stucco bridges, and tree plantings. Provide new tree plantings where noted to reinforce historic tree patterns and to rehabilitate historic open and closed spaces.
- Provide stronger visual connection to West Mountain and Bathhouse Row.
- Preserve and stabilize Whittington Creek:
 - Stabilize the creek by improving the channel bottom to eliminate undercutting. Coordinate the channel stabilization with the city of Hot Springs, since Whittington Creek provides storm water conveyance for the City.
 - Restore the historic channel walls (for both historic periods), matching materials (including stone and mortar) and craftsmanship. Collaborate with the city of Hot Springs.
- Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space.
- Realign trails to reflect historic patterns, including the area by the historic bandstand location and the Myrtle Street road removal. Re-construct the trails to establish a consistent width and to have a consistent edge. Provide a trail that is six feet wide and maintain the edges to be weed free. Establish street crossings and provide access to West Mountain's Mountain Top Trail.
- Reestablish the historic open areas as lawns.
- Widen the walk along the road to West Mountain Drive, and establish a linear row of trees to formalize and enhance the entrance and connection to West Mountain.
- Add a pavilion in the original bandstand location west of West Mountain Drive. Preserve the Southern Magnolia tree groves around the pavilion site.

Gulpha Gorge Campground Treatments Common to all Action Alternatives:

- Address soil erosion by planting lawn seed.
- Address erosion at the creek bed by increasing lawn seeding or planting of ground cover to stabilize and maintain the rock retaining wall and roadside drainage ditches.
- Provide guidelines for the removal of dead, dying, or diseased trees that present safety hazards.
- Judiciously prune limbs that are safety hazards.
- Preserve healthy mature trees to retain their historic character including form and habit, and that provide shade.
- Consider subtle (not formal) pruning of overgrown shrubs.
- Consider planting additional shrubs or small trees along the eastern edge of the campground to screen traffic noise and views from the adjacent highway.
- Consider incremental planting of shrubs amongst and between camp sites to provide a greater sense of privacy.
- Stabilize or replace the deteriorating concrete and wood picnic tables.
- Screen utilities using vegetation or elements that are compatible with the historic character of the campground.
- Avoid adding non-historic features.
- Preserve historic buildings, structures, elements, and the spatial organization of the historic campground through stabilization and repair.
- Stabilize the dam remnant and the rock and concrete pedestrian crossing over the creek.
- Consider developing an interpretive wayside for this and associated non-extant features.
- Preserve historic masonry features.

*Selected portions of Chapter VI, including pages 2-4 and 15-37 include treatment alternatives that were not selected as the recommended treatment alternative. These pages are not included in the printed copy of the report, but may be viewed in digital format as a pdf file on the enclosed compact disk.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Alternative #2, the first of the three action alternatives, provides for the protection and preservation of extant historic resources while accommodating change within the park's historic landscapes (see fold-out drawing Sheet LR19). This alternative allows the most extensive change to the existing conditions in order to reestablish the significant historic landscape to the greatest extent possible.

Reconstruction and restoration of select elements within the landscape reestablish the historic characteristics of the Architectural Park (Magnolia Promenade and Bathhouse Row) and Mountain Sideground parks (South Park, Foreground Park, Tufa Park, and Wooded Park). The Grand Promenade is retained as a pedestrian corridor that provides passage from one Mountain Sideground park to the next, and serves as a reminder of the Pleasure Drive/Service Road present during the historic period. A series of pedestrian entrances provide multiple links between the Architectural Park and the Mountain Sidegrounds, including the reconstruction of two of the original entrances designed by Lt. Stevens, entrances two and five. The Formal Entrance is restored to its historic appearance, to serve as a major focal point and primary pedestrian connection between Bathhouse Row and Hot Springs Mountain. The Arlington Lawn is rehabilitated with the expansion of the hot water cascade and the creation of a substantial scenic overlook that together create a major focal point. To accommodate these changes the Lower Tufa Terrace Trail is removed. Historic resources associated with Hot Springs and West mountains are preserved through restoration and rehabilitation, and select non-contributing elements are replaced with features that compliment the historic character of the mountains. Whittington Park is rehabilitated as a formal entrance to West Mountain and revitalized to enhance historic resources. The historic resources at Gulpha Gorge Campground are stabilized, enhanced, and preserved.

Study Area Landscape Treatment Alternative #2

- * Preserve contributing historic resources through stabilization, rehabilitation and restoration.¹
- Reconstruct selected historically significant features that are missing, if adequate documentation is available.
- * Allow specific additions or alterations that are compatible with the historic character of the landscape and that meet contemporary needs.
- * Remove or modify non-contributing impacting features, or modify them so that they become at a minimum, non-contributing compatible.
- * Retain non-contributing compatible features.
- * Develop and apply a design vocabulary for buildings, site planning and site features that respects the historic character of each historic landscape. Develop three distinct design vocabularies for: 1) Reservation Front (including Bathhouse Row, Arlington Lawn and the Mountain Sidegrounds), 2) Mountains (including West Mountain, Hot Springs Mountain and Gulpha Gorge Campground), and 3) Whittington Park.

¹ Throughout this section, an * at the beginning of a treatment directive indicates that this statement is the same for all of the action alternatives.

- * Visually and physically connect the park with downtown Hot Springs.

Reservation Front Landscape Treatment Alternative #2

Bathhouse Row Landscape Treatment Alternative #2

- * Preserve the scale and form of landscape features.
- * Rehabilitate the patterns and rhythm of Stevens' Architectural Park including the lawn border, promenade and lawn park.
- * Establish the boundaries of Bathhouse Row by extending the lawn border, promenade and lawn park organization and patterns from the intersection of Central Avenue and Reserve Street to the Superior Bathhouse.
- Follow the existing spatial organization and patterns to the southern end of Arlington Lawn.
- Reestablish the boundaries of the Architectural Park by adding features at each:
 - Restore the Noble Fountain to the corner of Central Avenue and Reserve Street. Provide a simple terrace, similar in size to the original setting, with the Noble Fountain at its center to establish the southern entrance to Bathhouse Row. Remove the existing fluted concrete walls, signs and paving. Set the fountain away from the street edge and protect it with simple concrete bollards that are set along the curb. Connect the terrace to the Administration Building with a formal sidewalk along the alignment of the original sidewalk.
 - Create a new terrace with a new fountain at its center at the northwestern corner of the Superior Bathhouse to serve as the northern entrance to Bathhouse Row (and the National Historic Landmark District). Align the terrace and fountain to serve as the entry to the rehabilitated entrance five. Re-construct the Hoke Smith Fountain at the center of the terrace as a focal point using historic documentation.
- Rehabilitate the visual and physical connections to the Mountain Sidegrounds from Bathhouse Row by adding two pedestrian entrances.
 - Re-construct entrance two so that it extends from Bathhouse Row to South Park, connecting with the Grand Promenade. Create a visual terminus (a seating node) on the east side of the Grand Promenade.
 - Rehabilitate a new entrance where the original entrance five was located, adjacent to the Superior Bathhouse, so that it extends from Bathhouse Row to the Tufa Park, connecting to the Grand Promenade. Add an overlook as part of the new entrance on the north side of the Superior Bathhouse to provide a view to Central Avenue, Arlington Lawn and to the extant remnant cooling tank features and spring boxes.
- * Replace non-contributing impacting materials at the Administration Building terrace with materials consistent with the historic character: i.e., remove black traction tape along limestone steps, replace plaza concrete with simple concrete.
- * Re-configure the parking at the Administration Building, so that the area is reduced to accommodate three spaces, and so the edge of the parking lot is in alignment with the building setback from Reserve Street.

- * Replace the existing Reserve Street paving with simple concrete paving. Remove existing brick paving and tree median to be consistent with historic design intent.
- * Replace the fluted concrete walls at the Administration Building with a simple concrete wall that is compatible with the park's historic walls, particularly those at the Formal Entrance.
- Rehabilitate a double row of trees along the Magnolia Promenade (see Figure 6-4).
 - Maintain the Southern Magnolias in the lawn border as a single species; provide infill plantings where necessary, following the original spacing.
 - Plant a new interior row of deciduous canopy trees in the lawn park and maintain the single age trees in uniform size and form.

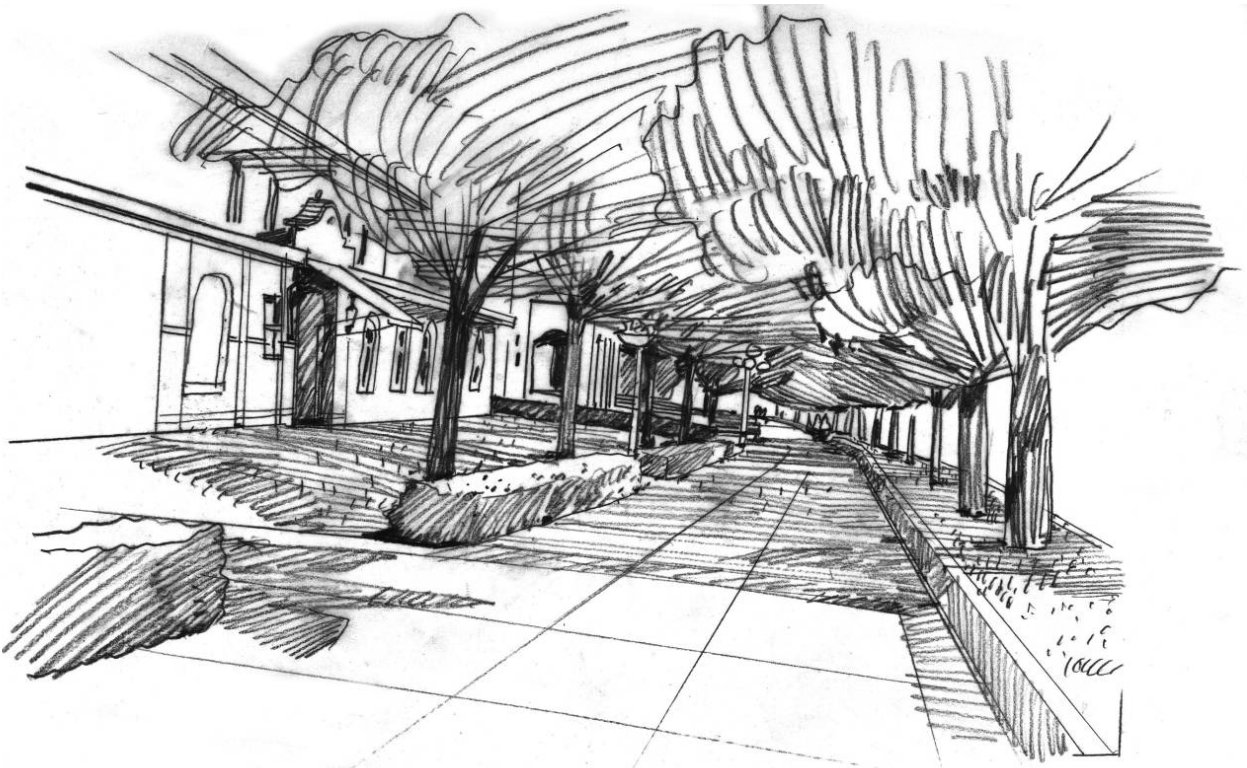


Figure 6-4: Magnolia Promenade Alternative #1

- Establish new gardens in front of the Men's and Women's Comfort Stations in a design style that is consistent with the formal character of Bathhouse Row, using the Mann & Stern's plan as a guide to provide simple formal outdoor rooms with lawns, walks, and an seating area with drinking fountains, etc.
- * Remove the non-contributing trees and shrubs in the lawn park.
- * Relocate the concrete ramp at the north side of the entrance to the Fordyce Bathhouse. Remove the existing ramp and construct a new ramp on the south side of the building entrance to preserve the original scale and form of the exedra entry terrace at the Formal Entrance/Stevens Balustrade.
- Reconstruct the entrances to each bathhouse to be consistent with the historic intent.
- * Relocate the concrete ramp at the north side of the entrance to the Fordyce Bathhouse. Remove the existing ramp and construct a new ramp on the south side of the building entrance to preserve the original scale and form of the exedra entry terrace at the Formal Entrance/Stevens Balustrade.
- Rehabilitate the Maurice Spring.
 - Widen the sidewalk to the spring and extend the holly hedge on both sides of the sidewalk.
 - Replace the concrete steps with limestone steps, replace the concrete terrace at the top of the steps, and remove the non-historic light fixture.
 - Replace site furnishings with compatible furnishings.
 - Preserve and stabilize the springs and their associated features.
 - Add vegetation on the west side of the spring and remove vegetation in the lawn area on the south side of the sidewalk. Thin vegetation above the historic stone wall to improve views to the Mountain Sidegrounds.
 - Restore the historic stone wall.
- Rehabilitate the holly hedge in historic patterns.
 - Extend the hedge to the front entrances of the bathhouses along the walks.
 - Extend the hedge along the walks to the comfort stations.
 - Extend the holly hedge along the exedra entry terrace to the rehabilitated entrance two.
 - * Remove the existing hedges from the secondary side entrances of the bathhouses.
- * Preserve all extant five-globe light fixtures. Rehabilitate the historic pattern by adding new light fixtures that match the existing fixtures.
- Remove the drop-off and service drive access at the intersection of the Formal Entrance and Central Avenue.

Mountain Sidegrounds Landscape Treatment Alternative #2

- * Preserve historic features through stabilization, rehabilitation and restoration.
- * Remove non-contributing impacting features.
- * Rehabilitate vegetation, topography, and other natural elements to better convey the historic character of the Mountain Sideground parks, and to place the Grand Promenade within its historically intended context.
- * Enhance natural features to provide visual and sensory cues to the historic character of the landscape.
- * Replace the black chain link fence with a steel fence that is compatible with the historic character of the park.
- * Replace the steel railings within the Mountain Sidegrounds with railings that are compatible with the historic character.

South Park Landscape Treatment Alternative #2

- Preserve desirable views to and from the South Park.
- Preserve the extant features of the Grand Promenade in the South Park
- Redesign the Reserve Street entrance to the Grand Promenade and South Park
 - Relocate the Noble Fountain to its original location (outside of South Park); refer to Bathhouse Row Treatment Alternative #2.
 - Replace the pavement, vegetation, and ramp with a rectangular terrace of simple concrete paving, and a lawn that extends on the east and west sides of the terrace.
 - Add a new fountain in the center of the new that is in a design style that reflects its time and that respects the historic character of the South Park historic landscape.
 - Extend a sidewalk that parallels Reserve Street and that connects with the walk at the front of the Administration Building, following the alignment of the original walk.
 - Retain the upper steps and terraces that currently exist and are associated with the Grand Promenade in the South Park.
 - Expose the rock outcrops at the western slope adjacent to entrance one.
- * Preserve the Grand Promenade in the South Park
 - Retain the pavement of the main alignment of the Grand Promenade.
 - Remove bench pads and seating area.
 - Replace the wrought iron railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Rehabilitate vegetation and rock outcrops consistent with the historic character of the South Park.
 - Plant native vegetation in naturalistic groupings to establish a light shade canopy; to create a naturalistic character and a park-like setting.
 - Preserve existing rock outcrops.
 - In areas where topsoil is thin over native stone, consider removing topsoil and turf to expose the stone.

- Create a new display spring on the eastern side of the Grand Promenade in the area where a hot spring is seeping to the surface (behind the Quapaw Bathhouse). Utilize native rocks and vegetation to develop a naturalistic character at the spring.
- Rehabilitate a pedestrian entrance in the historic location of entrance two between Bathhouse Row and the Grand Promenade at the South Park.
 - Provide a focal terminus for the rehabilitated entrance two in the form of a vertical wall as a backdrop to a small seating node.
- Establish an accessible pedestrian route from the rehabilitated entrance to Bathhouse Row at the Formal Entrance/Stevens Balustrade.
- Preserve desirable views to and from the South Park.

Foreground Park and Formal Entrance Landscape Treatment Alternative #2

- * Rehabilitate the Foreground Park as a contributing landscape space that is integral to the historic character of the Reservation Front.
- Rehabilitate the Foreground Park to emphasize a strong visual and physical connection between Bathhouse Row and the Grand Promenade.
- Preserve, stabilize and restore extant historic features including the Stevens Balustrade, the limestone entry columns, the alignment of the original service drive, the stone walls and the Display Springs.
- * Replace non-compatible impacting features such as the brick terrace with compatible materials.
- Replace non-compatible impacting topography and plantings (groomed slopes and lawns) with naturalistic topography and native vegetation at the Grand Promenade and the Display Springs and the concrete ramp behind the Fordyce Bathhouse.
- * Rehabilitate the Formal Entrance as entrance four – the primary pedestrian entrance to the mountainside grounds and Hot Springs Mountain.
- Reestablish a center walkway along the centerline of the original service drive. Provide an accessible route to the Grand Promenade along the original service drive alignment behind the Fordyce Bathhouse that connects the Formal Entrance to the Grand Promenade.

Formal Entrance Landscape Treatment Alternative #2

- Complete the Formal Entrance so that it extends from Central Avenue to the Old Carriage Road (and the site of the original pavilion) as it did originally, following the original central axis and symmetrical arrangement to reestablish it as the primary pedestrian entrance to Hot Springs Mountain.
- * Re-construct the original sequence of historic spaces that comprised the original Formal Entrance, including the topography that steps up the hillside towards Hot Springs Mountain. Follow the historic formal patterning of the spaces (see Figure 6-5).

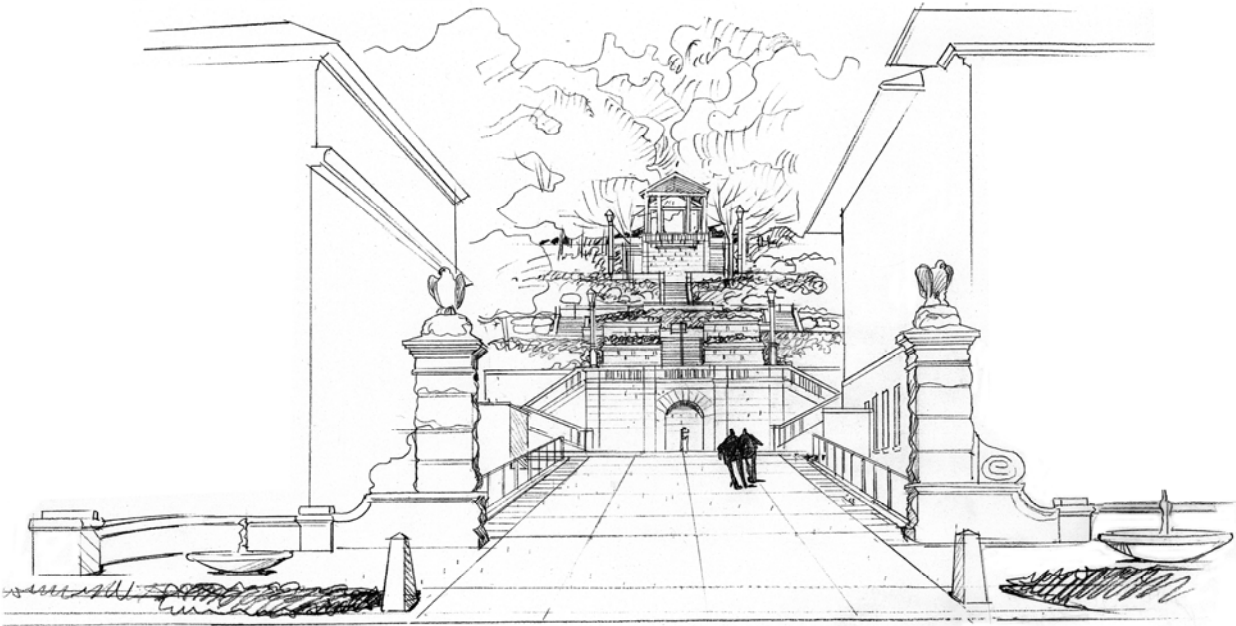


Figure 6-5: Formal Entrance Treatment Alternative #2

- * Remove non-compatible impacting features including the low stacked stone walls at Stevens Balustrade.
- Remove non-compatible non-impacting and impacting features including the raised concrete planters, and the accessible walk that extends from the Fordyce Bathhouse north to the Formal Entrance.
- * Orient the accessible route from the Fordyce Bathhouse to the south and the route from the Maurice Bathhouse to the north to allow for the Formal Entrance to be completed as a whole space.
- * Rehabilitate the exedra entry terrace at Bathhouse Row and Central Avenue so that it extends from the historic columns to Central Avenue, and is of a similar form and scale to the original space.
- * Re-construct the original low, limestone walls to frame the exedra entry terrace. Replace the existing non-compatible impacting fountains with simple concrete and stone basins that 'mark' the site of the original fountains. Use simple forms and compatible materials that will not detract from the adjacent extant historic elements.
- * Remove the visitor drop-off at the intersection of Central Avenue and the Formal Entrance.
- Allow for a narrow service drive that is similar in scale to the original driveway. Rebuild the concrete walkway and score the paving to interpret the original composition of a central driveway, flanked by walks on either side. Remove the existing fluted concrete bollards and fluted concrete fountains. Remove the raised concrete planters along the sides of the Maurice and Fordyce bathhouses and rehabilitate the original route. Use simple forms and materials that do not detract from the extant historic features.

- Re-construct the terrace above the Stevens Balustrade. Remove the brick paving, and rebuild the terrace to follow the formal patterning of the Formal Entrance. Rebuild the terrace using simple materials such as simple concrete paving that does not detract from the extant historic features.
- Re-construct the terraced walkway above the Grand Promenade following the original alignment and topographic changes including the double set of steps and intermediate landing. Preserve the stone wall along the Grand Promenade and finish the wall by adding a simple limestone capstone.
- * Expose rock outcroppings on the slope between the Stevens Balustrade and the Grand Promenade. Replace existing lawn with low growing native vegetation.
- Reestablish the historic visual focal point (icon) from downtown and overlook to downtown Hot Springs at the top of the Formal Entrance by constructing an addition at in the location of the original pavilion (see Figure 6-5).
 - * Re-construct the limestone walls, steps, landings, balustrade, and pavilion site associated with the original pavilion using historic documentation.
 - Construct a pavilion in the original location that is compatible with the formal arrangement of the Formal Entrance including reinforcing its architectural form and compatible in mass, form, and scale with the original pavilion.
- * Rehabilitate the historic formal planting arrangement along the length of the Formal Entrance including the formal rows of trees on either side of the central axis and the low plantings at Central Avenue.

Display Springs Landscape Treatment Alternative #2

- * Rehabilitate the historic stone walls matching materials (including stone) and craftsmanship to the original construction. Thin vegetation to allow for the rehabilitation and to provide a visual connection between the Display Spring and the Grand Promenade.
- * Remove the non-compatible impacting walls (low, stacked stone) at the edges of the historic stone walls.
- * Replace the brick terrace and seating with a simple concrete terrace that has a simpler form, and a scale consistent with the Display Springs, and that has site furnishings that are compatible with the historic character.

Tufa Park Landscape Treatment Alternative #2

- Preserve historic trails, rock outcrops, vegetation and other contributing elements in the Tufa Park.
- * Preserve the historic character area in the Tufa Park.
- Remove non-contributing impacting elements.
- Remove seating areas, plazas, and bench pads along the Grand Promenade.
- Realign the non-historic trail on the east side of the Grand Promenade between the proposed overlook and entrance six.
- Reconstruct entrance five at the north side of the Superior Bathhouse.
- Expose rock outcrops adjacent to entrance six.
- Add new railings that are compatible with the historic character of Tufa Park along the Grand Promenade between entrances five and six.
- Create physical reminders of the historic geomorphology of the springs, topography and vegetation in Tufa Park, (see Figure 6-6):
 - Expose native rock throughout the Tufa Park.
 - Expose a hot spring in the upper portion of the Tufa Park for expanded hot water display over exposed rock.
 - Plant native vegetation in naturalistic groupings to establish a more park-like setting.
 - Expand the Hot Water Cascade:
 - Expose rock outcrops.
 - Plant indigenous ferns and shrubs to soften the character of the rock outcrop.
 - Remove the Lower Tufa Terrace Trail.
 - Create a new pedestrian overlook at the expanded Hot Water Cascade.



Figure 6-6: Tufa Park, Alternative #2

Wooded Park Landscape Treatment Alternative #2

- * Stabilize areas where soil erosion is occurring.
- * Preserve the woods on the eastern side of the Grand Promenade through stabilization and restoration.
- * Remove invasive species that threaten the woodland plant community.
- * Preserve extant historic features including historic drainage channels and historic stone retaining walls.
- * Preserve entrance six.
- * Maintain the north entrance to the Grand Promenade.
- * Preserve the existing pedestrian trail located between the north entrance to the Grand Promenade and entrance eight.
- Preserve entrance eight.

Arlington Lawn Landscape Treatment Alternative #2

- * Preserve contributing historic features.
- Redefine Arlington Lawn as linear park by reconstructing a simple lawn that is defined by linear sidewalks.
- Extend the lawn border, promenade and lawn park organization, features, plantings, and patterns from Bathhouse Row's Magnolia Promenade along the street edges of Arlington Lawn, to its northern end.
- Reconstruct new paths to closely follow the alignment of the historic paths. Use simple materials such as simple concrete paving.
- * Remove the non-contributing, impacting pavilion.
- Remove the fluted concrete basin and other non-contributing impacting features in the Arlington Lawn.
- Expand the Hot Water Cascade to form a focal point for Arlington Lawn and a visual transition to the Tufa Park.
- Remove the terraced lawn stage and stone retaining walls near the Desoto Rock.
- Remove the Lower Tufa Terrace Trail.
- Minimize the visual impact of the utility area on the Arlington Lawn:
 - Construct a low profile wall around the utility area.
 - Remove the sweeper building and work area on the north side.
 - Provide a low-profile entrance on the south of the screen wall.
- Expand the visibility of the rock outcrop and spring boxes near the Superior Bathhouse and entrance five by removing vegetation that has grown over the rocks.

West and Hot Springs Mountains Treatment Alternative #2

- See West and Hot Springs Mountains treatments common to all action alternatives.

Whittington Park Landscape Treatment Alternative #2

- See fold-out drawing Sheet LR22.
- * Rehabilitate Whittington Park as a formal entrance to West Mountain. Provide park uses and a formal style that is similar to original design intent.
- * Preserve and stabilize extant park features, including the existing topographic bench, concrete/stucco bridges, and tree plantings. Provide new tree plantings and removed tree and shrub plantings where noted to reinforce historic tree patterns and to rehabilitate historic open and closed spaces.
- Provide a stronger visual connection to West Mountain and Bathhouse Row.
- * Preserve and stabilize Whittington Creek:
 - Stabilize the creek by improving the channel bottom to eliminate undercutting. Coordinate the channel stabilization with the city of Hot Springs, since Whittington Creek provides storm water conveyance for the City.
 - Restore the historic channel walls (for both historic periods), matching materials (including stone and mortar) and craftsmanship. Collaborate with the city of Hot Springs.
- *Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space (see Figure 6-7).
 - Add site features including paving, a pavilion and lawn to this space.

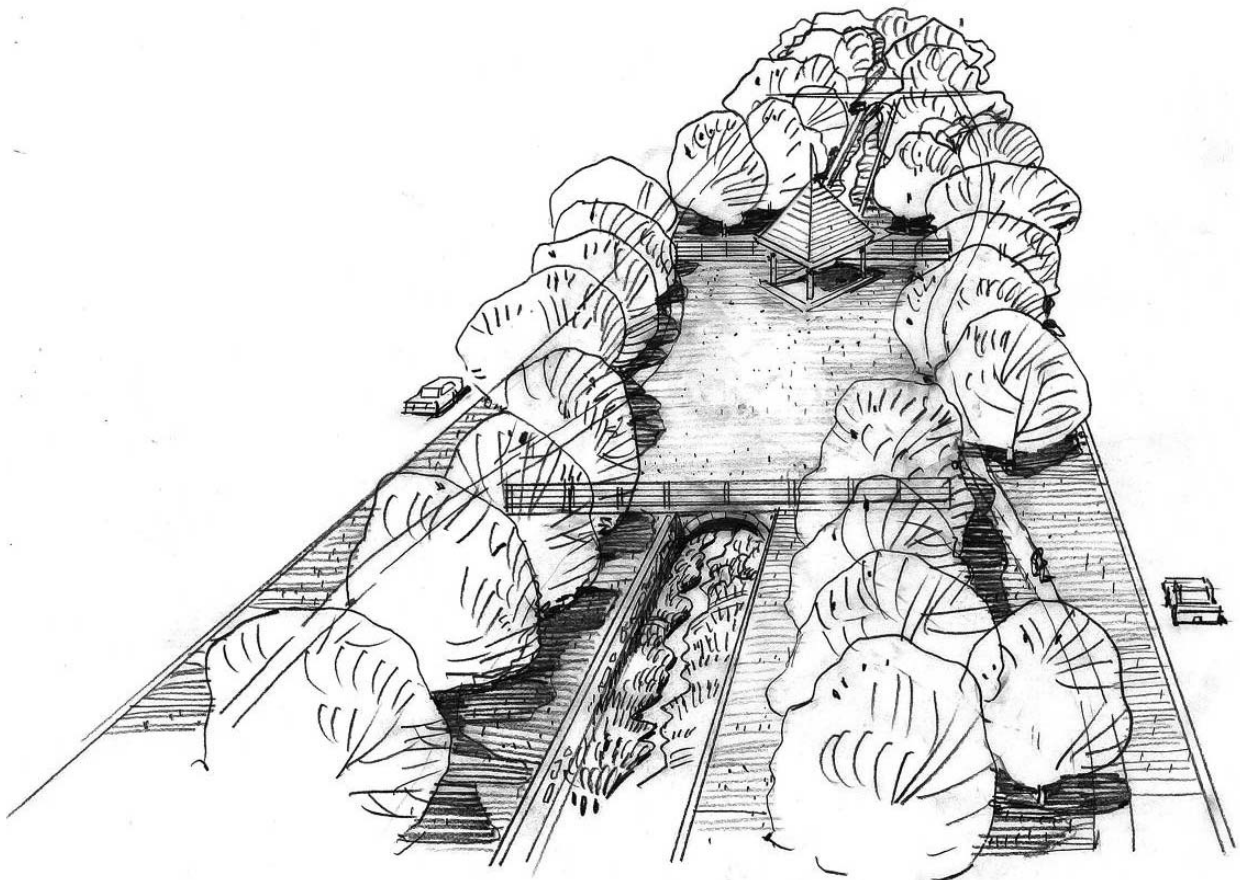


Figure 6-7: Whittington Park Reclaimed Landscape Area Alternative #2

- Re-align trails to reflect historic patterns, including the area by the historic bandstand location and the Myrtle Street road removal. Re-construct the trails to establish a consistent width and to have a consistent edge. Provide a trail that is six feet wide and maintain the edges to be weed free.
- Establish street crossings and provide access to West Mountain's Mountain Top Trail.
- * Reestablish the historic open areas as lawns.
- * Widen the walk along the road to West Mountain Drive, and establish a linear row of trees to formalize and enhance the entrance and connection to West Mountain.
- * Add a pavilion in the original bandstand location west of West Mountain Drive. Preserve the Southern Magnolia tree groves around the pavilion site.

Gulpha Gorge Campground Treatment Alternative #2:

- *See Gulpha Gorge Campground treatments common to all action alternatives.*

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Alternative #3 provides for the protection and preservation of extant historic resources with a minimal amount of change within the park's historic landscapes (see fold-out drawing Sheet LR20). Although minimal alterations to the existing features are acceptable, the emphasis is on preserving the resources that currently exist.

Throughout the Reservation Front non-compatible elements are removed and replaced with compatible features when appropriate. The Grand Promenade is retained as a pedestrian corridor that provides passage from one Mountain Sideground park to the next, and serves as a reminder of the Pleasure Drive/Service Road present during the historic period. The existing pedestrian entrances are maintained, no new entrances are added. The Formal Entrance is rehabilitated to reveal the historic design intent using materials and a design approach that are compatible with, but that do not attempt to recreate the non-extant historic elements. The main pedestrian routes within Arlington Lawn are altered to reflect the historic patterns. The Hot Water Cascade, amphitheater, and Lower Tufa Terrace Trail are retained in their current conditions. Historic resources associated with Hot Springs and West mountains are preserved, and select non-contributing elements are replaced with features that compliment the historic character of the park. Whittington Park is rehabilitated as a formal entrance to West Mountain and revitalized to enhance historic resources. The historic resources at Gulpha Gorge Campground are stabilized, enhanced, and preserved.

Study Area Landscape Treatment Alternative #3

- Preserve contributing historic resources through stabilization, rehabilitation and restoration.²
- Do not reconstruct missing historic features.
- * Allow specific additions or alterations that are compatible with the historic character of the landscape and that meet contemporary needs.
- * Remove or modify non-contributing impacting features, or modify them so that they become at a minimum, non-contributing compatible.
- * Retain non-contributing compatible features.
- * Develop and apply a design vocabulary for buildings, site planning and site features that respects the historic character of each historic landscape. Develop three distinct design vocabularies for: 1) Reservation Front (including Bathhouse Row, Arlington Lawn and the Mountain Sidegrounds), 2) Mountains (including West Mountain, Hot Springs Mountain and Gulpha Gorge Campground), and 3) Whittington Park.
- * Visually and physically connect the park with downtown Hot Springs.

² Throughout this section, an * at the beginning of a treatment directive indicates that this statement is the same for all of the action alternatives.

Reservation Front Landscape Treatment Alternative #3

Bathhouse Row Landscape Treatment Alternative #3

- Preserve the scale and form of contributing landscape features.
- * Rehabilitate the patterns and rhythm of Stevens' Architectural Park, including the lawn border, promenade and lawn park.
- * Extend the lawn border, promenade and lawn park organization and patterns.
- Reestablish the existing spatial organization and patterns of Bathhouse Row from Reserve Street to Fountain Street.
- Reestablish the boundaries of the Architectural Park by adding features at each ends:
 - Restore the Noble Fountain to the corner of Central Avenue and Reserve Street. Provide a simple terrace, similar in size to the original setting, with the Noble Fountain at its center to establish the southern entrance to Bathhouse Row (see Figure 6-8). Remove the existing fluted concrete walls, signs and paving. Set the fountain away from the street edge and protect it with simple concrete bollards that are set along the curb. Connect the terrace to the Administration Building with a formal sidewalk along the alignment of the original sidewalk.

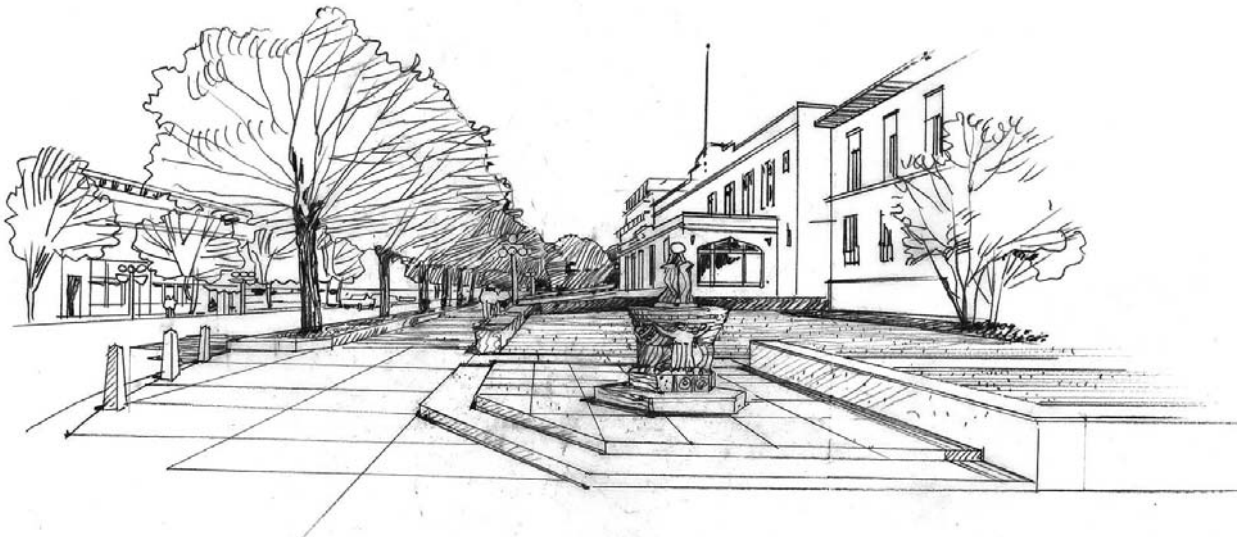


Figure 6-8: Relocation of Noble Fountain Alternative #3

- Re-configure the parking area at the Administration Building, so that the area is reduced to accommodate three spaces, and so the edge of the parking lot is in alignment with the building setback from Reserve Street.
- * Replace Reserve Street concrete with simple concrete paving. Remove existing brick paving and tree median to be consistent with historic design intent.

- * Replace the fluted concrete walls at the Administration Building with a simple concrete wall that is compatible with the park's historic walls, particularly those at the Formal Entrance.
- * Replace non-contributing impacting materials at the Administration Building terrace with materials consistent with the historic character: i.e., remove black traction tape along limestone steps, replace plaza concrete with simple concrete.
- * Remove non-contributing trees and shrubs in the lawn park.
- * Rehabilitate the Maurice Spring.
 - Extend the holly hedge on both sides of the sidewalk; replace the concrete steps with limestone steps.
 - Replace the concrete terrace at the top of the steps.
 - Remove the non-historic light fixture.
 - Preserve and stabilize the springs and their associated features.
 - Restore the historic stone wall.
- * Rehabilitate the holly hedge in historic patterns. Extend the hedge to the front entrances of the bathhouses along the walks. Extend the hedge along the walks to the comfort stations.
- * Remove the existing hedges from the secondary side entrances of the bathhouses.
- * Preserve all extant five-globe light fixtures. Rehabilitate the historic pattern by adding new light fixtures that match the existing fixtures.
- * Ensure consistent maintenance of the landscape around the bathhouses by providing maintenance throughout by the National Park Service. Do not transfer the responsibility of landscape maintenance for individual buildings/sites to lessees.
- Infill plantings along Magnolia Promenade. Maintain Southern Magnolias as single species, and follow the original spacing.
- Relocate walk to the men's and women's Comfort Stations from the side to the center. Line walk with holly hedge.
- * Relocate the concrete ramp at the north side of the entrance to the Fordyce Bathhouse. Remove the existing ramp and construct a new ramp on the south side of the building entrance to preserve the original scale and form of the exedra entry terrace at the Formal Entrance/Stevens Balustrade.
- Provide service and delivery access, and an universally accessible drop-off in the front of the Maurice Bathhouse along Central Avenue.

Mountain Sidegrounds Landscape Treatment Alternative #3

- * Preserve historic features.
- * Remove non-contributing impacting features.
- * Using vegetation, topography, and other natural elements increase the legibility of the historic features of the Mountain Sideground parks. These include the native stone outcrops and naturalistic vegetation that existed in the area before the springs were capped. This will help to place the Grand Promenade within its historically intended context.
- * Enhance natural features to provide visual and sensory cues to the historic character of the landscape.
- * Replace the black chain link fence with a fence that is compatible with the historic character of the Mountain Sidegrounds.
- * Replace the steel railings within the Mountain Sidegrounds with railings that are compatible with the historic character.

South Park Landscape Treatment Alternative #3

- * Preserve the Grand Promenade.
 - Retain the pavement of the main alignment of the Grand Promenade.
 - Remove bench pads and seating area.
 - Replace the wrought iron railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Plant indigenous trees and shrubs to reestablish the historic naturalistic character of South Park and to provide shade.
- Expose rock outcrops that are readily apparent.
- Replace fence with one more compatible with historic character

Foreground Park and Formal Entrance Landscape Treatment Alternative #3

- * Rehabilitate the foreground park as a key landscape space in the reservation front.
- * Rehabilitate the historic character of the foreground park to emphasize a strong connection between Bathhouse Row and the Grand Promenade.
- * Rehabilitate the Formal Entrance as entrance four – the primary pedestrian entrance to the mountainside grounds and Hot Springs Mountain.
- * Preserve and stabilize extant historic features including the Stevens Balustrade, the limestone entry columns, the alignment of the service drive, the stone walls and the display springs.
- * Replace non-compatible impacting features such as the brick terrace with compatible materials.
- * Replace non-compatible impacting topography and plantings (groomed slopes and lawns) with naturalistic topography and native vegetation along the Grand Promenade.

Formal Entrance Landscape Treatment Alternative #3

- * Complete/rehabilitate the Formal Entrance so that it extends from Central Avenue to the Old Carriage Road (and the site of the original pavilion) as it did originally, following the original central axis and symmetrical arrangement.
- * Re-construct the original sequence of historic spaces that comprised the original Formal Entrance, including the topography that steps up the hillside towards Hot Springs Mountain. Follow the historic formal patterning of the spaces (see Figure 6-9).

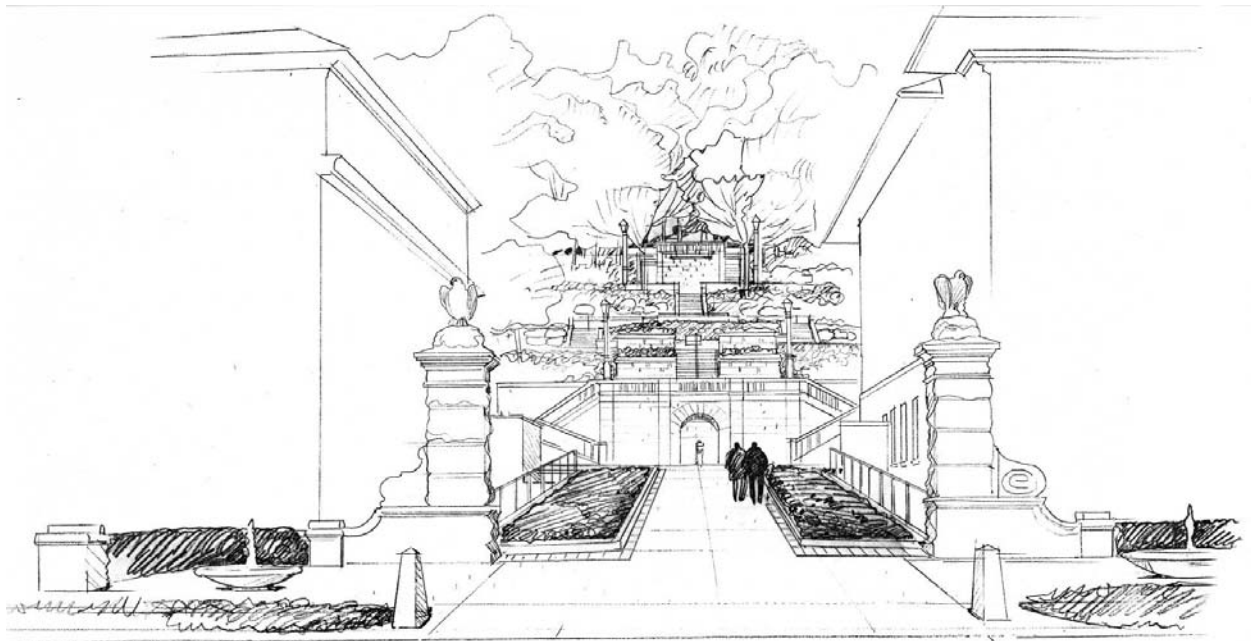


Figure 6- 9: Formal Entrance Treatment Alternative #3

- * Remove non-compatible impacting features including the low stacked stone walls at Stevens Balustrade.
- Allow for non-compatible, non-impacting features to remain.
- Orient the accessible route from the Fordyce Bathhouse to the south and the route from the Maurice Bathhouse to the north to allow for the exedra entry terrace to be completed as a whole space.
- * Rehabilitate the exedra entry terrace at Bathhouse Row and Central Avenue so that it extends from the historic columns to Central Avenue, and is of a similar form to the original space.
 - Strengthen the holly hedges with infill plantings of the same species and habit (in place of the original limestone walls) to frame the terrace.
 - Replace the existing non-compatible impacting fountains with simple concrete and stone basins that 'mark' the site of the original fountains.
 - Remove the existing fluted concrete bollards and replace with simple concrete bollards.
 - Use simple forms and compatible materials that do not detract from the extant historic elements.
- * Remove the visitor drop-off and service access at the intersection of Central Avenue and the Formal Entrance.
 - Relocate the visitor drop-off and service access to the front of the Maurice Bathhouse.
 - Establish a primary pedestrian crossing where the Formal Entrance meets Central Avenue. Relocate the existing southbound traffic signal to the northern edge of the Formal Entrance and add a pedestrian crosswalk. Maintain the existing traffic signal operations.
- Retain the raised concrete planters along the sides of the Maurice and Fordyce bathhouses and re-plant with a low growing vine or groundcover.
- Retain the terrace above the Stevens Balustrade.
- Re-construct the terraced walkway above the Grand Promenade following the original alignment and topographic changes including the double set of steps and intermediate landing. Preserve the stone wall along the Grand Promenade and finish the wall by adding a simple limestone capstone.
- * Expose the rock outcroppings on the slope between the Stevens Balustrade and the Grand Promenade. Replace existing lawn with low growing native vegetation.
- Reestablish the historic visual focal point (icon) from downtown and overlook to downtown Hot Springs at the top of the Formal Entrance by constructing an addition at in the location of the original pavilion (see Figure 6-9).
 - * Re-construct the limestone walls, steps, landings, balustrade, and pavilion site associated with the original pavilion using historic documentation.
- The addition will include a terrace, balustrade and lighting, but not a pavilion. The addition will be contemporary in design and the terrace will have a similar scale, mass and form as the original.

- * Reconstruct the limestone walls, steps, landings, balustrade, and pavilion site associated with the original pavilion using historic documentation.
- * Rehabilitate the historic formal planting arrangement along the length of the Formal Entrance including the formal rows of trees on either side of the central axis. Continue the low plantings at Central Avenue to follow the pattern of the lawn border.

Display Springs

- * Rehabilitate the historic stone walls matching materials (including stone) and craftsmanship to the original construction. Thin vegetation to allow for the rehabilitation and to provide a visual connection between the Display Spring and the Grand Promenade.
- * Remove the non-compatible impacting walls (low, stacked stone) at the edges of the historic stone walls.
- * Replace the brick terrace and seating with a simple concrete terrace that has a simpler form, and a scale that is consistent with the Display Springs.

Tufa Park Landscape Treatment Alternative #3

- Preserve historic trails, rock outcrops, vegetation and other contributing elements in the Tufa Park.
- * Preserve the historic character area in the Tufa Park.
- Expose native rock outcrops wherever possible (see Figure 6-11).
- Plant native trees, shrubs, ferns, grasses and other vegetation in naturalistic groups/masses.
- Avoid formally pruning plants.
- Remove non-historic trails.
- Remove non-contributing impacting and non-impacting seating areas and overlooks.

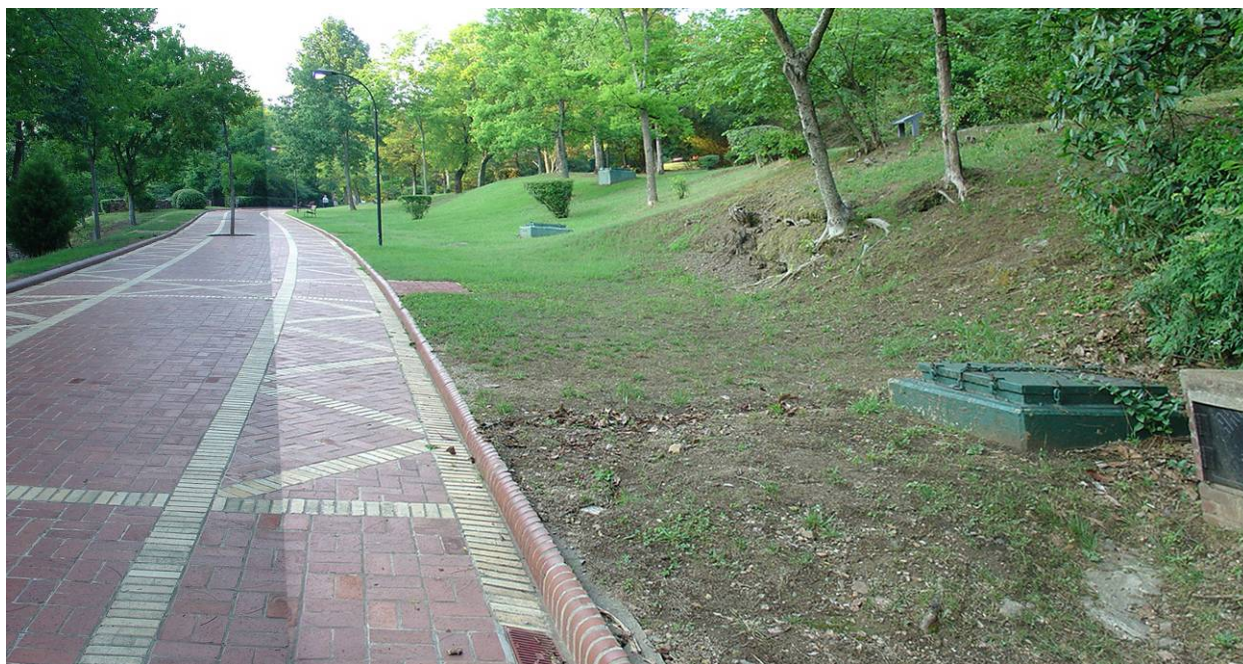


Figure 6- 10: Tufa Park Existing Conditions



Figure 6- 11: Tufa Park Proposed Treatment Alternative #3

Wooded Park Landscape Treatment Alternative #3

- * Stabilize areas where soil erosion is occurring.
- * Preserve/Restore the woods on the eastern side of the Grand Promenade.
- * Remove invasive species that threaten the woodland plant community.
- * Maintain historic drainage channels.
- * Preserve entrance six.
- * Preserve historic stone retaining walls throughout Wooded Park.
- * Maintain the north entrance to the Grand Promenade.
- * Preserve pedestrian trail located between the north entrance to the Grand Promenade and entrance eight.
- * Preserve entrance eight.

Arlington Lawn Landscape Treatment Alternative #3

- * Preserve contributing historic features.
- Reestablish conceptual alignment of lawn and sidewalks.
- Expand Hot Water Cascade by exposing more rock.
- Realign Tufa Terrace Trail and enhance the trail by exposing additional rock outcrops and by planting masses of native vegetation.
- Reconstruct the edges of the Hot Water Cascade lower pools and the stage and wall using native stone set in naturalistic patterns.
- Integrate the amphitheater with the pedestrian circulation by realigning the walks.
- Reduce the size of the service area and screen with plantings or a low screen wall.
- Plant native trees and shrubs to increase the naturalistic vegetation along hillside.
- * Remove pavilion.

West and Hot Springs Mountains Treatment Alternative #3

- See West and Hot Springs Mountains treatments common to all action alternatives.

Whittington Park Landscape Treatment Alternative #3

- * Rehabilitate Whittington Park as a formal entrance into West Mountain. Provide park uses and a more formal style similar to original design intent.
- * Preserve and stabilize extant park features, including the existing topographic bench, concrete bridges, and tree plantings. Provide new tree plantings and remove tree and shrub plantings where noted to reinforce historic tree patterns and to rehabilitate open and closed spaces.
- * Provide stronger visual connection to West Mountain and Bathhouse Row.
- * Preserve and stabilize Whittington Creek:
 - Stabilize the creek by improving the channel bottom to eliminate undercutting. Coordinate the channel stabilization with the city of Hot Springs, since Whittington Creek provides storm water conveyance for the City.

- Restore the historic channel walls (for both historic periods), matching materials (including stone and mortar) and craftsmanship. Collaborate with the city of Hot Springs.
- * Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space (see Figure 6-12).
 - Add site features including a fountain and open lawn framed by trees.

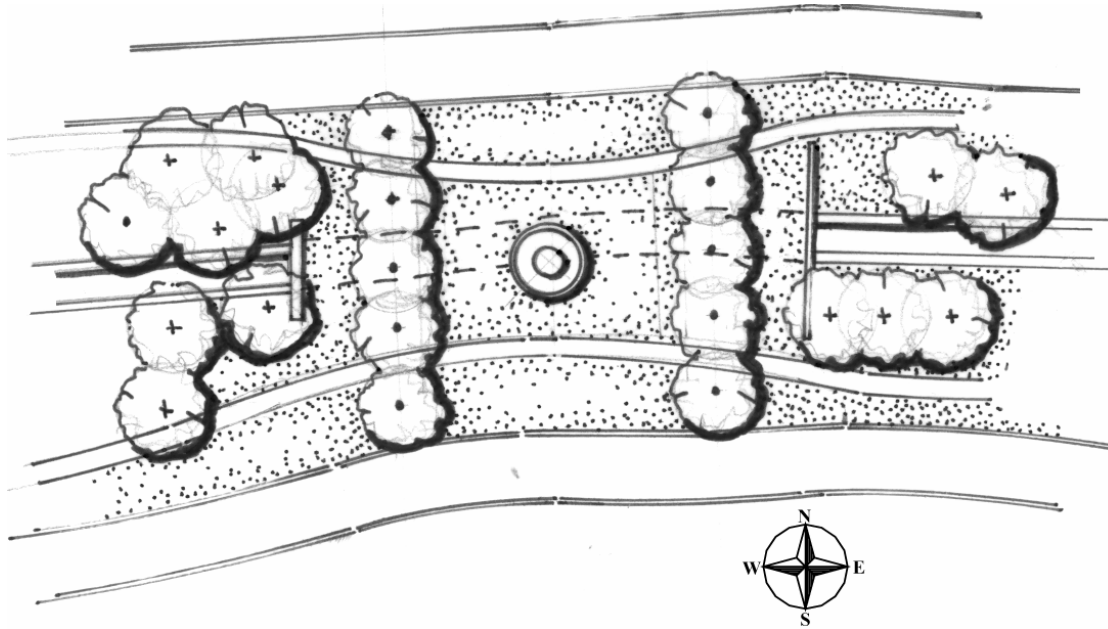


Figure 6- 12: Whittington Park Treatment Alternative #3

- * Relocate trails to reflect historic pattern, including the area by the historic bandstand location and the Myrtle Street road removal. Re-construct the trails to establish a consistent width and to provide an edge. Provide a trail four to six feet wide and maintain edges to be weed free. Establish street crossings and provide access to West Mountain's Mountain Top Trail.
- * Rehabilitate lawn areas.
- * Widen walk along road to West Mountain Drive. Establish linear tree planting row to formalize and enhance entrance and connection to West Mountain.
- * Add a pavilion in the original bandstand location west of West Mountain Drive. Preserve the Southern Magnolia tree grove around the pavilion site.
- Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space.

Gulpha Gorge Campground Treatment Alternative #3:

- *See Gulpha Gorge Campground treatments common to all action alternatives.*

Recommended Treatment: Alternative #4 (Preferred Alternative)

The Recommended Treatment (Alternative #4: Preferred Alternative) provides for the protection and preservation of extant historic resources and accommodates a moderate amount of changes to the park's historic landscapes.

Reconstruction and restoration of selected elements within the landscape reestablish the historic characteristics of the Architectural Park (Magnolia Promenade and Bathhouse Row) and Mountain Sideground parks (South Park, Foreground Park, Tufa Park, and Wooded Park). The Grand Promenade is retained as a pedestrian corridor that provides passage from one Mountain Sideground park to the next, and serves as a reminder of the Pleasure Drive/Service Road present during the historic period. A series of pedestrian entrances provide multiple links between the Architectural Park and the Mountain Sidegrounds. A new design for entrance one provides an entry into the Mountain Sidegrounds from Reserve Street, which was an original feature of Lt. Stevens' design. The Formal Entrance, entrance two, and entrance five are all rehabilitated to establish the historic connections between Bathhouse Row and the Mountain Sidegrounds using materials and a design approach that are compatible but that do not recreate non-extant historic elements. A universally accessible route links the Formal Entrance and the rehabilitated entrance two. Arlington Lawn is rehabilitated to suggest the earliest circulation design for the area as a park. The Hot Water Cascade pools and amphitheater are rehabilitated to display a more naturalistic appearance and recapture the essence of the natural features that originally drew visitors to Hot Springs. Historic resources associated with Hot Springs and West mountains are preserved and select non-contributing elements are replaced with features that compliment the historic character of the mountains. Whittington Park is rehabilitated as a formal entrance to West Mountain and revitalized to enhance historic resources. The historic resources at Gulpha Gorge Campground are stabilized, enhanced, and preserved.

Study Area Landscape Recommended Treatment (Alternative #4: Preferred Alternative):

- * Preserve contributing historic resources through stabilization, rehabilitation and restoration.
- * Allow specific additions or alterations that are compatible with the historic character of the landscape and that meet contemporary needs.
- * Remove or modify non-contributing impacting features, or modify them so that they become at a minimum, non-contributing compatible.
- * Retain non-contributing compatible features.
- * Develop and apply a design vocabulary for buildings, site planning and site features that respects the historic character of each historic landscape. Develop three distinct design vocabularies for: 1) Reservation Front (including Bathhouse Row, Arlington Lawn and the Mountain Sidegrounds), 2) Mountains (including West Mountain, Hot Springs Mountain and Gulpha Gorge Campground), and 3) Whittington Park.
- * Visually and physically connect the park with downtown Hot Springs.

Reservation Front Landscape Recommended Treatment
(Alternative #4: Preferred Alternative):

Bathhouse Row Landscape Recommended Treatment (Alternative #4: Preferred Alternative):

- * Preserve the scale and form of contributing landscape features.
- * Rehabilitate the patterns and rhythm of Stevens' Architectural Park, including the lawn border, promenade and lawn park.
- * Establish the boundaries of Bathhouse Row by extending the lawn border, promenade and lawn park organization and patterns from the intersection of Central Avenue and Reserve Street to the Superior Bathhouse.
- * Extend the lawn border, promenade and lawn park organization and patterns.
- Reestablish the boundaries of the Architectural Park by adding features at each end:
 - Restore the Noble Fountain to the corner of Central Avenue and Reserve Street. Provide a simple terrace, similar in size to the original setting; with the Noble Fountain at its center to establish the southern entrance to Bathhouse Row (see figure 6-13). Remove the existing fluted concrete walls, signs and paving. Set the fountain away from the street edge and protect it with simple concrete bollards that are set along the curb. Connect the terrace to the Administration Building with a formal sidewalk along the alignment of the original sidewalk.
 - Create a new terrace with a new fountain at its center at the northwestern corner of the Superior Bathhouse to serve as the northern entrance to Bathhouse Row (and the National Historic Landmark District). Align the terrace and fountain to serve as the entry to the rehabilitated entrance five. Re-construct the Hoke Smith Fountain at the center of the terrace as a focal point using historic documentation.



Figure 6-13: Relocation of Noble Fountain Recommended Treatment (Alternative #4)

- Rehabilitate the visual and physical connections to the Mountain Sidegrounds from Bathhouse Row by reconstructing entrance two so that it extends from Bathhouse Row to South Park, connecting with the Grand Promenade. Create a visual terminus (a seating node) on the east side of the Grand Promenade.
- * Replace non-contributing impacting materials at the Administration Building terrace with materials consistent with the historic character: i.e., remove black traction tape along limestone steps, replace plaza concrete with simple concrete paving.
- * Re-configure the parking at the Administration Building, so that the area is reduced to accommodate three spaces, and so the edge of the parking lot is in alignment with the building setback from Reserve Street.
- * Replace the existing Reserve Street paving with simple concrete paving. Remove existing brick paving and tree median to be consistent with historic design intent.
- * Replace the fluted concrete walls at the Administration Building with a simple concrete wall that is compatible with the park's historic walls, particularly those at the Formal Entrance.



Figure 6-14: Bathhouse Row Double Row of Trees, Recommended Treatment (Alternative #4: Preferred Alternative)

- Rehabilitate a double row of trees along the Magnolia Promenade (see Figure 6-14).
 - Maintain the Southern Magnolias in the lawn border as a single species; provide infill plantings where necessary, following the original spacing.
 - Plant a new interior row of deciduous canopy trees in the lawn park and maintain the single age trees in uniform size and form.
- Establish new gardens in front of the Men's and Women's Comfort Stations in a design style that is consistent with the formal character of Bathhouse Row, using the Mann & Stern's plan as a guide to provide simple formal outdoor rooms with lawns, walks, and an seating area with drinking fountains, etc.
- * Remove the non-contributing trees and shrubs in the lawn park.
- * Relocate the concrete ramp at the north side of the entrance to the Fordyce Bathhouse. Remove the existing ramp and construct a new ramp on the south side of the building entrance to preserve the original scale and form of the exedra entry terrace at the Formal Entrance/Stevens Balustrade.
- Reconstruct the entrances to each bathhouse to be consistent with the historic intent.
- *Relocate the concrete ramp at the north side of the entrance to the Fordyce Bathhouse. Remove the existing ramp and construct a new ramp on the south side of the building entrance to preserve the original scale and form of the exedra entry terrace at the Formal Entrance/Stevens Balustrade.
- Rehabilitate the Maurice Spring.
 - Widen the sidewalk to the spring and extend the holly hedge on both sides of the sidewalk,
 - Replace the concrete steps with limestone steps, replace the concrete terrace at the top of the steps, and remove the non-historic light fixture,
 - Preserve and stabilize the springs and their associated features,
 - Add vegetation on the west side of the spring, and
 - Restore the historic stone wall.
- * Rehabilitate the holly hedge in historic patterns. Extend the hedge to the front entrances of the bathhouses along the walks. Extend the hedge along the walks to the comfort stations.
- Extend the holly hedge along the exedra entry terrace to the rehabilitated entrance two.
- * Remove the existing hedges from the secondary side entrances of the bathhouses.
- * Preserve all extant five-globe light fixtures. Rehabilitate the historic pattern by adding new light fixtures that match the existing fixtures.
- Remove the drop-off and service drive access at the intersection of the Formal Entrance and Central Avenue.
- Collaborate with the city and state to provide a new service lane along the east edge of Central Avenue for the length of Bathhouse Row, as Central Avenue (Highway 7) is outside the park boundaries.
 - Remove the easternmost drive lane and convert to a drop-off and service only lane.
 - Provide bumpouts at the corner of Central Avenue and Reserve Street and at the Formal Entrance.
 - Provide an opening in the concrete edge that aligns with the entrance to each bathhouse.

Mountain Sidegrounds Landscape Recommended Treatment
(Alternative #4: Preferred Alternative)

- * Preserve historic features through stabilization, rehabilitation and restoration.
- * Remove non-contributing impacting features.
- * Rehabilitate vegetation, topography, and other natural elements to better convey the historic character of the Mountain Sideground parks, and to place the Grand Promenade within its historically intended context.
- * Enhance natural features to provide visual and sensory cues to the historic character of the landscape.
- * Replace the black chain link fence with a steel fence that is compatible with the historic character of the park.
- * Replace the steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.

South Park Landscape Recommended Treatment (Alternative #4: Preferred Alternative)

- * Preserve desirable views to and from the South Park.
- * Preserve the extant features of the Grand Promenade.
- Redesign the Reserve Street entrance to the Grand Promenade and South Park
 - Relocate the Noble Fountain to its original location (outside of South Park); refer to Bathhouse Row Treatment Alternative #2.
 - Replace the pavement, vegetation, and ramp with a rectangular terrace of simple concrete paving, and a lawn that extends on the east and west sides of the terrace.
 - Add a new fountain in the center of the new that is in a design style that reflects its time and that respects the historic character of the South Park historic landscape.
 - Extend a sidewalk that parallels Reserve Street and that connects with the walk at the front of the Administration Building, following the alignment of the original walk.
 - Retain the upper steps and terraces that currently exist and are associated with the Grand Promenade in the South Park.
 - Expose the rock outcrops at the western slope adjacent to entrance one.
- * Preserve the Grand Promenade in the South Park
 - Retain the pavement of the main alignment of the Grand Promenade.
 - Remove bench pads and seating area.
 - Replace the wrought iron railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Rehabilitate vegetation and rock outcrops consistent with the historic character of the South Park.
 - Plant native vegetation in naturalistic groupings to establish a light shade canopy, to create a naturalistic character and a park-like setting.
 - Preserve existing rock outcrops.
 - In areas where topsoil is thin over native stone, consider removing topsoil and turf to expose the stone.

- Create a new display spring on the eastern side of the Grand Promenade in the area where a hot spring is seeping to the surface (behind the Quapaw Bathhouse). Utilize native rocks and vegetation to develop a naturalistic character at the display spring.
- Rehabilitate a pedestrian entrance in the historic location of entrance two between Bathhouse Row and the Grand Promenade at the South Park.
 - Provide a focal terminus for the rehabilitated entrance two in the form of a vertical wall as a backdrop to a small seating node on the eastern side of the Grand Promenade.
- Establish an accessible pedestrian route from the rehabilitated entrance to Bathhouse Row at the Formal Entrance/Stevens Balustrade.
- Preserve desirable views to and from the South Park.

Foreground Park Recommended Treatment (Alternative #4: Preferred Alternative)

- * Rehabilitate the Foreground Park as a contributing landscape space that is integral to the historic character of the Reservation Front.
- * Rehabilitate the Foreground Park to emphasize a strong visual and physical connection between Bathhouse Row and the Grand Promenade.
- * Preserve, stabilize and restore extant historic features including the Stevens Balustrade, the limestone entry columns, the alignment of the original service drive, the stone walls and the Display Springs.
- * Replace non-compatible impacting features such as the brick terrace with compatible materials, such as simple concrete paving.
- * Replace non-compatible impacting topography and plantings (groomed slopes and lawns) with naturalistic topography and native vegetation at the Grand Promenade and the Display Springs and the concrete ramp behind the Fordyce Bathhouse.
- * Rehabilitate the Formal Entrance as entrance four – the primary pedestrian entrance to the mountainside grounds and Hot Springs Mountain.

Formal Entrance Recommended Treatment (Alternative #4: Preferred Alternative)

- * Complete the Formal Entrance so that it extends from Central Avenue to the Old Carriage Road (and the site of the original pavilion) as it did originally, following the original central axis and symmetrical arrangement to reestablish it as the primary pedestrian entrance to Hot Springs Mountain.
- * Re-construct the original sequence of historic spaces that comprised the original Formal Entrance, including the topography that steps up the hillside towards Hot Springs Mountain. Follow the historic formal patterning of the spaces (see Figure 6-15).
- * Remove non-compatible impacting features including the low stacked stone walls at the Stevens Balustrade.
- Remove non-compatible features such as the raised concrete planters, and the accessible walk from the Fordyce Bathhouse.

- * Orient the accessible route from the Fordyce Bathhouse to the south and the route from the Maurice Bathhouse to the north to allow for the Formal Entrance to be completed as a whole space.

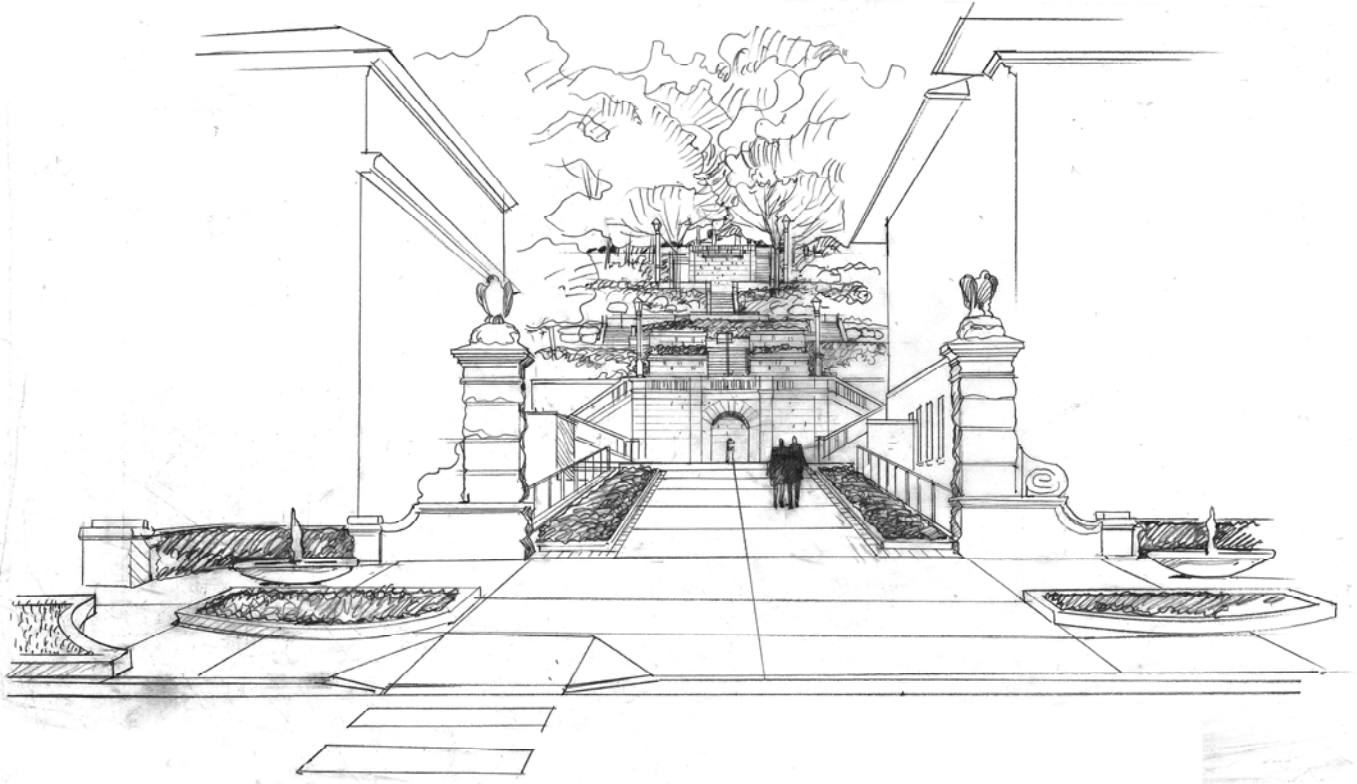


Figure 6-15: Formal Entrance Recommended Treatment (Alternative #4: Preferred Alternative)

- * Remove the visitor drop-off at the intersection of Central Avenue and the Formal Entrance.
 - Establish a primary pedestrian crossing where the Formal Entrance meets Central Avenue. Relocate the existing southbound traffic signal to the northern edge of the Formal Entrance and add a pedestrian crosswalk. Maintain the existing traffic signal operations.
 - Rebuild the concrete walkway and score the paving to interpret the original composition of a central driveway, flanked by walks on either side. Remove the raised concrete planters along the sides of the Maurice and Fordyce bathhouses and rehabilitate the original broad route.
- * Rehabilitate the exedra entry terrace at Bathhouse Row and Central Avenue so that it extends from the historic columns to Central Avenue, and is of a similar form and scale to the original space.
 - * Re-construct the original low, limestone walls to frame the exedra entry terrace. Replace the existing non-compatible impacting fountains with simple concrete and stone basins that 'mark' the site of the original fountains. Use simple forms

and compatible materials that will not detract from the adjacent extant historic elements.

- Re-construct the terrace above the Stevens Balustrade. Remove the brick paving, and rebuild the terrace to follow the formal patterning of the Formal Entrance. Rebuild the terrace using simple materials such as simple concrete paving that does not detract from the extant historic features.
- Reestablish the historic visual focal point (icon) from downtown and overlook to downtown Hot Springs at the top of the Formal Entrance by constructing an addition at in the location of the original pavilion (see Figure 6-15).
 - Re-construct the terraced walkway above the Grand Promenade following the original alignment and topographic changes including the double set of steps and intermediate landing. Preserve the stone wall along the Grand Promenade and finish the wall by adding a simple limestone capstone.
 - * Re-construct the limestone walls, steps, landings, balustrade, and pavilion site associated with the original pavilion using historic documentation.
 - Construct a pavilion in the original location that is compatible with the formal arrangement of the Formal Entrance including reinforcing its architectural form and compatible in mass, form and scale to the original pavilion.
- * Rehabilitate the historic formal planting arrangement along the length of the Formal Entrance including the formal rows of trees on either side of the central axis and the low plantings at Central Avenue.

Display Springs Landscape Recommended Treatment (Alternative #4: Preferred Alternative)

- * Rehabilitate the historic stone walls matching materials (including stone) and craftsmanship to the original construction. Thin vegetation to allow for the rehabilitation and to provide a visual connection between the Display Spring and the Grand Promenade.
- * Remove the non-compatible impacting walls (low, stacked stone) at the edges of the historic stone walls.
- * Replace the brick terrace and seating with a simple concrete terrace that has a simpler form, and a scale consistent with the Display Springs, and that has site furnishings that are compatible with the historic character.

Tufa Park Landscape Recommended Treatment (Alternative #4: Preferred Alternative)

- Preserve historic trails, rock outcrops, vegetation and other contributing elements in the Tufa Park.
- * Preserve the historic character area in the Tufa Park.
- Add an overlook on the Grand Promenade near the Superior Bathhouse to provide a view and interpretation of remnant cooling tank features and the previous location of entrance five.

Create physical reminders of the historic geomorphology of the springs, topography and vegetation in Tufa Park (see Figure 6-16):

- Expose native rock throughout the Tufa Park.
- Plant native vegetation in naturalistic groupings to establish a more park-like setting.
- Expose a hot spring in the upper portion of the Tufa Park, at the site of the cave spring (spring number 10).
- Renovate the hot water display spring to reflect the naturalistic character of the renovated Tufa Park.
- Establish a row of evenly spaced, single species, deciduous canopy trees along the west side of the Grand Promenade behind the Hale and Superior bathhouses and the maintenance area.
- Rehabilitate the historic trail from the Grand Promenade to Hot Springs Mountain Drive near entrance six.



Figure 6-16: Tufa Park Recommended Treatment (Alternative #4: Preferred Alternative)

Wooded Park Landscape Recommended Treatment (Alternative #4: Preferred Alternative)

- * Stabilize areas where soil erosion is occurring.
- * Preserve the woods on the eastern side of the Grand Promenade through stabilization and restoration.
- * Remove invasive species that threaten the woodland plant community.
- * Preserve extant historic features including historic drainage channels and historic stone retaining walls.
- * Preserve entrance six.
- * Maintain the north entrance to the Grand Promenade.
- * Preserve the existing pedestrian trail located between the north entrance to the Grand Promenade and entrance eight.
- Preserve entrance eight.

Arlington Lawn Landscape Recommended Treatment (Alternative #4: Preferred Alternative):

- * Preserve contributing historic features.
- Reestablish conceptual alignment of lawn and sidewalks.
- Expand the Hot Water Cascade:
 - Expose rock outcrops.
 - Plant indigenous ferns and shrubs to soften the character of the rock outcrop.
 - Create a new pedestrian overlook at the expanded Hot Water Cascade.
- Modify the Hot Water Cascade pools and amphitheater walls. Replace existing materials with native stone arranged in a naturalistic pattern to create a more rustic character in this area (see Figure 6-17).
- Establish a buffer area between the Hot Water Cascade and Arlington Lawn. Use native rocks, grasses, and low shrubs to create a rustic area that compliments the Hot Water Cascade and defines an edge to the lawn.
- Realign the Lower Tufa Terrace Trail. Lengthen the trail using more gentle slopes and curves. Enhance the trail with rock outcrops and masses of native vegetation.
- Minimize and screen the maintenance area. Reduce the buildings within the maintenance area at Arlington Lawn, and construct a masonry wall along the north, west, and south sides of the maintenance area to screen the structures from pedestrians. Provide a gate at the south end of the enclosure.

- Modify the route for service vehicles from Central Avenue to the maintenance area by providing a curb cut at Central Avenue north of the Superior Bathhouse.
- Provide reinforced concrete (to support service vehicles) for the sidewalk/service drive from the curb cut at Central Avenue to the maintenance area.
- Provide drive-able turf from the sidewalk/service drive to the maintenance enclosure.
- * Remove the pavilion.
- Extend the lawn border, double row of trees and holly hedge along the Central Avenue side of Arlington Lawn.
- Establish a pedestrian node at the northwest corner of Arlington Lawn. Move the transformer and power poles to another location. Preserve the historic stone retaining walls and utilize them to define the northern and eastern edges of the plaza. Pave the plaza with simple concrete and install a small fountain. This node serves as the terminus of the double row of trees and provides pedestrian access to Arlington Lawn.

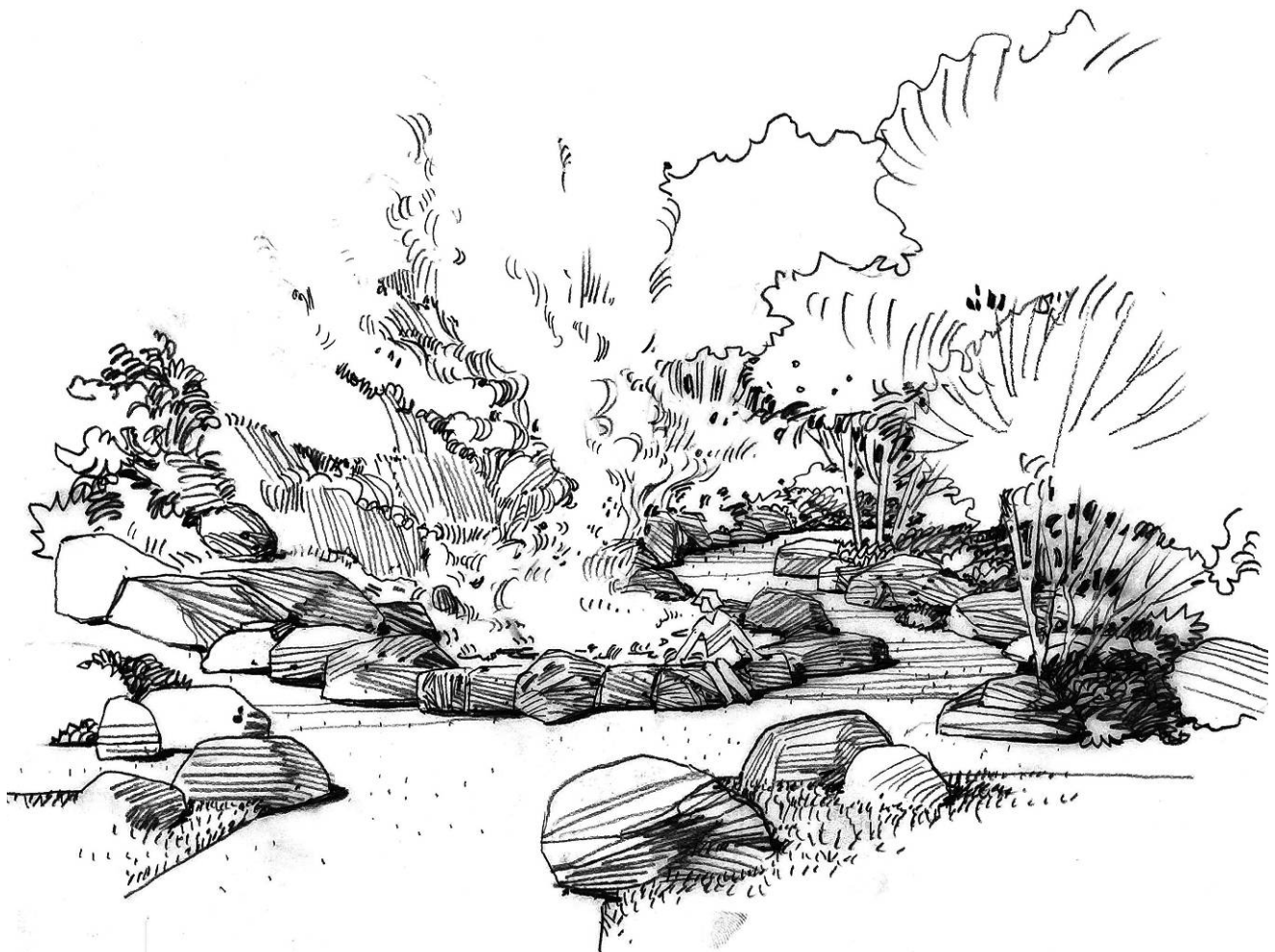


Figure 6-17: Modify the Hot Water Cascade at Arlington Lawn Recommended Treatment (Alternative #4: Preferred Alternative).

*West and Hot Springs Mountains Recommended Treatment
(Alternative #4: Preferred Alternative)*

- See West and Hot Springs Mountains treatments common to all action alternatives.

Whittington Park Landscape Recommended Treatment (Alternative #4: Preferred Alternative):

- See fold-out drawing Sheet LR23.
- * Rehabilitate Whittington Park as a formal entrance to West Mountain. Provide park uses and a formal style that is similar to the original design intent.
- * Preserve and stabilize extant park features, including the existing topographic bench, concrete/stucco bridges, and tree plantings. Provide new tree plantings and remove tree and shrub plantings where noted to reinforce historic tree patterns and to rehabilitate historic open and closed spaces.
- Provide stronger visual connection to West Mountain and Bathhouse Row.
- * Preserve and stabilize Whittington Creek:
 - Stabilize the creek by improving the channel bottom to eliminate undercutting. Coordinate the channel stabilization with the city of Hot Springs, since Whittington Creek provides storm water conveyance for the City.
 - Restore the historic channel walls (for both historic periods), matching materials (including stone and mortar) and craftsmanship. Collaborate with the city of Hot Springs.
- Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space.
 - Add a pavilion, lawn, and tree plantings to reestablish this area as a park space.
- * Realign trails to reflect historic pattern, including the area by the historic bandstand location and the Myrtle Street road removal (see Figure 6-18). Re-construct the trails to establish a consistent width and to have a consistent edge. Provide a trail six feet wide and maintain edges to be weed free. Establish street crossings and provide access to West Mountain's Mountain Top Trail.

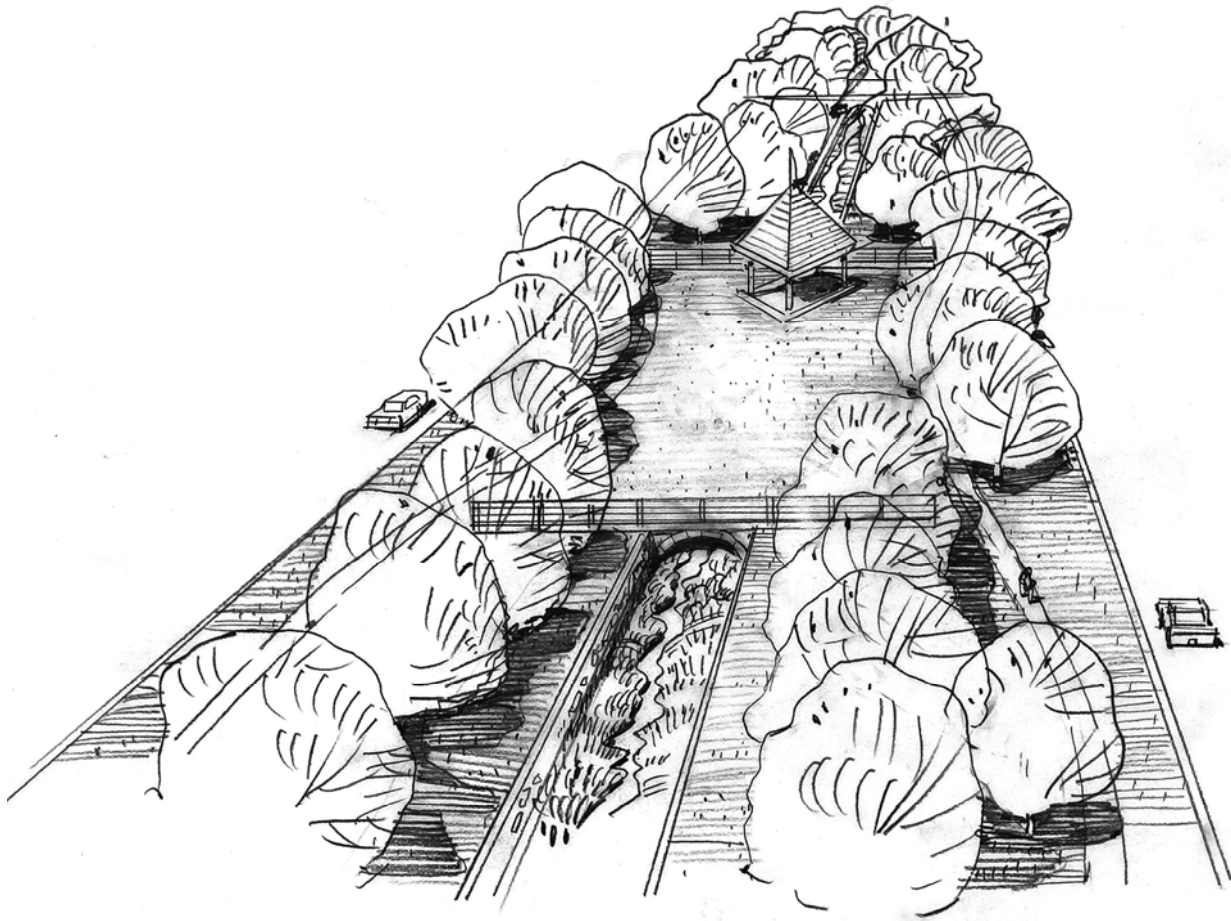


Figure 6-18: Whittington Park Reclaimed Landscape Area Recommended Treatment (Alternative #4: Preferred Alternative)

- * Rehabilitate the historic open areas as lawns.
- * Widen the walk along the road to West Mountain Drive, and establish a linear row of trees to formalize and enhance entrance and connection to West Mountain.
- Add a pavilion in the original bandstand location west of West Mountain Drive. Preserve the Southern Magnolia tree grove around the pavilion site.

Gulpha Gorge Campground Landscape Recommended Treatment (Alternative #4: Preferred Alternative):

- See Gulpha Gorge Campground treatments common to all action alternatives.

Summary of Alternatives

Table 6-1 summarizes the major elements of Alternative Treatments #1- #4 and tests each of these elements against the proposal objectives which were stated in Chapter I. Table 6-1 reveals that Alternative #4 meets the project objectives.

The comparative analysis of potential impacts from each alternative is summarized in Table 6-2. Only resource topics carried forward for analysis in this *CLR/EA* are included in the table. More detailed analysis and conclusions of potential impacts is provided in Chapter VII: *Treatment Impacts/Environmental Consequences*.

Table 6-1: Alternatives Summary and Extent to Which Each Alternative Meets Project Objectives

Project Objectives	Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
Document the development of the historic landscapes at Hot Springs National Park.	1	3	3	3
Document the existing conditions of the historic landscapes at Hot Springs National Park.	1	3	3	3
Evaluate the significance and integrity of the historic landscapes at Hot Springs National Park.	1	3	3	3
Provide guidelines and a range of treatment recommendations for managing the complex and extensive historic landscape resources within the park.	1	3	2	3
Provide management recommendations and schematic treatment plans for specific historic landscapes within the park that accommodate current and future needs while preserving the historic character and significant features present.	1	2	2	3
Streamline planning and compliance processes for the historic landscapes at Hot Springs National Park.	1	2	2	3
Enhance visitor experience through an understanding of the history of the development of the park.	1	2	2	3
Provide recommendations for efficiently managing the historic landscapes within the park while taking into consideration budget constraints.	1	2	2	3
TOTALS	8	20	19	24

1 = Partially Meets Project Objective

2 = Meets Basic Level of Objective

3 = Meets Highest Level of Objective

Table 6-2: Environmental Impact Summary for Each Alternative

<i>Resource Topic: Cultural Resources</i>			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
<p>There would continue to be short-term, negligible to minor adverse impacts during periods of construction related to on-going management actions; however the no-action alternative would result in a long-term, localized minor adverse impact to cultural resources due to potential introduction of inappropriate materials, features and vegetation.</p> <p>Section 106: No Adverse Impact. Continue site specific Section 106 coordination with Arkansas SHPO.</p>	<p>This treatment alternative would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts. The impacts would result primarily from actions of rehabilitation and reconstruction. These actions would extend only during periods of construction and/or demolition. When compared to the no-action alternative, Treatment Alternative #2 would meet more project objectives and result in long-term, localized minor beneficial impacts to cultural resources due to potential introduction of historically correct/compatible materials, features and vegetation.</p> <p>Section 106: No Adverse Impact. Prepare Programmatic Agreement with Arkansas SHPO.</p>	<p>Treatment Alternative #3 would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts due to potential protection and preservation of historically correct materials, features and vegetation within the historic landscape. Because there would likely be fewer construction projects there should be less potential for impacts to archaeological resources and the periods of construction and/or demolition would be in a cumulative sense shorter in duration. When compared to the no-action alternative, Treatment Alternative #3 would meet more project objectives; however it would not meet as many objectives as Treatment Alternative #2. Treatment Alternative #3 would likely result in long-term, localized minor beneficial impacts to cultural resources.</p> <p>Section 106: No Adverse Impact. Prepare Programmatic Agreement with Arkansas SHPO.</p>	<p>Treatment Alternative #4 would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts. When compared to the no-action alternative, and other treatment alternatives, Treatment Alternative #4 would meet project objectives.</p> <p>Section 106: No adverse impact. Prepare Programmatic Agreement with Arkansas SHPO.</p>

Resource Topic: <i>Special Status Species</i>			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
The No-Action Alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, and negligible impact upon state listed species or their habitats within the Reservation Front and Mountains.	This alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible to minor beneficial impacts to the state listed alga and wood stonecrop within the Reservation Front.	Treatment Alternative #3 would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible impacts to the state listed alga and minor beneficial impacts to the wood stonecrop within the Reservation Front.	This alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible to minor beneficial impacts to the state listed alga and wood stonecrop within the Reservation Front.
Resource Topic: <i>Water Quality</i>			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
The No-Action Alternative would have no impact upon the water quality of any springs or streams within Reservation Front, Whittington Park, Gulpha Campground, or the Mountains.	Alternative #2 would result in negligible to minor adverse short-term impacts and negligible to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality upon springs and streams within Whittington Park and Gulpha Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.	Alternative #3 would result in negligible to minor adverse short-term impacts and negligible adverse to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality upon springs and streams within Whittington Park and Gulpha Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.	Alternative #4 would result in negligible to minor adverse short-term impacts and negligible adverse to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality upon springs and streams within Whittington Park and Gulpha Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.

Resource Topic: Floodplains			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
The proposed action would have no impact upon the 100-year floodplain within any section of Hot Springs National Park.	Alternative #2 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the 100-year floodplain and its capacity or functions within Whittington Park, Gulpha Campground, or the Mountains.	Alternative #3 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the 100-year floodplain and its capacity or functions within Whittington Park, Gulpha Campground, or the Mountains.	Alternative #4 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the 100-year floodplain and its capacity or functions within Whittington Park, Gulpha Campground, or the Mountains.
Resource Topic: Visitor Experience			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
Implementation of the No-Action Alternative would have long-term, negligible beneficial impact to visitor's experiences at Hot Springs National Park.	Implementation of Treatment Alternative #2 would have long-term, moderate beneficial impact to visitor's experiences at Hot Springs National Park.	Implementation of Treatment Alternative #3 would have long-term, minor beneficial impact to visitor's experiences at Hot Springs National Park.	Implementation of Treatment Alternative #4 would have long-term, moderate beneficial impact to visitor's experiences at Hot Springs National Park.
Resource Topic: Park Operations			
Alternative #1: No Action	Alternative #2:	Alternative #3:	Alternative #4: Preferred Alternative
Implementation of No-Action Alternative #1 would result in short and long-term, localized, negligible beneficial impacts to the historic landscape.	Implementation of Treatment Alternative #2 would result in short and long-term, moderate adverse impacts to park operations.	Implementation of Treatment Alternative #3 would result in short and long-term, minor adverse impacts to park operations.	Implementation of Treatment Alternative #4 would result in short and long-term, minor adverse impacts to park operations.

Mitigation Measures

The alternatives evaluated in this *CLR/EA* provide a range of reasonable treatments to achieve project objectives. The treatment alternatives are based on differing landscape management philosophies; however all alternatives are based within the same range of historic landscapes within the park. Because there is no change in location for any treatment alternatives, the following mitigation measures have been developed to minimize the degree and/or severity of effects, and would be implemented, as needed, during implementation of any alternative, including the No-Action Alternative.

- Any contractors and subcontractors, utilized for construction projects would be instructed on procedures to follow in case previously unknown archaeological resources are uncovered during construction. If previously unknown and significant archeological resources are unearthed during construction, work would be stopped in the area of discovery and the NPS would consult with the Arkansas State Historic Preservation Office (SHPO) and as appropriate, the Advisory Council on Historic Preservation. If impacts to significant resources could not be avoided by redesign, mitigating measures would be developed in consultation with the SHPO to help ensure that the informational significance of the sites would be preserved. If appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990 would be implemented.
- The NPS would ensure that any contractors and subcontractors utilized for construction are informed of the penalties for illegally collecting artifacts or intentionally damaging archaeological sites, or historic properties.
- To minimize the amount of ground disturbance, staging and stockpiling areas would be located in previously disturbed sites, away from visitor use areas and circulation patterns to the extend possible. All staging and stockpiling areas would be returned to pre-construction conditions following construction.
- Construction zones would be identified and fenced with construction tape, snow fencing, or some other material prior to any construction activity. All protection measures would be clearly stated in the construction specifications and workers would be instructed to avoid conducting activities beyond the construction zone.
- Because soils are susceptible to erosion until re-vegetation takes place, standard erosion control measures such as silt fences and/or sand bags would be used to minimize any potential erosion. Other *NPS Best Management Practices (BMPs)* would be used as necessary and could include sediment traps and erosion checks.
- Fugitive dust generated by construction would be controlled by spraying water on the construction site, as needed. Water needed for dust control would come from park approved sources or would be provided by contractors from sources outside the park.
- To reduce noise and emissions, construction equipment would not be permitted to idle for long periods of time.
- To minimize potential petrochemical leaks from construction equipment, the equipment would be regularly monitored to identify and/or repair any leaks.

- To minimize the potential impact to park visitors, variation on construction timing may be considered, such as conducting a majority of the work in shoulder seasons.

Environmentally Preferable Alternative

The environmentally preferable alternative is determined by applying the criteria suggested in NEPA, which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that "...the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101." Using the six criteria from Section 101 detailed below.

- **Criterion 1**—*Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.*
- **Criterion 2**—*Assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings.*
- **Criterion 3**—*Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.*
- **Criterion 4**—*Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.*
- **Criterion 5**—*Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities.*
- **Criterion 6**—*Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.*

Alternative #1 does provide the opportunity for future generations to enjoy the benefits of aesthetically pleasing surroundings through maintenance of current landscape treatments, which focuses on a manicured, resort-style landscape. This alternative also maintains a certain portion of the park's cultural heritage and provides a wide range of beneficial uses for park visitors and city residents, who use the national park as a city or neighborhood park. However, this alternative would not preserve important cultural landscape elements as well as the treatment alternatives because of the presence of numerous non-contributing landscape features. This alternative would not allow for restoration of significant landscape elements or introduction of features that compliment the landscape.

Alternative #2 would provide for protection and preservation of cultural resources while incorporating complimentary changes to the historic landscape. Future generations would receive a greater benefit than Alternative #1 because this treatment alternative would restore historic pedestrian entrances to the Mountain Sidegrounds as well as incorporating a hot water cascade, which would provide visitors a greater exposure to the historic design intent for the park. This alternative would reestablish the landscape to the era of significance to a higher degree than any other alternative; however this would not create a reasonable balance between historic preservation and resources available to implement the alternative.

Alternative #3 would implement the highest level of preservation of all the alternatives; however it would limit the park's ability to make smaller changes that would result in reconstruction of historic elements that are no longer exist. Park visitors and city residents would not receive the additional benefits of being exposed to the historic design intent for the

landscape elements such as pedestrian entrances. This alternative, as well as Alternatives #1 and #2 do not strike a balance between resources available and the desire to reestablish the landscape to its period of significance.

Alternative #4 would protect and preserve extant historic resources, while allowing some flexibility in incorporating compatible elements such as pedestrian entrances and rehabilitation of Arlington Lawn. This alternative best supports the balance of preservation of cultural and natural heritage with available resources to implement the proposed treatment.

No new information came forward during public scoping or consultation with regulatory agencies or Native American tribes to necessitate the development of any new alternatives, other than those described and evaluated in this document. Because it meets the Purpose and Need for the project, the project objectives, and is the environmentally preferable alternative, Alternative #4 is also recommended to be the Preferred Alternative for this proposal.

Chapter VII: Impacts from Treatment Alternatives/ Environmental Consequences

Chapter VII: Impacts from Treatment Alternatives (Environmental Consequences)

Environmental Consequences

This chapter of the *CLR/EA* forms the scientific and analytic basis for the comparisons of treatment alternatives as required by 40 CFR 1502.14. This discussion of impacts (effects) is organized in parallel with Chapter III: Existing Conditions (Affected Environment) and is organized by resource topic areas. The no action alternative and each treatment alternative are discussed within each resource topic area. Resource topics analyzed are Cultural Resources (Cultural Landscape and Archeological Resources), Special Status Species, Water Quality, Floodplain, Visitor Experience and Park Operations. The analysis of alternatives in this *CLR/EA* is at a programmatic level. Each of the action alternatives includes a large number of proposed treatments. A number of these treatments are common to all action alternatives and would result in redundant analysis if addressed for each alternative. Common treatments for all action alternatives are presented in Chapter VI: Treatment Alternatives. To minimize redundant discussion, the elements common to the action alternatives will only be discussed at the beginning of each resource topic. The balance of the discussion for each resource topic will focus on treatments that are distinct to that treatment alternative.

Potential impacts for this proposal are described in terms of type, context, duration, and intensity:

1. **Type** of impact refers to the consequences of implementing a given alternative as beneficial or adverse, direct or indirect:
 - Beneficial — A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
 - Adverse — A change that moves the resource away from a desired condition or detracts from its appearance or condition.
 - Direct — An effect that is caused by an action and occurs in the same time and place.
 - Indirect — An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.
2. **Context** describes the area or location in which the impact will occur.
3. **Duration** describes the length of time an effect will occur, either short-term or long-term:
 - Short-term — Impacts generally last only during construction, and the resources resume their preconstruction conditions following construction.
 - Long-term — Impacts last beyond the construction period, and the resources may not resume their preconstruction conditions for a longer period of time following construction.

Professional judgment is used to reach reasonable conclusions as to the type, intensity, context and duration of potential impacts for each resource topic.

Comparison of Impacts

The comparison of impacts for each treatment alternative is summarized in Table 6-2, which is at the end of Chapter VI: *Treatment Alternatives*. The impact analysis presented in this chapter results in a determination of an Environmentally Preferable Alternative, which is also described in Chapter VI: *Treatment Alternatives*.

Cumulative Impacts

The CEQ regulations, which implement NEPA, require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions.”¹ Cumulative impacts are considered for the no-action and proposed action alternatives.

Cumulative impacts were determined by combining the impacts of the no-action and action alternatives with other potential past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify ongoing and foreseeable future projects at Hot Springs National Park, and if applicable, within the surrounding area. Given this, the following projects were identified for the purpose of conducting the cumulative effects analysis.

- **Construction of a downtown bypass** – The Arkansas State Highway and Transportation Department and local communities have developed plans to construct a bypass on State Route 70 to improve regional transportation and alleviate congestion on State Route 7, through downtown Hot Springs. A portion of State Route 7 is also Central Avenue along Bathhouse Row.
- **Construction of regional bike / pedestrian trails** – Arkansas Department of Transportation and local communities have developed plans to create a regional bike trail system. This trail system will link important cultural sites and community facilities throughout the region. A portion of this trail system will be located along Central Avenue.
- **Urban Development in Garland County** – Growth beyond park boundaries will likely continue to some degree for the foreseeable future. The recharge area for the groundwater resource at Hot Springs National Park extends beyond the park boundaries and could be affected by increased impervious surfaces.

¹ 40 CFR 1508.7.

- **Hot Springs National Park Wayside Plan** – The Park does not have funding yet to prepare a Wayside Plan; however park staff are confident that funding will be acquired in the foreseeable future to prepare this plan. The Wayside Plan will improve information available to visitors to the park landscapes, enriching visitor experiences of the park.
- **Hot Springs National Park Interpretive Plan** – This plan has been funded and will be prepared by staff from the Harper’s Ferry Center. Representatives from the Harper’s Ferry Center have been on-site to initiate the planning process. The Hot Springs National Park Interpretive Plan will determine appropriate methods for interpreting the park’s resources, enriching visitor experiences of the park.
- **Leasing Hot Springs National Park Bathhouses for Adaptive Reuse** – A program is being implemented to lease bathhouses to outside commercial enterprises for adaptive reuse. The leasing program provides the NPS an opportunity to rehabilitate and reuse bathhouses for purposes similar to their original functions. The first bathhouse to be leased for this purpose is the Ozark Bathhouse, which is currently being rehabilitated.
- **Archaeological Inventory at Hot Springs National Park** – An archaeological inventory will be conducted at the park to identify sites that may be eligible for listing on the NRHP.
- **Consolidation of Museum Collections** – Hot Springs National Park will become a curatorial facility for museum collections from other NPS units in the Midwest Region.

Impairment Analysis

The NPS *Management Policies 2006* requires analysis of potential effects to determine whether or not actions would impair park resources or values. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service (NPS) managers must always seek ways to avoid or minimize to the greatest degree practicable, actions that would adversely affect park resources and values that are related to the legislative establishment of the park, National Historic Landmarks, or other nationally significant resources.

These laws give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may constitute impairment. Impairment may result from NPS activities in managing the park, from visitor activities, or from activities undertaken by concessionaires, contractors, and others operating in the park. Impairment of park resources can also occur from activities occurring outside park boundaries. An impact would be more likely to constitute impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park.
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park.
- Identified as a goal in the park's GMP or other relevant NPS planning documents.

An impairment determination is included in the environmental consequences analysis section for all resource topics relating to park resources and values.

Impacts to Cultural Resources

Basis of Analysis

In this *CLR/EA*, impacts to historic properties are described in terms of type, context, duration, and intensity, as described above, which are consistent with the regulations of the CEQ that implement the NEPA. This *CLR/EA* is intended to comply with the requirements of both NEPA and Section 106 of the NHPA. To achieve this, a Section 106 summary is included under the Preferred Alternative for each of the cultural resource topics carried forward for analysis. The Section 106 summary is an assessment of effects of the implementation of the preferred treatment alternative on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations.

Under the Advisory Council's regulations, a determination of either adverse effect or no adverse effect must be made for affected historic properties that are eligible for, or listed in the National Register of Historic Places (NRHP). An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the National Register (e.g., diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). *Adverse effects* also include reasonably foreseeable effects caused by the Preferred Alternative that would occur later in time; be farther removed by distance; or be cumulative.² A determination of *no adverse effect* means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the NRHP.

² 36 CFR Part 800.5, Assessment of Adverse Effects.

In accordance with the Advisory Council's regulations for implementing Section 106, impacts to historic properties for this project were identified and evaluated by (1) determining the area of potential effect; (2) identifying cultural resources present in the area of potential effect that were listed in or eligible to be listed in the NRHP; (3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the NRHP; and (4) considering ways to avoid, minimize, or mitigate adverse effects. The area of potential effect was established in Chapter IV: Landscape Analysis and further refined in Chapter VI: Treatment Alternatives.

CEQ regulations and the National Park Service's DO-12 also call for a discussion of the appropriateness of mitigation, as well as analysis of how effective the mitigation would be in reducing the intensity of a potential impact. Any reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined in Section 106 is similarly reduced. Although adverse effects under Section 106 may be mitigated, the effect remains adverse.

In order for a historic property to be listed in the NRHP, it must meet one or more of the following criteria of significance: A) associated with events that have made a significant contribution to the broad patterns of our history; B) associated with the lives of persons significant in our past; C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; D) have yielded, or may be likely to yield, information important in prehistory or history. In addition, the historic property must possess integrity of location, design, setting, materials, workmanship, feeling, association.³

As noted in Chapter I, it was determined that the proposal under consideration would not likely affect Museum Collections and there are no established Ethnographic Resources at Hot Springs National Park so these topics are not addressed in this chapter.

³ National Register Bulletin, How to Apply the National Register Criteria for Evaluation.

Cultural Landscapes

Intensity levels:

- **Negligible** – Impact(s) would be at the lowest level of detection, or barely perceptible and not measurable. For the purposes of Section 106, the determination of effect would be – **no effect**.
- **Minor – Adverse impact** - impacts would not affect the overall cultural landscape, or the significant landscape characteristics. For purposes of Section 106, the determination would be – **no adverse effect**.

Beneficial impact - preservation of the overall cultural landscape and significant landscape characteristics in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of Section 106, the determination of effect would be – **no adverse effect**.

- **Moderate – Adverse impact** - impacts would alter the cultural landscape or one or more of the significant landscape characteristics, but would not diminish the integrity of the landscape to the extent that its NRHP status or eligibility is jeopardized. For purposes of Section 106, the determination would be – **adverse effect**.

Beneficial impact - rehabilitation of the cultural landscape or one or more of the significant landscape characteristics in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes*. For purposes of Section 106, the determination of effect would be – **no adverse effect**.

- **Major – Adverse impact** - impacts would alter the overall cultural landscape or one or more of the significant landscape characteristics, diminishing the integrity of the landscape to the extent that its NRHP status or eligibility is jeopardized. For purposes of Section 106, the determination would be – **adverse effect**.

Beneficial impact - restoration of the cultural landscape or one or more of the landscape characteristics in accordance with the *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of Section 106, the determination of effect would be – **no adverse effect**.

Archaeological Resources

Intensity levels:

- **Negligible** – Impact(s) would be at the lowest level of detection, or barely perceptible and not measurable, either adverse or beneficial. For the purposes of Section 106, the determination of effect would be – **no effect**.
- **Minor – Adverse impact** – Disturbance of a site(s) results in little, if any loss of integrity. For purposes of Section 106, the determination would be – **no adverse effect**.

Beneficial impact – Maintenance and preservation of a site(s). For purposes of Section 106, the determination of effect would be – **no adverse effect**.

- **Moderate – Adverse impact** – Disturbance of a site(s) results in a loss of integrity. For purposes of Section 106, the determination would be – **adverse effect**. A memorandum of agreement (MOA) is executed among the NPS and applicable state or tribal historic preservation officer and, if necessary, the Advisory Council on Historic Preservation in accordance with 36 CFR 800.6(b). Measures identified in the MOA to minimize or mitigate adverse impacts reduce the intensity of impact under NEPA from major to moderate.

Beneficial impact – Stabilization of a site(s). For purposes of Section 106, the determination of effect would be – **no adverse effect**.

- **Major – Adverse impact** – Disturbance of a site(s) results in loss of integrity. For purposes of Section 106, the determination would be – **adverse effect**. Measures to minimize or mitigate adverse impacts cannot be agreed upon and the NPS and applicable state or tribal historic preservation officer and/or Advisory Council are unable to negotiate and execute a MOA in accordance with 36 CFR 800.6(b).

Beneficial impact – Active intervention to preserve site(s). For purposes of Section 106, the determination of effect would be – **no adverse effect**.

Treatment Alternative #1: No-Action

Cultural Landscape Analysis: The no-action alternative would result in the continuation existing of Hot Springs National Park landscape management approaches. Bathhouse Row would continue to be the primary cultural resource at the park and Arlington Lawn and the Grand Promenade would continue to function as recreation spaces used mainly by Hot Springs residents. The mountains would continue to provide outdoor recreation opportunities. All areas would continue to be maintained (given consistent staffing) as they have in recent years. Implementation of the no-action alternative could result in a long-term deviation from the intent of Stevens' design which would result in impacts to the integrity of the historic landscape. Incompatible features and inappropriate materials and vegetation could be incorporated into the landscape. Continued incremental alteration of historic features, materials and vegetation could result in long-term, localized minor adverse impacts to the cultural landscape.

Archaeological Resources: At this time there are no known archaeological resources within the area of potential effect; however there is potential for archaeological resources. Because the no-action alternative would result in continuation of landscape management practices that could include ground disturbing actions, there is potential for adverse impacts to archaeological resources. Without prior knowledge of archaeological resources in the area of a ground-disturbing project, it is not possible to determine the precise nature of those impacts; however the implementation of the park's archaeological inventory, appropriate mitigation measures (described in Chapter VI) and coordination with the Arkansas SHPO it is anticipated that the potential for adverse effects would be mitigated.

Cumulative Impacts: Because the area of potential effect is so large, the percentage of all potential actions from on-going landscape management within the park would be high. On-going actions within the park, in addition to other actions outside the park, such as the potential for construction of a downtown bypass and bike trails could result in a cumulative loss and adverse impacts to archaeological resources. Adverse impacts could be mitigated through actions such as an archaeological resource inventory at Hot Springs National Park.

Conclusion: There would continue to be short-term, negligible to minor adverse impacts during periods of construction related to on-going management actions; however the no-action alternative would result in a long-term, localized minor adverse impact to cultural resources due to potential introduction of inappropriate materials, features and vegetation.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Section 106 Summary: The potential effects of the no-action alternative have been evaluated at a programmatic level and after applying the Advisory Council's criteria of

adverse effects (36 CFR Part 800.5), the National Park Service concludes that although the no-action alternative provides the least beneficial impacts to the historic landscape of all alternatives, the no-action alternative would result in no adverse effect to the cultural landscape at Hot Springs National Park.

After applying the same Advisory Council's regulations, the National Park Service concludes that, although archaeological resources have not been identified in the area of potential effect, there is potential for the presence of these resources in the area. Therefore there is the potential for an adverse effect to archaeological resources. Because this analysis is programmatic and does not include site-specific analysis of cultural landscape or archaeological resources, Section 106 compliance will continue to be required at the time specific projects are proposed.

Actions Common to all Treatment Alternatives

The management philosophy for the actions common to all treatment alternatives is rehabilitation of resources that contribute to the historic significance of the landscape. The philosophy of rehabilitation allows for stabilization of historic features and removal of features that do not contribute to the significance of the landscape. In addition, it provides flexibility to allow the addition of new features that are compatible with the historic character of the landscape. Preservation of historic features such as light fixtures, the Formal Entrance (Stevens Balustrade), and the historic character area in the Tufa Park would result in long-term, minor beneficial impacts to the landscape. Some historic features have degraded and require stabilization to maintain their integrity within the landscape. Stabilization of resources including the channel bottom of Whittington Creek and mountain trails would have long-term, moderate beneficial impacts by preventing further degradation of the resource. Native vegetation would be replanted in areas where invasive species are removed and would become a basis for the plant palette for revegetation efforts. Reestablishment of a more natural landscape with plant species that are native to the region would result in a long-term, localized minor beneficial impact. The reestablishment of native plant species would provide a more natural setting in the historic landscape and would likely require fewer resources to maintain than in the no-action alternative.

The removal of other non-contributing features like inappropriate brick paving and railings would result in short-term, minor adverse impacts, but only during the period of demolition and removal. Ultimately, the removal of non-contributing features would be a long-term, minor beneficial impact to the cultural landscape. The addition of new structures such as shelters and restrooms on the mountains would have a long-term, negligible adverse impact to the cultural landscapes. The features would be designed to be compatible with the historic landscape character. Another common treatment is the proposal to establish a design vocabulary for all landscape components within the historic landscape at Hot Springs National Park. The establishment of a design vocabulary would provide guidance to assist park staff maintenance in implementing treatment recommendations and assist interpretative staff in telling the story of the historic landscape. A design vocabulary would also help

streamline the development of a Section 106 Programmatic Agreement with the Arkansas State Historic Preservation Officer.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Cultural Landscape Analysis: The emphasis of Treatment Alternative #2 is restoration and reconstruction; however this treatment alternative is also the most flexible in allowing new features to be added to the landscape. This flexibility would ensure that the historic character of the landscape would be reestablished to a greater extent than any other treatment alternative and the no-action alternative. Treatment Alternative #2 would result in reestablishment of historic pedestrian connections from sidewalks along Central Avenue as well as historic connections between elements of the landscape. Reestablishment of pedestrian connections such as the connections to the Mountain Sidegrounds from Bathhouse Row would require reconstruction of two entrances which would ultimately have long-term, moderate beneficial impacts on the historic landscape; however short-term impacts from reconstruction efforts would be localized, minor and adverse. These adverse impacts would last only as long as it takes to prepare the site and reconstruct the appropriate features. Although a component of this alternative is the reestablishment of pedestrian connections within the landscape there is a proposed element that would eliminate an existing access point. The drop-off and service area along Central Avenue (between the Fordyce and Maurice bathhouses) would be removed. Although this is considered as removal of a site feature, there would be no adverse effect to historic pedestrian connections and it would result in removal of security bollards, which are incompatible features.

Archaeological Resources: There are no known archaeological resources within the area of potential effect; however there is potential for archaeological resources. Because Treatment Alternative #2 would result in ground disturbing actions associated with treatments such as reconstruction of historic features including a new pavilion at the top of the Formal Entrance, removal of soil over rock outcrops, and creation of a new display spring, there is the potential for adverse impacts to archaeological resources. Without prior knowledge of archaeological resources in the area of a ground-disturbing project, the precise nature of those impacts is not able to be determined at this time; however with the implementation of the park's archaeological inventory, appropriate mitigation measures (described in Chapter VI) and coordination with SHPO, it is anticipated that the potential for adverse effects would be mitigated.

Cumulative Effects: Cumulative impacts for Treatment Alternative #2 are similar to the other treatment alternatives. On-going actions within the park, in addition to other actions outside the park, such as the potential for construction of a downtown bypass and bike trails could result in adverse impacts to archaeological resources; however the impacts from this alternative could be mitigated through cumulative actions such as an archaeological resource inventory at Hot Springs National Park and adherence to appropriate laws and regulations protecting these resources. This alternative would result in beneficial impacts to vegetation management within the cultural landscape. There would be an overall beneficial impact cumulative effect to vegetation within the historic landscape.

Conclusion: This treatment alternative would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts. The impacts would result primarily from actions of rehabilitation and reconstruction. These actions would extend only during periods of construction and/or demolition. When compared to the no-action alternative, Treatment Alternative #2 would meet more project objectives and result in long-term, localized minor beneficial impacts to cultural resources due to potential introduction of historically correct/compatible materials, features and vegetation.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Section 106 Summary: The potential effects of Alternative #2 have been evaluated at a programmatic level and after applying the Advisory Council's criteria of adverse effects, the National Park Service concludes that implementation of Treatment Alternative #2 would result in no adverse effect to the cultural landscape at Hot Springs National Park.⁴

After applying the same Advisory Council's regulations, the National Park Service concludes that, although archaeological resources have not been identified in the area of potential effect, there is potential for the presence of these resources in the area. Although there is the potential for archaeological resources in the area of potential effect, the effects to archaeological resources is unknown at this time. This analysis is programmatic and does not include site-specific analysis of cultural landscape or archaeological resources and Section 106 compliance will be required for proposed treatment actions. A Programmatic Agreement should be developed between the NPS and the Arkansas SHPO to simplify the Section 106 process.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Cultural Landscape Analysis: This alternative focuses on protection and preservation of the historic landscape and a high percentage of the proposed treatments are common to all alternatives. Because this alternative focuses on protection and preservation there is less flexibility than in the other treatment alternatives to introduce compatible features into the landscape; however this alternative does allow non-compatible, non-impacting features to remain. This alternative would also require less resources to implement than other treatment alternatives because less construction and demolition would be required. This alternative proposes construction of a terrace at the Formal Entrance, a less intensive feature than that proposed in alternative #2. Construction of simpler, yet compatible features would result in a long-term, localized beneficial impact to the historic landscape; however as with all construction projects there would be a short-term, localized minor adverse impact that would only last during the period of construction. A construction project that differs from other alternatives is the relocation of the Bathhouse Row drop-off / service access area. The current

⁴ Code of Federal Regulations, "Title 36-Parks, Forests, and Public Property," Chapter 8, Protection of Historic Properties, subpart B- the Section 106 Process, 800.5: Assessment of adverse effects.

drop-off / service area between the Fordyce and Maurice bathhouses would be removed and relocated to the north. Relocating the drop-off / service area to the front of the Maurice Bathhouse would allow the Formal Entrance to be reconstructed to its original intent from Central Avenue. This proposed treatment would provide long-term, localized beneficial impacts to the historic landscape; although there would be short-term, minor adverse impacts from the construction of the new drop-off / service area and the removal of two or three Southern Magnolia trees. In comparison to the no-action alternative, Treatment Alternative #3 would have a stronger effort placed on reestablishment of native vegetation and reestablishing a more natural landscape. Proposed treatments include removal of non-historic trails, exposing more rock outcrops and springs, and reducing formal maintenance of shrubs, which would have long-term, localized moderate beneficial impacts to the historic landscape.

Archaeological Resources: There are no known archaeological resources within the area of potential effect; however there is potential for archaeological resources within the area of potential effect. Although Treatment Alternative #3 would likely result in fewer ground disturbing actions than the other treatment alternatives, there is the potential for adverse impacts to archaeological resources. However, without prior knowledge of archaeological resources in the area of a ground-disturbing project, the precise nature of those impacts is not able to be determined at this time; however the implementation of appropriate mitigation measures (Chapter VI) and coordination with SHPO should reduce potential adverse effects to the intensity level of minor.

Cumulative Impacts: Cumulative impacts would be similar to those described for Treatment Alternative #2.

Conclusion: Treatment Alternative #3 would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts due to potential protection and preservation of historically correct materials, features and vegetation within the historic landscape. Because there would likely be fewer construction projects there should be less potential for impacts to archaeological resources and the cumulative periods of construction and/or demolition shorter in duration. When compared to the no-action alternative, Treatment Alternative #3 would meet more project objectives; however it would not meet as many objectives as Treatment Alternative #2. Treatment Alternative #3 would likely result in long-term, localized minor beneficial impacts to cultural resources.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Section 106 Summary: The potential effects of Alternative #3 have been evaluated at a programmatic level and after applying the Advisory Council's criteria of adverse effects (36 CFR Part 800.5), the National Park Service concludes that implementation of Treatment

Alternative #3 would result in no adverse effect to the cultural landscape at Hot Springs National Park.

After applying the same Advisory Council's regulations, the National Park Service concludes that, although archaeological resources have not been identified in the area of potential effect, there is potential for the presence of these resources in the area. Although there is the potential for archaeological resources in the area of potential effect, the effects to archaeological resources is unknown at this time. This analysis is programmatic and does not include site-specific analysis of cultural landscape or archaeological resources and Section 106 compliance will be required for proposed treatment actions. A Programmatic Agreement should be developed between the NPS and the Arkansas SHPO to simplify the Section 106 process.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Cultural Landscape Analysis: Treatment Alternative #4 focuses on protection and preservation of extant historic resources, which is similar to Treatment Alternative #3; however there is flexibility to incorporate more changes to the historic landscape than Treatment Alternative #3, which has greater emphasis on preservation (therefore decreasing opportunities for replacing missing historic features). This treatment alternative does not provide as much flexibility in incorporating new features in the historic landscape as Treatment Alternative #2; however it does strike a balance between protection and preservation of the historic landscape and resources available for implementation of the Recommended Treatment. The Recommended Treatment proposes projects throughout the landscape (outside of Bathhouse Row) to restore natural settings that would reflect the intent of Stevens' design. The Maurice Spring would be rehabilitated with native vegetation. Proposed treatments for the Tufa Park and Arlington Lawn would also incorporate native vegetation in less formal plantings, natural materials and exposing natural stone to create a more rustic character. Proposals for reestablishing the natural character of the landscape would result in long-term, localized moderate beneficial impacts to the cultural landscape.

Although there are some similarities between treatment alternatives for reestablishment of natural settings, there are proposals to reestablish formal vegetation patterns. This alternative, as well as Treatment Alternative #2, proposes that a second row of Southern Magnolia trees should be planted on the east side of the sidewalk along Bathhouse Row. Another proposal to reestablish formal landscape design is to reinstate formal tree plantings and reconstruct pavilions in Whittington Park. Reestablishment of formal plantings would result in long-term, moderate beneficial impacts to the historic landscape.

A notable difference between the Recommended Treatment and all other alternatives is the proposal to remove the existing drop-off / service area and replace that with a new service lane on the east side of Central Avenue that would extend the length of Bathhouse Row. This proposed drop-off / service lane would require closing the right lane of Central Avenue and construction of bump-outs to frame the service area. There would also be curb-cuts that would center on the entrance to each bathhouse. Although this proposed treatment

would resolve access issues it would introduce a landscape feature that would have a short and long-term, minor adverse impact to the historic landscape.

Archaeological Resources: There are no known archaeological resources within the area of potential effect; however there is potential for archaeological resources within the area of potential effect. Treatment Alternative #4 would likely result in fewer ground disturbing actions than Treatment Alternative #2, but possibly more than the no-action alternative and Treatment Alternative #3. With ground disturbance there is the potential for adverse impacts to archaeological resources. However, without prior knowledge of archaeological resources in the area of a ground-disturbing project, the precise nature of those impacts is not able to be determined at this time; however the implementation of appropriate mitigation measures (Chapter VI) and coordination with SHPO should reduce potential adverse effects to the intensity level of minor.

Cumulative Impacts: Cumulative impacts would be similar to those described for Treatment Alternative #2.

Conclusion: Treatment Alternative #4 would result in a range of impacts from short-term, minor adverse to long-term moderate beneficial impacts. When compared to the no-action alternative, and other treatment alternatives, Treatment Alternative #4 would meet project objectives.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Section 106 Summary: The potential effects of Alternative #4 have been evaluated at a programmatic level and after applying the Advisory Council's criteria of adverse effects (36 CFR Part 800.5), the National Park Service concludes that implementation of Treatment Alternative #4 would result in no adverse effect to the cultural landscape at Hot Springs National Park.

After applying the same Advisory Council's regulations, the National Park Service concludes that, although archaeological resources have not been identified in the area of potential effect, there is potential for the presence of these resources in the area. Although there is the potential for archaeological resources in the area of potential effect, the effects to archaeological resources is unknown at this time. This analysis is programmatic and does not include site-specific analysis of cultural landscape or archaeological resources and Section 106 compliance will be required for proposed treatment actions. A Programmatic Agreement should be developed between the NPS and the Arkansas SHPO to simplify the Section 106 process.

Special Status Species

Basis for Analysis

The Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq.) requires examination of impacts on all federally-listed threatened, endangered, and candidate species. Section 7 of the ESA requires all federal agencies to consult with the United States Fish and Wildlife Service (USFWS) to ensure that any authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. In addition, the NPS *Management Policies 2006* and Director's Order 77 *Natural Resources Management Guidelines* require the NPS to examine the impacts on federal, candidate species, as well as state-listed threatened, endangered, candidate, rare, declining and sensitive species.

Potential impacts to special status species or their habitats were evaluated based on species presence and the potential effects of actions related to treatments to the cultural landscape at Hot Springs National Park. For the purposes of this analysis, the USFWS and the Arkansas Natural Heritage Commission were contacted with regards to federally-listed and state-listed species to determine if those species occur in or near the project area. As noted in Table 7-1, the USFWS indicated that there are no known records of threatened or endangered species in the project area. The Arkansas Natural Heritage Commission indicated that there are known occurrences of state-listed species in certain locations within Hot Springs National Park.

Table 7- 1: Rare Species and Communities within Hot Springs National Park

Scientific Name	Common Name	State Status
<u>Non-Vascular Plants</u> <i>Phormidium treleasei</i>	a blue-green alga	State Inventory
<u>Vascular Plants</u> <i>Asplenium x gravesii</i> <i>Castanea pumila</i> var. <i>ozarkensis</i> <i>Galium arkansanum</i> var. <i>pubiflorum</i> <i>Streptanthus maculatus</i> ssp. <i>obtusifolius</i>	Graves' spleenwort Ozark chinquapin Arkansas bedstraw Arkansas cabbage/twistflower	State Inventory State Inventory State Inventory State Inventory
<u>Plant Communities</u> Novaculite glad-outcrop Xeric Shortleaf Pine-Oak Forest	— —	State Inventory State Inventory

Source: "Fire Management Plan Environmental Assessment, Hot Springs National Park, Hot Springs, Arkansas," US Department of the Interior, National Park Service, 2005; Arkansas Natural Heritage Commission, "State Species of Special Concern - Plants," 2005.

The following thresholds were used to determine the intensity or magnitude of effects on special status species.

Intensity levels:

- **Negligible** — No observable or measurable impacts to native species, their habitats, or the natural processes sustaining them. Impacts would be of short duration and well within natural fluctuations.
- **Minor** — Impacts are detectable, but not expected to be outside the natural range of variability and are not expected to have any long-term effects on native species, their habitats, or the natural processes sustaining them.

Population numbers, population structure, genetic variability, and other demographic factors for species may have small, short-term changes, but long-term characteristics remain stable and viable. Occasional responses to disturbances by some individuals are expected, but without interference to feeding, reproduction, or other factors affecting population levels. Key ecosystem processes may have short-term disruptions that are within natural variation. Sufficient habitat remains functional to maintain viability of all species. Impacts are outside of critical reproduction periods for sensitive native species.

- **Moderate** — Impacts are detectable and expected to be outside the natural range of variability, and other demographic factors for species. There may be short-term changes, but rebound to pre-impact numbers and remain stable and viable in the long-term.

Frequent responses to disturbance by some individuals are expected, with some negative impacts to feeding, reproduction, or other factors affecting short-term disruptions that are outside natural variation; however there would be a return to natural conditions. Sufficient habitat remains functional to maintain viability of all native species. Some impacts may occur during critical periods of reproduction or in key habitats for sensitive native species.

- **Major** — Impacts on native species, their habitats, or the natural processes sustaining them are detectable, and expected to be outside the natural range of variability for long periods of time or to be permanent. Population numbers, population structure, genetic variability, and other demographic factors for species may have large, short-term declines with long-term population numbers significantly depressed.

Frequent responses to disturbances by some individuals are expected, with negative impacts to feeding, reproduction, or other factors resulting in long-term decrease in population levels. Breeding colonies of native species may relocate to other portions of the park. Key ecosystem processes may be disrupted in the long-term or permanently. Loss of habitat may affect the viability of at least some native species.

Treatment Alternative #1: No Action

Special Status Species Analysis: There are no federal listed species within the Reservation Front, and only two state listed species are located within this area: a rare blue-green alga and wood stonecrop. Because the no-action alternative is a continuation of current landscape management philosophy, there are no plans to alter springs or fountains. There are no landscape management plans that would not involve disturbance of earth so this alternative would have negligible impact upon the above state listed species and no impact upon federal listed species. There are no federal or state listed species within Gulpha Gorge Campground or Whittington Park, and therefore the proposed action would have no impact upon such species in these areas. Although federal listed species are not known in the study area of Hot Springs and West Mountains, there are eight state listed species of plants that occur within these areas. The proposed action, however, would not involve disturbance of earth and therefore there would be negligible short-term impacts to such species along the on the Mountains.

Cumulative Impact: The No-Action Alternative would not contribute to cumulative adverse impacts upon federal or state listed species or their habitats within the Reservation Front, Gulpha Gorge Campground, Whittington Park, or the Mountains.

Conclusion: The No-Action Alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, and negligible short-term, impact upon state listed species or their habitats within the Reservation Front and Mountains.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural or cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Actions Common to all Treatment Alternatives

Actions common to all treatment alternatives that may have the potential to impact Special Status Species are associated with reestablishing natural / native vegetation, rehabilitating and constructing new springs and removal of invasive plant species. Removal of non-contributing features such as invasive plant species could result in short-term, minor adverse impacts to water quality from soil erosion; however these impacts would be mitigated through implementation of NPS BMPs.

Native vegetation would be replanted in areas where invasive species are removed and would become an important part of the potential plant palette for revegetation efforts. Reestablishment of a more natural landscape with plant species that are native to the region would result in a long-term, localized minor beneficial impact. The reestablishment of native plant species would provide a more natural setting in the historic landscape and would likely require fewer resources to maintain than in the no-action alternative.

Stabilization and preservation of wooded areas and trails would result in long-term, minor beneficial impacts to natural systems in the mountains and mountain sidegrounds. Exposure of rock outcrops through the removal of lawn and underlying soil would result in long-term, localized minor beneficial impacts.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Special Status Species Analysis: There are no federal listed species within the Reservation Front, and only two state listed species are located within this area: a rare blue-green alga and wood stonecrop. The proposed action would have no impact upon federal listed species, and there would be negligible to minor beneficial impacts upon the above state listed species. In addition to treatments common to all action alternatives, the proposed action would expand the Hot Water Cascade, modify the Hot Water Display Spring, and expose tufa rock and springs northeast of brick plaza #2 (see drawing sheet LR 18). While the rare blue-green alga may sustain negligible to minor short-term adverse impacts during the construction phase of the proposed action, in the long-term there is likely to be a minor beneficial impact by expanding habitat for the alga, such as by expanding the Hot Water Cascade and exposing previously subterranean springs. Also, by exposing additional tufa there would be a minor beneficial long-term impact to the rare wood stonecrop which inhabits rocky shallow soil areas.

The proposed action would have no impact upon federal listed or state listed species or their habitats within the Mountains, Gulpha Gorge Campground, or Whittington Park.

Cumulative Impact: The proposed action would not contribute to cumulative adverse impacts upon federal listed species or their habitats within the Reservation Front, Gulpha Gorge Campground, Whittington Park, or the Mountains. The proposed action may result in cumulative minor beneficial impacts to populations and available habitat for the state listed wood stonecrop and blue-green alga.

Conclusion: This alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible to minor beneficial impacts to the state listed alga and wood stonecrop within the Reservation Front.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Special Status Species Analysis: There are no federal listed species within the Reservation Front, and only two state listed species are located within this area: a rare blue-green alga and wood stonecrop. The proposed action would have no impact upon federal listed species, and there would be negligible to minor beneficial impacts upon the above state listed species. In addition to treatments common to all action alternatives, the proposed action would expose tufa/rock outcrops (and re-vegetate) two areas: northeast of brick plaza #2 and east of the Grand Promenade and Superior Bathhouse (see drawing sheet LR 19). While the rare blue-green alga may sustain minor short-term adverse impacts during the construction phase of the proposed action, in the long-term there are likely to be negligible impacts by relocating Noble Fountain and rehabilitating Maurice Spring. Also, there would likely be a minor beneficial long-term impact on the wood stonecrop as a result of exposing tufa and other rock outcrops that may provide suitable habitat.

The proposed action would have no impact upon federal listed or state listed species or their habitats within the Mountains, Gulpha Gorge Campground, or Whittington Park.

Cumulative Impact: The proposed action would not contribute to cumulative adverse impacts upon federal listed species or their habitats within the Reservation Front, Gulpha Gorge Campground, Whittington Park, or the Mountains. The proposed action may result in cumulative minor beneficial impacts to populations and available habitat for the state listed wood stonecrop, and negligible cumulative impacts to the rare blue-green alga and its habitat.

Conclusion: Treatment Alternative #3 would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible impacts to the state listed alga and minor beneficial impacts to the wood stonecrop within the Reservation Front.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Special Status Species Analysis: There are no federal listed species within the Reservation Front, and only two state listed species are located within this area: a rare blue-green alga and wood stonecrop. The proposed action would have no impact upon federal listed species, and there would be negligible to minor beneficial impacts upon the above state listed species. In addition to treatments common to all action alternatives, the proposed action would re-construct the Hoke Smith Fountain, expand the Hot Water Cascade, expose rock outcrops southeast of Brick Plaza #2, and expose tufa rock and springs northeast of Brick

Plaza #2 (see drawing sheet LR 21). While the rare blue-green alga may sustain negligible to minor short-term adverse impacts during the construction phase of the proposed action, in the long-term there is likely to be a minor beneficial impact by expanding habitat for the alga, such as by expanding the Hot Water Cascade and exposing previously subterranean springs. Also, by exposing additional rock outcrops and tufa there would be a minor beneficial long-term impact to the rare wood stonecrop which inhabits rocky shallow soil areas.

The proposed action would have no impact upon federal listed or state listed species or their habitats within the Mountains, Gulpha Gorge Campground, or Whittington Park.

Cumulative Impact: The proposed action would not contribute to cumulative adverse impacts upon federal listed species or their habitats within the Reservation Front, Gulpha Gorge Campground, Whittington Park, or the Mountains. The proposed action may result in cumulative minor beneficial impacts to populations and available habitat for the state listed wood stonecrop and blue-green alga.

Conclusion: This alternative would have no impact upon federal listed species or their habitats in any section of Hot Springs National Park, whereas there would be negligible to minor beneficial impacts to the state listed alga and wood stonecrop within the Reservation Front.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Water Quality

Basis for Analysis

Policies in the National Park Service *Management Policies 2006* and Director's Order 77 Natural Resources Management Guidelines provide for protection of quality and quantity of surface water and groundwater require protection of water quality consistent with the Clean Water Act. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Water quality of both surface and groundwater systems were evaluated. Impacts were determined based on potential exposure of groundwater resources and surface water runoff. The following thresholds were used to determine the intensity or magnitude of effects on water quality.

Intensity Levels:

- **Negligible**— Impacts are chemical, physical, or biological that would not be detectable, would be well below water quality standards or criteria, and would be within historical or desired water quality conditions.

- **Minor** – Impacts are chemical, physical, or biological that would be detectable, but that would be well below water quality standards or criteria and within historical or desired water quality conditions.
- **Moderate** – Impacts are chemical, physical, or biological that would be detectable, but that would be at or below water quality standards or criteria; however, historical baseline or desired water quality conditions would be altered on a short-term basis.
- **Major** – Impacts are chemical, physical, or biological that would be detectable, but that would be frequently altered from the historical baseline or desired water quality conditions; and / or chemical, physical, or biological water quality standards or criteria would be slightly and singularly exceeded on a short-term basis.

Treatment Alternative 1: No Action

Water Quality Analysis: Other than hillside springs, there are no open water drainages or streams within or adjacent to the Reservation Front. Although there are no open water drainages along the Reservation Front, there are hydrologic connections from the Reservation Front to Hot Springs Creek through storm drains and runoff from the exposed springs. Continuation of current landscape maintenance practices would not result in disturbance of soils, create siltation, or alter the chemistry of surface waters or groundwater, to any measurable extent. Any landscape management action based on current landscape management philosophies would be mitigated through implementation of NPS BMPs and therefore there would be negligible short-term and long-term impacts to the water quality of springs or streams within the Reservation Front.

Although Whittington Creek occurs within Whittington Park and Gulpha Creek occurs within the Gulpha Gorge Campground, this alternative would not result in soil disturbance, create siltation, or alter the chemistry of surface waters or groundwater to any measurable extent. Therefore continuation of current landscape management actions and implementation of NPS BMPs in Whittington Park and Gulpha Campground would result in negligible short-term and long-term impacts upon the water quality of these streams. Implementation of current landscape management actions would require mitigation through NPS BMPs resulting in minimal disturbance of soils, siltation, increase the volume of storm water runoff; or alteration of surface water or groundwater chemistry; therefore there would be negligible short-term and long-term impacts upon the water quality of streams at the base of the Mountains.

Cumulative Impact: The proposed action would not contribute to cumulative water quality impacts upon springs or streams within the Reservation Front, Whittington Park, Gulpha Gorge Campground, or the Mountains.

Conclusion: The No-Action Alternative would have negligible short, and long-term impacts upon the water quality of any springs or streams within Reservation Front, Whittington Park, Gulpha Gorge Campground, or the Mountains.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural or cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Actions Common to all Treatment Alternatives

Actions common to all treatment alternatives that may have the potential to impact water quality are associated with rehabilitation of Maurice Springs, which would have short-term, localized, minor, adverse impacts. These short-term impacts would only extend through the period of rehabilitation. Long-term impacts to water quality from the rehabilitation of the springs would likely be negligible. Stabilization of areas within the Wooded Park that are experiencing soil erosion would have long-term, localized minor beneficial impacts to water quality.

The portion of Whittington Creek through Whittington Park has degraded over the years and the channel is being undercut and side channel walls are collapsing. These factors result in increased levels of sediment in the creek. The proposed treatment to preserve and stabilize the creek through Whittington Park would result in long-term, minor beneficial impacts to water quality. Short-term impacts due to stabilization efforts would likely be an increased sediment load, but only during the period when stabilization efforts are underway.

Gulpha Gorge Campground is experiencing soil erosion due to impacts from visitors as well as erosion of the creek channel. Proposed treatments for this area include reduction of soil erosion through establishment of vegetation in areas impacted by visitors. Creek stabilization efforts would include establishing vegetation along creek banks and maintenance of drainage features in the campground. Implementation of these treatments would result in long-term, minor beneficial impacts to the water quality of Gulpha Creek.

Removal of non-contributing features such as invasive plant species could result in short-term, minor adverse impacts to water quality from soil erosion; however these impacts would be mitigated through implementation of NPS BMPs. All other proposed treatments that require exposure and disturbance of soils could potentially impact water quality of Hot Springs Creek, Whittington Creek or Gulpha Creek. In all cases, NPS BMPs would be implemented, which would mitigate the potential impacts to water quality in these creeks.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Water Quality Analysis: Other than runoff from hillside springs and storm water drainage, there are no open water drainages within or adjacent to the Reservation Front that connect directly to Hot Springs Creek. In addition to treatments common to all action alternatives, this alternative would expand the Hot Water Cascade, expose tufa rock and springs, modify the Hot Water Display Spring (see drawing sheet LR18). Consequently,

Alternative #2 would likely result in negligible to minor short-term impacts to water quality of the Reservation Front and Hot Springs Creek during the construction period and negligible long-term impacts to water quality. Best management practices (BMP) would be employed to minimize potential short-term and long-term impacts to water quality. Lastly, this alternative would restore vegetation and stabilize slopes east of the Grand Promenade between Brick Plaza 4 and 5, and therefore may result in a long-term minor beneficial impact upon surface water quality in that area.

Whittington Creek occurs within Whittington Park, and the channel of Whittington Creek would be stabilized by each of the action alternatives. Consequently, Alternative #2 would result in a long-term minor beneficial impact upon the water quality of Whittington Creek. Gulpha Creek occurs within the Gulpha Gorge Campground, and the creek bed and channel of Gulpha Creek would be stabilized with ground cover and lawn seeding by each of the action alternatives to minimize erosion. Therefore, Alternative #2 would result in a long-term minor beneficial impact upon the water quality of Gulpha Creek.

Also, this alternative would not impact water quality of streams within the Mountains.

Cumulative Impact: The proposed action would have a negligible to minor beneficial contribution to cumulative water quality impacts upon springs and streams within the Reservation Front, while there would be a minor beneficial contribution to cumulative water quality impacts upon springs and streams within Whittington Park and Gulpha Gorge Campground. There would be no adverse contribution to cumulative water quality impacts upon springs and streams within the Mountains.

Conclusion: Alternative #2 would result in negligible to minor adverse short-term impacts and negligible to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality upon springs and streams within Whittington Park and Gulpha Gorge Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural or cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Water Quality Analysis: Other than runoff from hillside springs, there are no open water drainages or streams within or adjacent to the Reservation Front. There is a hydrologic connection from the Reservation Front to Hot Springs Creek through storm drains. In addition to treatments common to all action alternatives, the proposed action would plant shade trees on the west side of Grand Promenade (see drawing sheet LR19). Consequently, this alternative would likely result in negligible to minor short-term impacts to water quality

of the Reservation Front and Hot Springs Creek during the construction period and negligible long-term impacts to water quality. Best management practices would be employed to minimize potential short-term and long-term impacts to water quality. Lastly, this alternative would restore native vegetation and stabilize slopes east of the Grand Promenade between Brick Plazas 4 and 5, and therefore may result in a long-term minor beneficial impact upon surface water quality in that area.

Whittington Creek occurs within Whittington Park, and the channel of Whittington Creek would be stabilized by each of the action alternatives. Consequently, Alternative #3 would result in a long-term minor beneficial impact upon the water quality of Whittington Creek. Gulpha Creek occurs within the Gulpha Gorge Campground, and the creek bed and channel of Gulpha Creek would be stabilized with ground cover and lawn seeding by each of the action alternatives to minimize erosion. Therefore, Alternative #3 would result in a long-term minor beneficial impact upon the water quality of Gulpha Creek.

This alternative would not impact water quality of streams within the Mountains.

Cumulative Impact: The proposed action would have a negligible adverse to minor beneficial contribution to cumulative water quality impacts upon springs and streams within the Reservation Front, while there would be a minor beneficial contribution to cumulative water quality impacts upon springs and streams within Whittington Park and Gulpha Gorge Campground. There would be no adverse contribution to cumulative water quality impacts upon springs and streams within the Mountains.

Conclusion: Alternative #3 would result in negligible to minor adverse short-term impacts and negligible adverse to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality upon springs and streams within Whittington Park and Gulpha Gorge Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural or cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Water Quality Analysis: The only exposed water sources within the Reservation Front is runoff from hillside springs. There is a hydrologic connection between the Reservation Front and Hot Springs Creek through storm drains. In addition to treatments common to all action alternatives, the proposed action would expand the Hot Water Cascade, expose tufa rock and springs, and renovate hot water pools (see drawing sheet LR 21). Consequently, Alternative #4 would likely result in negligible to minor short-term impacts to water quality

of the Reservation Front and Hot Springs Creek during the construction period and negligible long-term impacts to water quality. Best management practices would be employed to minimize potential short-term and long-term impacts to water quality. Lastly, this alternative would restore native vegetation and stabilize slopes east of the Grand Promenade between Brick Plazas 4 and 5, and therefore may result in a long-term minor beneficial impact upon surface water quality in that area.

Whittington Creek occurs within Whittington Park, and the channel of Whittington Creek would be stabilized by each of the action alternatives. Consequently, Alternative #4 would result in a long-term minor beneficial impact upon the water quality of Whittington Creek. Gulpha Creek occurs within the Gulpha Gorge Campground, and the creek bed and channel of Gulpha Creek would be stabilized with ground cover and lawn seeding by each of the action alternatives to minimize erosion. Therefore, Alternative #4 would result in a long-term minor beneficial impact upon the water quality of Gulpha Creek.

This alternative would not impact water quality of streams within the Mountains.

Cumulative Impact: The proposed action would have a negligible adverse contribution to cumulative water quality impacts upon springs and streams within the Reservation Front; whereas there would be a minor beneficial contribution to cumulative water quality impacts upon streams within Whittington Park and Gulpha Gorge Campground. There would be no adverse contribution to cumulative water quality impacts upon springs and streams within the Mountains.

Conclusion: Alternative #4 would result in negligible to minor adverse short-term impacts and negligible adverse to minor beneficial long-term impacts to water quality within the Reservation Front. There would be a minor beneficial impact to water quality to streams within Whittington Park and Gulpha Gorge Campground, while there would be no adverse water quality impacts upon springs and streams within the Mountains.

Impairment: Because there would be no major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hot Springs National Park; (2) key to the natural or cultural integrity of the National Park; or (3) identified as a goal in the National Park's general management plan or other relevant National Park Service planning documents, there would be no impairment of the National Park's resources or values.

Floodplains

Basis for Analysis

Executive Order 11988 Floodplain Management requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternative exists. The NPS, under *Management Policies 2006* and Director's Order 77-2 Floodplain Management strives to preserve floodplain values and minimize hazardous conditions. According to Director's Order 77-2, certain construction within a 100-year floodplain requires a preparation

of a Statement of Findings for floodplains; however Section V (B) of the NPS *Procedural Manual* 77-2: *Floodplain Management* states that “historic or archaeological structures, sites, or artifacts whose location is integral to their significance” are excepted actions and the requirements of PM 77-2 do not apply. The proposed treatments within the 100-year floodplain are integral to the significance of the cultural landscape and have been determined to be excepted actions.

For the purposes of adhering to the requirements of NEPA, potential impacts to the 100-year floodplains associated with Hot Springs Creek, Whittington Creek and Gulpha Creek were evaluated based on the potential effects of treatments related to the cultural landscape at Hot Springs National Park. For the purposes of this analysis, FEMA floodplain maps for these creeks were evaluated.

The following thresholds were used to determine the intensity or magnitude of effects on the 100-year floodplain in Hot Springs National Park.

Intensity Levels:

- **Negligible** — An action that would cause no change the ability of the floodplain to convey floodwaters.
- **Minor** — An action that would cause minimal change in floodplain functions. The level of detection would be relatively small in terms of area and nature of change. No long-term effects to the functioning of the 100-year floodplain would occur.
- **Moderate** — An action that would change the existing floodplain function, but the impact could be mitigated by the modification of proposed facilities in floodplains.
- **Major** — An action that would have drastic and permanent consequences for existing floodplain functions that could not be mitigated.

Treatment Alternative 1: No Action

Flood Plain Analysis: 100-year designated floodplains exist along Hot Springs Creek, Gulpha Creek, and Whittington Creek. Although Hot Springs Creek was diverted underground beneath Bathhouse Row, this area could still be inundated during a 100-year flood. Implementation of the No-Action Alternative would not involve the addition of new structures or impervious surface area the would effect hydraulics of the 100-year floodplain, and therefore there would be negligible short-term and long-term impacts upon the 100-year floodplain within the Reservation Front, Whittington Park, Gulpha Gorge Campground, and the Mountains.

Cumulative Impact: The proposed action would not contribute to cumulative impacts upon the 100-year floodplain within the Reservation Front, Whittington Park, Gulpha Gorge Campground, or the Mountains.

Conclusion: The proposed action would have no impact upon the 100-year floodplain within any section of Hot Springs National Park.

Actions Common to all Treatment Alternatives

Actions common to all treatment alternatives that may have the potential to impact water quality are associated with the addition of new landscape features or the removal of non-contributing landscape features within the 100-year floodplain of Hot Springs Creek, Whittington Creek and Gulpha Creek. Actions along Bathhouse Row include relocation of the Noble Fountain to the corner of Central Avenue and Reserve Street and reestablishment of the holly hedge. The Arlington Lawn action common to all alternatives is removal of non-contributing trees and shrubs. These actions would result in long-term, negligible minor adverse impacts to the floodplain of Hot Springs Creek. The cumulative effects of these actions would not result in any adverse impact to the highly urbanized area along Central Avenue.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Flood Plain Analysis: One hundred year designated floodplains exist along Hot Springs Creek, Gulpha Creek, and Whittington Creek. Although Hot Springs Creek was diverted underground beneath Bathhouse Row, this area could still be inundated during a 100-year flood. In addition to treatments common to all action alternatives, the proposed action would establish a double row of trees and hedge along Central Avenue, re-construct the Formal Entrance, and re-construct Arlington Lawn (see drawing sheet LR 18). Although the 100-year flood could inundate Bathhouse Row with water levels up to five or six feet above ground level, Alternative #2 would result in negligible impacts upon the floodplain and its capacity or functions within the Reservation Front.

Although a portion of Gulpha Gorge Campground occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within this section of Hot Springs National Park. And while most of Whittington Park occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within Whittington Park. Lastly, 100-year floodplain does not exist within the Mountains, and therefore the proposed action would have no impact upon any 100-year floodplain and its capacity or functions within the Mountains.

Cumulative Impact: The proposed action would have a negligible cumulative impact upon the 100-year floodplain within the Reservation Front, and no contribution to cumulative impacts upon the 100-year floodplain within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Conclusion: Alternative #2 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the

100-year floodplain and its capacity or functions within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Flood Plain Analysis: 100-year designated floodplains exist along Hot Springs Creek, Gulpha Creek, and Whittington Creek. Although Hot Springs Creek was diverted underground beneath Bathhouse Row, this area could still be inundated during a 100-year flood. In addition to treatments common to all action alternatives, the proposed action would remove non-compatible trees in front of the Lamar Bathhouse, re-construct portions of the Formal Entrance, and re-construct Arlington Lawn (see sheet drawing LR 19). Although the 100-year flood could inundate Bathhouse Row with water levels up to five or six feet above ground level, Alternative #3 would result in negligible impacts upon the floodplain and its capacity or functions within the Reservation Front.

Although a portion of Gulpha Gorge Campground occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within this section of Hot Springs National Park. While most of Whittington Park occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within Whittington Park. Lastly, 100-year floodplain does not exist within the Mountains, and therefore the proposed action would have no impact upon any 100-year floodplain and its capacity or functions within the Mountains.

Cumulative Impact: The proposed action would have a negligible cumulative impact upon the 100-year floodplain within the Reservation Front, and no contribution to cumulative impacts upon the 100-year floodplain within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Conclusion: Alternative #3 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the 100-year floodplain and its capacity or functions within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Flood Plain Analysis: 100-year designated floodplains exist along Hot Springs Creek, Gulpha Creek, and Whittington Creek. Although Hot Springs Creek was diverted underground beneath Bathhouse Row, this area could still be inundated during a 100-year flood. In addition to treatments common to all action alternatives, the proposed action would establish a double row of trees and hedge along Central Avenue, re-construct the Formal Entrance, and re-construct Arlington Lawn (see sheet drawing LR 21). The 100-year flood could inundate Bathhouse Row with water levels up to five or six feet above ground level, however Alternative #4 would result in negligible impacts upon the floodplain and its capacity or functions within the Reservation Front.

Although a portion of Gulpha Gorge Campground occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within this section of Hot Springs National Park. While most of Whittington Park occurs within the 100-year floodplain, the proposed action would have no impact upon the 100-year floodplain and its capacity or functions within Whittington Park. The 100-year floodplain does not exist within the Mountains, and therefore the proposed action would have no impact upon any 100-year floodplain and its capacity or functions within the Mountains.

Cumulative Impact: The proposed action would have a negligible cumulative impact upon the 100-year floodplain within the Reservation Front, and no contribution to cumulative impacts upon the 100-year floodplain within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Conclusion: Alternative #4 would result in negligible impacts upon the 100-year floodplain and its capacity or functions within the Reservation Front, and no impact upon the 100-year floodplain and its capacity or functions within Whittington Park, Gulpha Gorge Campground, or the Mountains.

Visitor Experience

Basis of Analysis

Hot Springs Reservation (later Hot Springs National Park) was established in 1832 to preserve the natural resources of the area for public use. Hot Springs National Park has provided a range of experiences for visitors seeking the health benefits from the waters, exercise on the trails entertainment, social interactions and education. It can be argued that visitor experience is based on every feature within the landscape. This is probably true to visitors devoted to historic authenticity and scholars, however most visitors can probably be classified as casual visitors that are expecting to experience a resort-like park and do not necessarily understand the difference between a historic feature, or a non-contributing compatible versus a non-contributing impacting feature.

The methodology used for assessing the impact to visitor experience is based on how the proposed alternatives would affect visitor's opportunities to enjoy their experiences at the park.

Intensity levels:

- **Negligible** – a negligible effect would be a change that would not be perceptible or would be barely perceptible by most visitors.
- **Minor** – a slight change in a few visitor's experiences, which would be noticeable but which would result in little detracting or improvement in the quality of the experience.

- **Moderate** – a moderate effect would be a change in a large number of visitor's experiences that would result in a noticeable decrease or improvement in the quality of the experience. This would be indicated by a change in frustration level or inconvenience for a period of time.
- **Major** – a substantial improvement in many visitor's experience or a severe decrease in the quality of many visitor's experiences.

Treatment Alternative #1: No Action

Visitor Experience Analysis: Although landscape management actions have resulted in alteration of the historic features in the landscape, it is unlikely that the casual visitor has noticed. Through discussions with park staff one change in the landscape that is noticed by visitors was identified. Park staff has been asked by visitors for many years why there are no springs exposed so they can experience what it must have been like at the park a 100-years ago.

The No-Action Alternative would be a combination of maintenance, preservation and stabilization of existing historic and non-contributing features. The Fordyce Bathhouse will remain the visitor center for the park and all current features would remain. The No-Action Alternative would result long-term, localized minor adverse impacts for visitors that do come to the park anticipating a more natural landscape and springs that are exposed. However, for most visitors it is likely that the No-Action Alternative would result in long-term, localized negligible beneficial impacts because they come to the park anticipating seeing a resort facility. Because the park is well maintained considering budgets and staffing, it likely meets most visitor's expectations. In the case of Whittington Park it is perceived as a well maintained city or neighborhood park and visitor expectations differ than those for Bathhouse Row, because virtually all visitors to this area are residents of the City of Hot Springs.

Cumulative Impacts: Although the No-Action Alternative results in long-term negligible beneficial impacts, the cumulative effect of this alternative with other actions at the park and in the region would result in long-term, regional minor beneficial impacts.

Conclusion: Implementation of the No-Action Alternative would have long-term, negligible beneficial impact to visitor's experiences at Hot Springs National Park.

Actions Common to all Treatment Alternatives

Actions common to all treatment alternatives that may have the potential to impact visitor experience include preservation of views throughout the park. Views from the mountain sidegrounds and mountain overlooks would be maintained and enhanced through vegetation management. Implementation of these actions would result in long-term, localized minor beneficial impacts. Visitor experiences on mountain trails would be improved through preservation, stabilization and repair of these features. This would result in long-term, localized minor beneficial impacts. Visitors to Whittington Park, which are mostly city residents, would be exposed to additional plantings, construction of pavilions, and improved

trails. These actions would provide long-term, localized moderate beneficial impacts to visitors and city residents.

Improvements to Gulpha Gorge Campground include planting of vegetation to screen noise and provide privacy for campsites; stabilization or replacement of picnic tables that have deteriorated over the years; and screening of campground utilities. All of these actions would result in long-term, localized minor beneficial impacts to park visitors.

The removal of the drop-off / service area between the Fordyce Bathhouse and the Maurice Bathhouse would result in a long-term, localized moderate adverse impact to visitors that require a centralized location for dropping-off or picking up passengers with some level of disability.

All proposed actions that would require some level of demolition and / or construction would have a short-term, localized minor adverse impact to visitor experience. The duration of the adverse impact would only be experienced during the period of construction.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Visitor Experience Analysis: Treatment Alternative #2 would provide an enhanced visitor experience by bringing water back to the surface. Rehabilitation of Maurice Spring, creation of a new display spring and expansion of the hot water cascade would result in long-term, localized moderate beneficial impacts.

Pedestrian circulation and access from one part of the park to another would be enhanced through reestablishment of pedestrian entrances that connect Bathhouse Row with the Grand Promenade. The Formal Entrance would be reestablished as the primary pedestrian entrance to Hot Springs Mountain. The terraced walkway above the Grand Promenade would be reconstructed to follow the original alignment and topographic changes. Whittington Park trails would be re-aligned to reflect historic alignments. Reestablishment of the double row of trees would benefit visitors on hot summer days, by providing shade over the sidewalk. Pedestrian circulation improvements would result in long-term, localized minor beneficial impacts.

Cumulative Impacts: Actions in Treatment Alternative #2 in addition to other actions such as preparation and implementation of the park's Interpretive Plan and Wayside Plan would provide visitors with a greater appreciation of the resource and enhance their experience. Visitor experience would be further enhanced through the establishment of the regional bike trail that is proposed to connect regional cultural facilities with downtown Hot Springs and Bathhouse Row. The cumulative impact from all these actions would result in a long-term, localized moderate beneficial impact.

Conclusion: Implementation of Treatment Alternative #2 would have long-term, moderate beneficial impact to visitor's experiences at Hot Springs National Park.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Visitor Experience Analysis: Because this alternative has a greater focus on protection and preservation of extant historic resources with minimal changes to the landscape there are fewer opportunities to enhance visitor experience than Treatment Alternative #2. Although the Formal Entrance is to be reestablished as the primary pedestrian entrance to Hot Springs Mountain and there would be infill plantings of Southern Magnolia along the west side of the sidewalk, additional improvements to pedestrian circulation would be less in this alternative than in Treatment Alternative #2. This would limit visitor's options for moving from Bathhouse Row to the Grand Promenade and would result in long-term, localized minor adverse impacts. Treatment Alternative #3 proposes the relocation of the drop-off / service area north of its current location. The new location would be in front of the Maurice Bathhouse would have a long-term, localized negligible beneficial impact, whereas Treatment Alternative #2 does not propose reestablishing a drop-off / service area centrally located along Central Avenue. Reestablishing viewsheds include creation of a terrace at the top of the Formal Entrance that would be a park focal point and overlook to Bathhouse Row and downtown Hot Springs. This action in addition to improvements to views that are common to all alternatives would provide long-term, localized minor beneficial impacts.

Cumulative Effects: Cumulative impacts are similar to those described in Treatment Alternative #2.

Conclusion: There would be fewer improvements to the historic landscape that would benefit visitors at the park; therefore Implementation of Treatment Alternative #3 would have long-term, minor beneficial impact to visitor's experiences at Hot Springs National Park.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Visitor Experience Analysis: This treatment alternative would improve pedestrian circulation with one additional connection between Bathhouse Row and the Grand Promenade. A notable difference between this alternative and all other alternatives is the development of a new drop-off lane / service area along Central Avenue. This proposal would require eliminating the right driving lane of Central Avenue and constructing bump-outs to delineate the new drop-off / service area. This would likely result in a long-term, localized minor beneficial impact to visitor experience, by providing visitors with disabilities access closer to the resource.

Cumulative Effects: Most cumulative actions in Treatment Alternative #4 would be similar to those described for Treatment Alternative #2; however a notable difference would be the cumulative impacts associated with the proposed drop-off lane / service area along Central Avenue. Central Avenue can get quite congested on weekends and during rush hour in the evening. The proposed downtown bypass is intended to alleviate some of the congestion in downtown. The proposed drop-off lane / service area in addition to

construction of the downtown bypass would likely result in a long-term, regional minor beneficial impact. The cumulative impact from all these actions would result in cumulative impacts that are long-term, localized moderate and beneficial.

Conclusion: Implementation of Treatment Alternative #4 would have long-term, moderate beneficial impact to visitor's experiences at Hot Springs National Park.

Park Operations

Basis of Analysis

Implementation of any alternative would affect the operations of Hot Springs National Park. This includes the number of staff required to accomplish recommendations for any alternative; when these actions would occur; and how these actions would occur. Park operations related to maintenance of park structures, grounds and interpretation of the cultural and natural heritage of Hot Springs National Park are the focus of this analysis.

Intensity levels:

- **Negligible** – Park operations would not be affected or the effect would be at low levels of detection.
- **Minor** – The effect would be detectable, but would be of a magnitude that it would not have an appreciable adverse or beneficial effect on park operations.
- **Moderate** – The effect would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public.
- **Major** – The effect would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable by staff and the public, and would be markedly different from existing operations.

Treatment Alternative #1: No Action

Park Operations Analysis: The No-Action Alternative is continuation of on-going park operations at Hot Springs National Park. Park staff would continue working on maintaining, protecting and preserving the historic features within the cultural landscape at the park. On-going maintenance and interpretive park operations would continue to be based out of the Fordyce Bathhouse and the two maintenance facilities. On-going maintenance actions would be conducted without the benefit of additional guidance on maintenance of historic features within the landscape, which would result in short and long-term, localized, negligible adverse impacts to the historic landscape.

Cumulative Impacts: Any project that occurs at the park has an effect on park operations, particularly maintenance staff. Planning projects require most staff at the park to contribute their knowledge and recommendations. Visitor contact and interpretation involve

rangers and interpretive specialists. On-going park operations (no-action) would benefit by implementation of Interpretive and Wayside Plans, which would cumulatively have a minor beneficial impact to park operations.

Conclusion: Implementation of No-Action Alternative #1 would result in short and long-term, localized, negligible beneficial impacts to the historic landscape.

Actions Common to all Treatment Alternatives

Actions common to all treatment alternatives are relevant to park operations. The common actions are described in Chapter VI.

Treatment Alternative #2: Rehabilitation with an Emphasis on Restoration and Reconstruction

Park Operations Analysis: Implementation of Treatment Alternative #2 would result in additional workload for maintenance staff, or a combination of additional workload and increased use of contractors to implement the actions identified in the alternative, in addition to regular maintenance requirements throughout the park. This would result in short-term and potentially long-term, minor adverse impact to maintenance operations. Implementation of this alternative would create the largest workload for the maintenance staff of any alternative. The workload of park interpretive staff would not increase dramatically since proposed actions are within the same area that is currently being interpreted.

Cumulative Impacts: Any project that occurs at the park has an effect on park operations, particularly maintenance staff. Planning projects require most staff at the park to contribute their knowledge and recommendations. Visitor contact and interpretation involve rangers and interpretive specialists. On-going park operations (no-action) would benefit by implementation of Interpretive and Wayside Plans, however the increase in the maintenance staff workload would cumulatively have a minor adverse impact to park operations.

Conclusion: Implementation of Treatment Alternative #2 would result in short and long-term, moderate adverse impacts to park operations.

Treatment Alternative #3: Rehabilitation with an Emphasis on Preservation

Park Operations Analysis: Implementation of Treatment Alternative #3 would result in additional workload for maintenance staff, or a combination of additional workload and increased use of contractors to implement the actions identified in the alternative. This additional workload would be added to regular maintenance requirements throughout the park. Although there would be additional workload it would likely be less than Treatment Alternative #2. This treatment alternative would result in short-term and potentially long-term, minor adverse impact to maintenance operations. The workload of park interpretive staff would be similar to Treatment Alternative #2.

Cumulative Effects: Cumulative impacts would be similar to those described in Treatment Alternative #2.

Conclusion: Implementation of Treatment Alternative #3 would result in short and long-term, minor adverse impacts to park operations.

Recommended Treatment: Alternative #4 (Preferred Alternative; Environmentally Preferable Alternative)

Park Operations Analysis: Treatment Alternative #4 would result in additional workload for maintenance staff, or a combination of additional workload and increased use of contractors to implement the actions identified in the alternative, in addition to regular maintenance requirements throughout the park. Although there would be an increase in workload to implement proposed actions in this alternative, the overall increase would be less than Treatment Alternative #2. Implementation of this alternative would result in short-term and potentially long-term, minor adverse impact to maintenance operations. Implementation of this alternative would create the largest workload for the maintenance staff of any alternative. The workload of park interpretive staff would not increase dramatically since proposed actions are within the same area that is currently being interpreted.

Cumulative Effects: Cumulative impacts would be similar to those described in Treatment Alternative #2.

Conclusion: Implementation of Treatment Alternative #4 would result in short and long-term, minor adverse impacts to park operations.

Chapter VIII: Recommended Treatment / Project Phasing and Design Vocabulary

Chapter VIII: Recommended Treatment/Project Phasing and Design Vocabulary

This chapter provides project statements to accomplish the Recommended Treatment (Alternative Four: Preferred Alternative) for the Hot Springs National Park cultural landscapes. Each project statement includes treatments grouped together that need to occur concurrently, however the order of the projects as they are presented does not imply a level of importance or suggest a sequence for implementation. Figure 8-1 illustrates the locations of projects within the study area and Figure 8-2 indicates the locations of projects within the Reservation Front.

In addition to project statements for landscape treatments, the first three projects are intended to provide broad guidance for park resource managers regarding future changes to be made to the park cultural landscapes. These projects include the preparation of three sets of detailed design guidelines for the Reservation Front (including Bathhouse Row, Arlington Lawn, and the Mountain Sidegrounds), the Mountains (including West Mountain, Hot Springs Mountain and Gulpha Gorge Campground), and Whittington Park. These areas are each defined by a distinct style and changes within them should relate to the distinct styles – rather than to a single set of guidelines for all of the landscapes within the park. Although the scope of the current report does not include detailed design guidelines, descriptions of design vocabularies appropriate to the three landscape components are included to clarify the main differences between the general styles appropriate for each landscape type. The term “design vocabulary” as used herein refers to a description of the concepts that should be utilized to direct design decisions for the park historic landscapes.

Project A:

Prepare Design Guidelines for the Reservation Front

- Prepare detailed design guidelines for the Reservation Front (including Bathhouse Row, Arlington Lawn, and the Mountain Sidegrounds).
- Institute a design vocabulary that respects and reveals the historic landscape of the Reservation Front through compatible repairs, modifications, and additions that are in keeping with the formal Architectural Park and Mountain Sidegrounds created by Lt. Robert Stevens in his 1892 park design, and that reflects a design aesthetic in the Beaux Arts style.
 - Use materials that are as similar to the existing historic materials in type, variety, color, and quality as possible. For example, new materials should be compatible with the limestone wall construction at the Formal Entrance and Maurice Spring, which are character-defining features.
 - Use a workmanship standard that equals the quality of the original construction.
 - For repairs, match existing historic materials as closely as possible in type, variety, color and quality. Finish materials to match the original workmanship, for example finish joints to match original technique, and cut stone and lay in courses to match the original construction.
 - Site new additions to reestablish the formal arrangement of Bathhouse Row including reinforcing its architectural form and its historic pedestrian entrances.
 - Design new features to be compatible in mass, form and scale to the original features. Maintain the variety of architectural scale and detailing that is exhibited in the original features, while respecting the common character-defining features of Bathhouse Row.
 - Provide site furnishings that are compatible with Bathhouse Row's formal architectural character. Consult with professionals with experience selecting site furniture for historic landscapes when selecting site furniture. Locate new site furnishings such as benches and drinking fountains, in the two courtyards at the restroom buildings. For example, simple steel or steel and wood benches with an elegant form and long lasting materials would complement Bathhouse Row more than the current park-like wood benches.
 - Design a sign standard for all identification, interpretation, directional and regulatory signage for the Reservation Front that respects its historic character and original Beaux Arts style of Bathhouse Row, while providing a uniform image for Hot Springs National Park.
 - Provide hand railings, guard railings, and fencing that are compatible with the original character of the Reservation Front. For example, simple steel pipe railings, painted black with horizontal rails are more compatible than the existing railings and chain link fencing.

Project B:

Prepare Design Guidelines for West and Hot Springs Mountains and Gulpha Gorge Campground

- Prepare detailed design guidelines for West and Hot Springs Mountains and Gulpha Gorge Campground.
- Institute a design vocabulary that respects and reveals the historic landscape of the Mountains through compatible repairs, modifications, and additions that are in keeping with the original development of the mountain roads, trails and structures. The original design followed the principles of rustic naturalistic design that was evident in the park from the early 1900s and through the National Park Service designs of the 1930s.
 - Use indigenous materials including stone and timber, and materials that complement these such as concrete paving and steel railings. Use materials that are as similar to the existing materials in type, variety, color, and quality as possible.
 - Use a workmanship standard that equals the quality of the original construction.
 - For repairs, match existing historic materials as closely as possible in type, variety, color and quality. Finish materials to match the original workmanship, for example finish joints to match original technique, and cut stone and lay in courses to match the original construction.
 - Site new additions to be subordinate to existing historic structures, and to match the original rustic naturalistic design, which was for man-made elements to be in harmony with the natural topography and surroundings and to showcase scenic qualities.
 - Design new structures to be compatible in mass, form and scale to the original structures. Maintain the variety of architectural scale and detailing that is exhibited in the original structures, while reinforcing the common architectural characteristics including simple volumetric forms and side-gabled roofs.
 - Provide site furnishings that are compatible with the historic landscape's rustic naturalistic style. For example, simple wood benches and tables, and simple utilitarian elements such as bear-proof trash receptacles fit with rustic naturalistic style of the mountains and Gulpha Gorge Campground.
 - Retain the traditional National Park Service site identification, directional and regulatory signage for the mountains and Gulpha Gorge Campground as it is compatible with the rustic historic character of these component landscapes.
 - Provide hand railings, guard railings, and fencing that are compatible with the mountain's original character. For example, simple steel pipe railings, painted black with horizontal rails are more compatible than the existing railings.

Project C:

Prepare Design Guidelines for Whittington Park

- Prepare detailed design guidelines for Whittington Park.
- Institute a design vocabulary that respects and reveals Whittington Park's historic landscape through compatible repairs, modifications, and additions that are in keeping with its original Romantic Garden Style.
 - Use materials that are as similar to the historic materials in type, variety, color, and quality as possible.
 - Use a workmanship standard that equals the quality of the original construction.
 - For repairs, match existing historic materials as closely as possible in type, variety, color and quality. Finish materials to match the original workmanship, for example finish joints to match original technique, and cut stone and lay in courses to match the original construction.
 - Site new additions to reestablish the formal arrangement of Whittington Park, including reinforcing its architectural form and its historic pedestrian entrances.
 - Design new structures to be compatible in mass, form and scale to the original non-extant features. Re-create, but do not mimic the form, mass and scale of the original bandstand.
 - Provide site furnishings that are compatible with Whittington Park's park-like character. Locate new site furnishings such as benches, drinking fountains, and trash receptacles in context with the formal park arrangement.
 - Design a sign standard for all identification, interpretation, directional and regulatory signage for Whittington Park that respects its historic character and original Romantic Garden style, while providing a uniform image for Hot Springs National Park. The sign system could be the same as used for Bathhouse Row or one that is similar, but simpler in design.

Project D: Preserve Historic Features

- Preserve historic features through stabilization, rehabilitation and restoration.

Project E: Rehabilitate Bathhouse Row Architectural Park

- Rehabilitate the patterns and rhythm of the Architectural Park as defined by Stevens, including the Lawn Border, Promenade and Lawn Park.
- Establish the boundaries of Bathhouse Row by extending the Lawn Border, Promenade and Lawn Park organization and patterns from the intersection of Central Avenue and Reserve Street to the Superior Bathhouse.
- Re-configure the parking at the Administration Building, so that the area is reduced to accommodate three spaces, and so the edge of the parking lot is in alignment with the building setback from Reserve Street.
- Replace the existing Reserve Street paving with simple concrete paving. Remove existing brick paving and tree median to be consistent with historic design intent.
- Redesign the Reserve Street entrance to the Grand Promenade and South Park
 - Relocate the Noble Fountain to its original location.
 - Replace the pavement, vegetation, and ramp with a rectangular terrace of simple concrete paving, and a lawn that extends on the east and west sides of the terrace.
 - Add a new fountain in the center of the new that is in a design style that reflects its time and that respects the historic character of the South Park historic landscape.
 - Extend a sidewalk that parallels Reserve Street and that connects with the walk at the front of the Administration Building, following the alignment of the original walk.
 - Retain the upper steps and terraces that currently exist and are associated with the Grand Promenade in the South Park.
 - Expose the rock outcrops at the western slope adjacent to entrance one.
- Replace the fluted concrete walls at the Administration Building with a simple concrete wall that is compatible with the park's historic walls, particularly those at the Formal Entrance.
- Replace non-contributing impacting materials at the Administration Building terrace with materials consistent with the historic character: i.e., remove black traction tape along limestone steps, replace plaza concrete with simple concrete paving.
- Remove non-contributing trees and shrubs in the Lawn Park.
- Rehabilitate the holly hedge in historic patterns. Extend the hedge to the front entrances of the bathhouses along the walks. Extend the hedge along the walks to the comfort stations.
- Remove the existing hedges from the secondary side entrances of the bathhouses.
- Preserve all extant five-globe light fixtures. Rehabilitate the historic pattern by adding new light fixtures that match the existing fixtures.
- Extend the Lawn Border, double row of trees and holly hedge along the Central Avenue side of Arlington Lawn.
- Reestablish the boundaries of the Architectural Park by adding features at each:
 - Restore the Noble Fountain to the corner of Central Avenue and Reserve Street. Provide a simple terrace, similar in size to the original setting; with the Noble Fountain at its center to establish the southern entrance to Bathhouse Row. Remove the existing fluted concrete walls, signs and paving. Set the fountain away from the street edge and protect it with simple concrete bollards that are set along the curb.

- Connect the terrace to the Administration Building with a formal sidewalk along the alignment of the original sidewalk.
- Create a new terrace with a new fountain at its center at the northwestern corner of the Superior Bathhouse to serve as the northern entrance to Bathhouse Row (and the National Historic Landmark District). Align the terrace and fountain to serve as the entry to the rehabilitated entrance five. Re-construct the Hoke Smith Fountain at the center of the terrace as a focal point using historic documentation.
- Rehabilitate a double row of trees along the Magnolia Promenade.
 - Maintain the Southern magnolias in the Lawn Border as a single species; provide infill plantings where necessary, following the original spacing.
 - Plant a new interior row of deciduous canopy trees in the Lawn Park and maintain the single age trees in uniform size and form.
- Reconstruct the entrances to each bathhouse to be consistent with the historic intent. At the Fordyce Bathhouse follow the recommendations for the accessible entrance as indicated in Project K.
- Establish a pedestrian node at the northwest corner of Arlington Lawn. Move the transformer and power poles to another location. Preserve the historic stone retaining walls and utilize them to define the northern and eastern edges of the plaza. Pave the plaza with simple concrete and install a small fountain. This node serves as the terminus of the double row of trees and provides pedestrian access to Arlington Lawn.

Project F:

Establish a Drop-off / Service Lane on Central Avenue

- Remove the drop-off and service drive access at the intersection of the Formal Entrance and Central Avenue.
- Provide a new service lane along the east edge of Central Avenue for the length of Bathhouse Row.
 - Remove the easternmost drive lane and convert to a drop-off and service only lane.
 - Provide bulbouts at the corner of Central Avenue and Reserve Street and at the Formal Entrance.
 - Provide an opening in the concrete edge that aligns with the entrance to each bathhouse.

Project G: Rehabilitate the Maurice Spring

- Widen the sidewalk to the spring and extend the holly hedge on both sides of the sidewalk,
- Replace the concrete steps with limestone steps, replace the concrete terrace at the top of the steps, and remove the non-historic light fixture,
- Preserve and stabilize the springs and their associated features,
- Add vegetation on the west side of the spring, and
- Restore the historic stone wall.

Project H:

Rehabilitate Landscape at Bathhouse Row Comfort Stations

- Establish new gardens in front of the Men's and Women's Comfort Stations in a design style that is consistent with the formal character of Bathhouse Row, using the Mann & Stern's plan as a guide to provide simple formal outdoor rooms with lawns, walks, and an seating area with drinking fountains, etc.

Project I:

Rehabilitate Entrance Two and Establish an Accessible Trail to the Grand Promenade

- Rehabilitate a pedestrian entrance in the historic location of entrance two between Bathhouse Row and the Grand Promenade at the South Park.
- Provide a focal terminus for the rehabilitated entrance two in the form of a small seating node with a vertical wall as a backdrop on the eastern side of the Grand Promenade.
- Establish an accessible pedestrian route from the rehabilitated entrance to Bathhouse Row at the Formal Entrance/Stevens Balustrade.
- Extend the holly hedge along the exedra entry terrace to the rehabilitated entrance two.

Project J:

Re-vegetate South Park and Establish New Display Spring at Hot Water Seep

- Rehabilitate vegetation and rock outcrops consistent with the historic character of the South Park.
 - Plant native vegetation in naturalistic groupings to establish a light shade canopy, to create a naturalistic character and a park-like setting.
 - Preserve existing rock outcrops.
 - In areas where topsoil is thin over native stone, consider removing topsoil and turf to expose the stone.
- Replace the black chain link fence with a steel fence that is compatible with the historic character of the park.
- Replace the steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Create a new display spring on the eastern side of the Grand Promenade in the area where a hot spring is seeping to the surface (behind the Quapaw Bathhouse). Utilize native rocks and vegetation to develop a naturalistic character at the display spring.

Project K:

Rehabilitate the Foreground Park and Re-construct the Formal Entrance

- Rehabilitate the Foreground Park as a contributing landscape space that is integral to the historic character of the Reservation Front.
- Rehabilitate the Foreground Park to emphasize a strong visual and physical connection between Bathhouse Row and the Grand Promenade.
- Replace the steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Replace non-compatible impacting topography and plantings (groomed slopes and lawns) with naturalistic topography and native vegetation at the Grand Promenade and the Display Springs and the concrete ramp behind the Fordyce Bathhouse.
- Rehabilitate the Formal Entrance as entrance four – the primary pedestrian entrance to the mountainside grounds and Hot Springs Mountain.
 - Complete the Formal Entrance so that it extends from Central Avenue to the Old Carriage Road (and the site of the original pavilion) as it did originally, following the original central axis and symmetrical arrangement to reestablish it as the primary pedestrian entrance to Hot Springs Mountain.
 - Re-construct the original sequence of historic spaces that comprised the original Formal Entrance, including the topography that steps up the hillside towards Hot Springs Mountain. Follow the historic formal patterning of the spaces.
- Replace the brick terrace with compatible materials, such as simple concrete paving.
- Remove the raised concrete planters, and the accessible walk from the Fordyce Bathhouse.
- Orient the accessible route from the Fordyce Bathhouse to the south and the route from the Maurice Bathhouse to the north to allow for the Formal Entrance to be completed as a whole space.
- Remove the visitor drop-off at the intersection of Central Avenue and the Formal Entrance.
- Establish a primary pedestrian crossing where the Formal Entrance meets Central Avenue. Relocate the existing southbound traffic signal to the northern edge of the Formal Entrance and add a pedestrian crosswalk. Maintain the existing traffic signal operations.
- Rebuild the concrete walkway and score the paving to interpret the original composition of a central driveway, flanked by walks on either side. Remove the raised concrete planters along the sides of the Maurice and Fordyce bathhouses and rehabilitate the original broad route.
- Rehabilitate the exedra entry terrace at Bathhouse Row and Central Avenue so that it extends from the historic columns to Central Avenue, and is of a similar form and scale to the original space.
- Re-construct the original low, limestone walls to frame the exedra entry terrace. Replace the existing non-compatible impacting fountains with simple concrete and stone basins that 'mark' the site of the original fountains. Use simple forms and compatible materials that will not detract from the adjacent extant historic elements.

- Re-construct the terrace above the Stevens Balustrade. Remove the brick paving, and rebuild the terrace to follow the formal patterning of the Formal Entrance. Rebuild the terrace using simple materials such as simple concrete paving that does not detract from the extant historic features.
- Reestablish the historic visual focal point (icon) from downtown and overlook to downtown Hot Springs at the top of the Formal Entrance by constructing an addition at in the location of the original pavilion.
- Re-construct the terraced walkway above the Grand Promenade following the original alignment and topographic changes including the double set of steps and intermediate landing. Preserve the stone wall along the Grand Promenade and finish the wall by adding a simple limestone capstone.
- Re-construct the limestone walls, steps, landings, balustrade, and pavilion site associated with the original pavilion using historic documentation.
- Re-construct a pavilion in the original location.
- Rehabilitate the historic formal planting arrangement along the length of the Formal Entrance including the formal rows of trees on either side of the central axis and the low plantings at Central Avenue.

Project L: Rehabilitate the Display Spring Plaza

- Rehabilitate the historic stone walls matching materials (including stone) and craftsmanship to the original construction. Thin vegetation to allow for the rehabilitation and to provide a visual connection between the Display Spring and the Grand Promenade.
- Remove the non-compatible impacting walls (low, stacked stone) at the edges of the historic stone walls.
- Replace the brick terrace and seating with a simple concrete terrace that has a simpler form, and a scale consistent with the Display Springs, and that has site furnishings that are compatible with the historic character.

Project M:

Mountain Sidegrounds Overlook at Former Entrance Five

- Add an overlook on the Grand Promenade near the Superior Bathhouse to provide a view and interpretation of remnant cooling tank features and the previous location of entrance five.

Project N: Rehabilitate the Tufa Park

- Create physical reminders of the historic geomorphology of the springs, topography and vegetation in Tufa Park:
 - Expose native rock throughout the Tufa Park.
 - Plant native vegetation in naturalistic groupings to establish a more park-like setting.
 - Expose a hot spring in the upper portion of the Tufa Park, at the site of the ghost spring.
 - Renovate the hot water display spring to reflect the naturalistic character of the renovated Tufa Park.
- Rehabilitate the historic trail from the Grand Promenade to Hot Springs Mountain Drive near entrance six.
- Replace the black chain link fence with a steel fence that is compatible with the historic character of the park.
- Replace the steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Establish a row of evenly spaced, single species, deciduous canopy trees along the west side of the Grand Promenade behind the Hale and Superior bathhouses and the maintenance area.

Project O:

Rehabilitate Arlington Lawn, the Hot Water Cascade, Amphitheater, and the Lower Tufa Terrace Trail

- Reestablish conceptual historic alignment of lawn and sidewalks.
- Expand the Hot Water Cascade by exposing rock outcrops and planting indigenous vegetation.
- Create a new pedestrian overlook at the expanded Hot Water Cascade.
- Modify the Hot Water Cascade pools and amphitheater walls. Replace existing materials with native stone arranged in a naturalistic pattern.
- Establish a buffer area between the Hot Water Cascade and Arlington Lawn. Use native rocks, grasses, and low shrubs to create a rustic area that compliments the Hot Water Cascade and defines an edge to the lawn.
- Realign the Lower Tufa Terrace Trail. Lengthen the trail using more gentle slopes and curves. Enhance the trail with rock outcrops and masses of native vegetation.
- Replace the steel railings with railings that are compatible with the historic character of the Mountain Sidegrounds.
- Minimize and screen the maintenance area at Arlington Lawn. Reduce the buildings within the maintenance area at Arlington Lawn, and construct a masonry wall along the north, west, and south sides of the maintenance area to screen the structures from pedestrians. Provide a gate at the south end of the enclosure.
- Modify the route for service vehicles from Central Avenue to the maintenance area by providing a curb cut at Central Avenue north of the Superior Bathhouse.

- Provide reinforced concrete (to support service vehicles) for the sidewalk/service drive from the curb cut at Central Avenue to the maintenance area.
- Provide drive-able turf from the sidewalk/service drive to the maintenance enclosure.
- Remove the pavilion at Arlington Lawn.

Project P: Preserve and Maintain the Wooded Park

- Stabilize areas where soil erosion is occurring.
- Preserve the woods on the eastern side of the Grand Promenade through stabilization and restoration.
- Remove invasive species that threaten the woodland plant community.
- Preserve extant historic features including historic drainage channels and historic stone retaining walls.
- Preserve entrance six.
- Maintain the north entrance to the Grand Promenade.
- Preserve the existing pedestrian trail located between the north entrance to the Grand Promenade and entrance eight.
- Preserve entrance eight.

Project Q: Rehabilitate West and Hot Springs Mountains

- Implement West and Hot Springs Mountains Treatments Common to all Action Alternatives as presented in Chapter VI: Treatment Alternatives.

Project R: Add Facilities on West Mountain

- When restrooms and shelters are needed on West Mountain, build new structures that are compatible with the historic character of West Mountain's historic landscape. Site and locate structures as shown in the Recommended Treatment.

Project S: Rehabilitate Whittington Park

- Rehabilitate Whittington Park as a formal entrance to West Mountain. Provide park uses and a formal style that is similar to the original design intent.
- Preserve and stabilize extant park features, including the existing topographic bench, concrete/stucco bridges, and tree plantings. Provide new tree plantings where noted to reinforce historic tree patterns and to rehabilitate historic open and closed spaces.
- Provide stronger visual connection to West Mountain and Bathhouse Row.
- Preserve and stabilize Whittington Creek:
 - Stabilize the creek by improving the channel bottom to eliminate undercutting. Coordinate the channel stabilization with the city of Hot Springs, since Whittington Creek provides storm water conveyance for the City.
 - Restore the historic channel walls (for both historic periods), matching materials (including stone and mortar) and craftsmanship. Collaborate with the city of Hot Springs.
- Rehabilitate the original form of the park (into two sections instead of three) by closing the road connection west of Myrtle Street and converting this area to a park space.
 - Add a lawn and tree plantings to reestablish this area as a park space.
- Realign trails to reflect historic pattern, including the area by the historic bandstand location and the Myrtle Street road removal. Re-construct the trails to establish a consistent width and to have a consistent edge. Provide a trail six feet wide and maintain edges to be weed free. Establish street crossings and provide access to West Mountain's Mountain Top Trail.
- Rehabilitate the historic open areas as lawns.
- Widen the walk along the road to West Mountain Drive, and establish a linear row of trees to formalize and enhance entrance and connection to West Mountain.

Project T: Add Pavilions to Whittington Park

- This project should only be implemented after or at the same time as the implementation of Project S.
- Add a pavilion in the original bandstand location west of West Mountain Drive. Preserve the Southern magnolia tree grove around the pavilion site.
- Add a pavilion in the rehabilitated park space created through closing Myrtle Street.

Project U: Preserve Gulpha Gorge Campground

- Implement Gulpha Gorge Campground Treatments Common to all Action Alternatives as presented in Chapter VI: Treatment Alternatives.

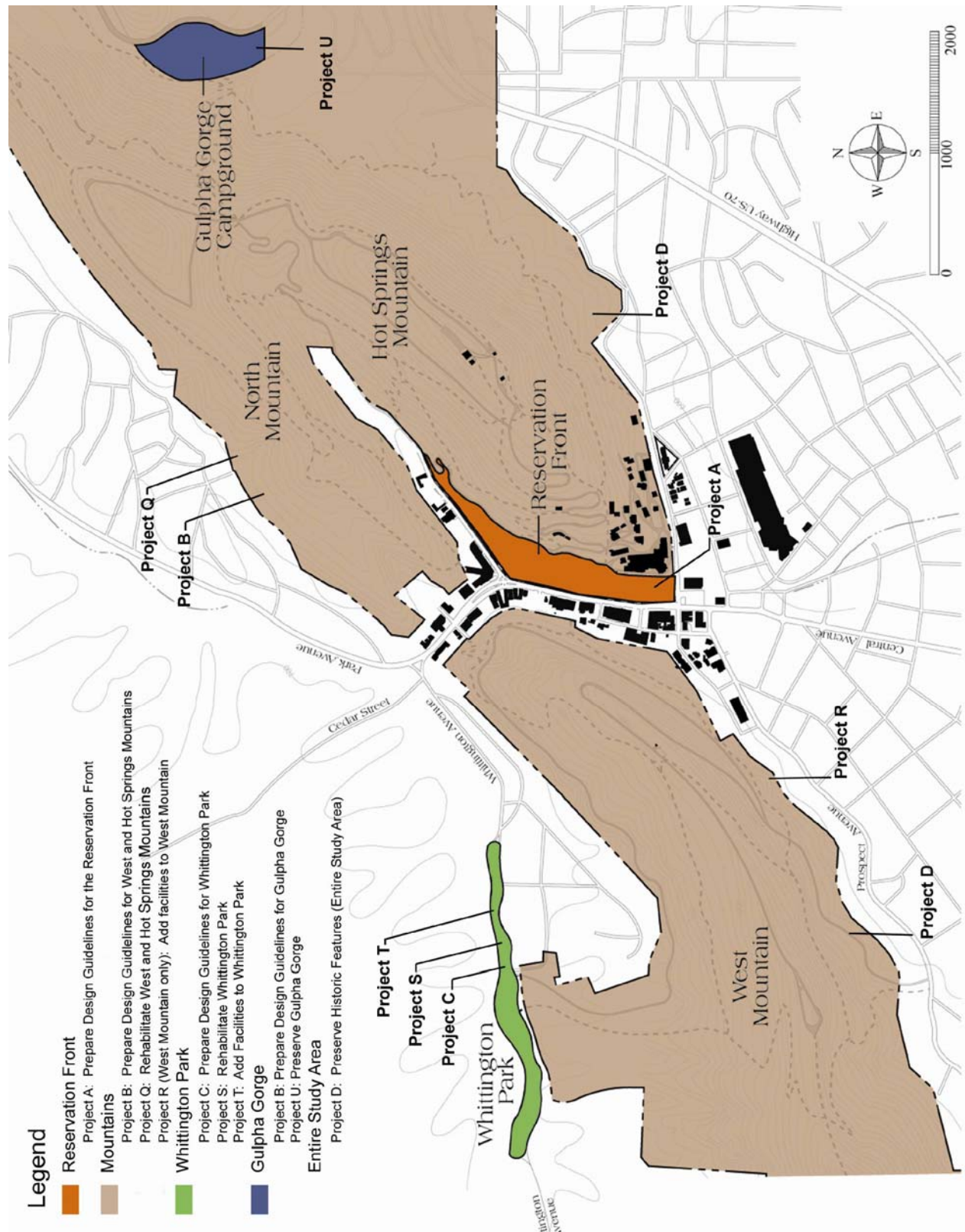


Figure 8- 1: Project locations in the Study Area.

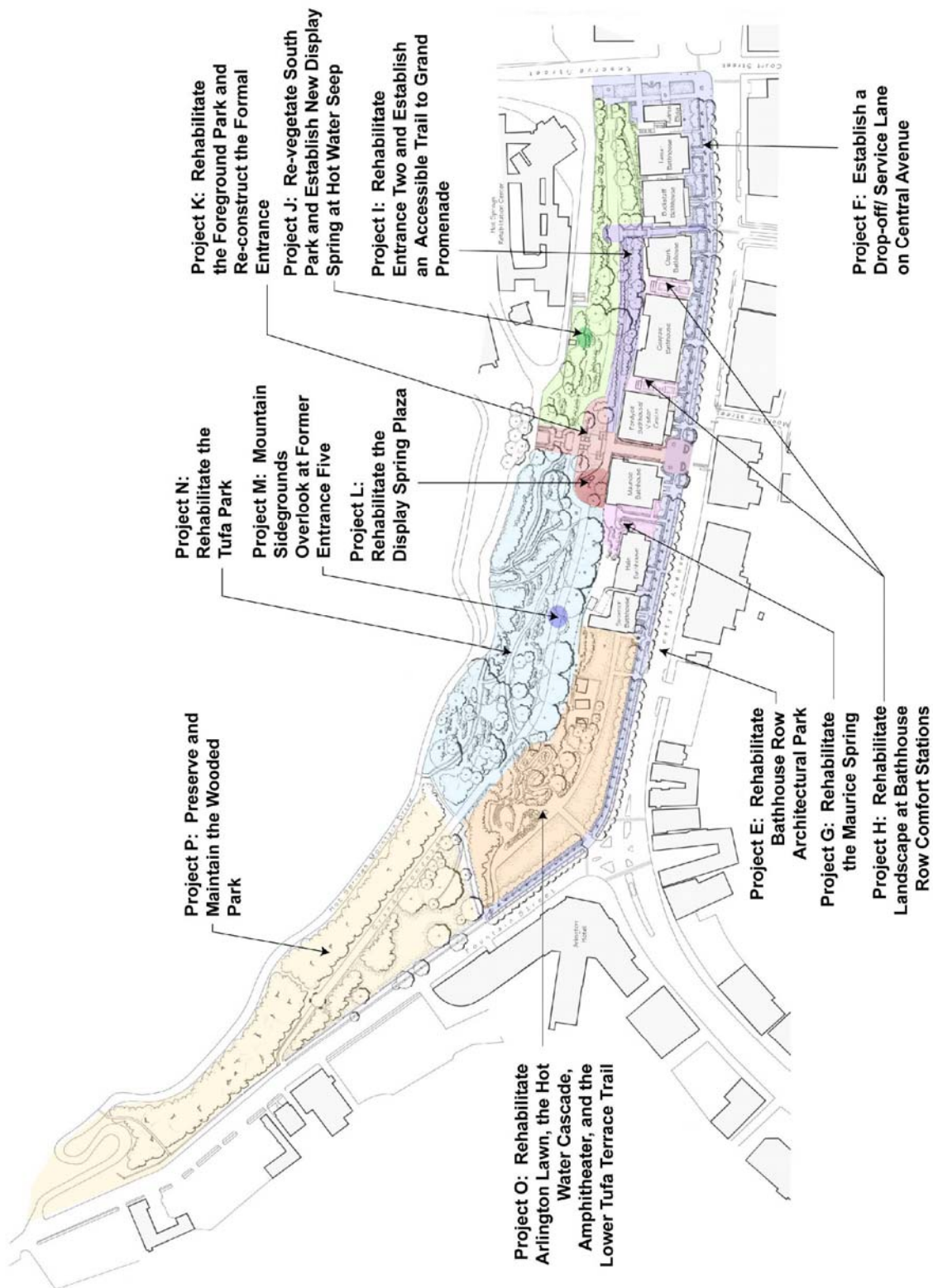


Figure 8- 2: Project locations in the Reservation Front.

Chapter IX: Consultation and Coordination

Chapter IX: Consultation and Coordination

External Scoping

External public scoping was conducted to inform various stakeholders and the public about the proposal to establish treatments for historic landscapes at Hot Springs National Park and to generate input on the preparation of this *CLR/EA*. A press release was forwarded to the *Hot Springs Sentinel-Record* on 1 May 2007. A copy of the press release is included in Appendix B. The public scoping meeting was held in the Ozark Bathhouse in Hot Springs National Park from 1-3 p.m. on 9 May 2007. Eight people attended the public scoping meeting. Meeting participants viewed landscape treatment concepts and discussed those treatment concepts with the consultant team and park staff. An account of the meeting and comments is provided in a memorandum dated 10 May 2007 and authored by Brenda Williams. Additional comments were received as a result of the *Hot Springs Sentinel-Record* article regarding the *CLR/EA*. These are noted in an email from Diane East to Marla McEnaney and Brenda Williams, dated 11 May 2007. The memorandum and email are included in Appendix B.

In addition to the general public scoping, the project team contacted state and federal agencies for information and comments relevant to the proposed action. Agencies contacted included:

Federal

U.S. Department of Interior – U.S. Fish and Wildlife Service (Section 7 coordination letter sent to USFWS on January 17, 2007). On 29 January 2007 the Fish and Wildlife Service sent a response indicating that there is one endangered species and one threatened species in the area. They also indicated they would provide further comment when the report is made available for review. A copy of the letter is provided in Appendix B.

State

The Arkansas Natural Heritage Commission was contacted by both phone and email in January 2007. The Arkansas State Historic Preservation Office was contacted by phone and email in April 2007. A copy of the email is provided in Appendix B.

Internal Scoping

Internal scoping was conducted by an interdisciplinary team of professionals from the park, the Midwest Regional Office and members of the consultant team. Interdisciplinary team members met on 8 May 2007 to discuss the purpose and need for the project; various alternatives; potential environmental impacts: past, present, and reasonably foreseeable projects that may have cumulative effects; and possible mitigation measures. The team also gathered background information during the course of their visit. Over the course of the

project, team members have conducted individual site visits to view and evaluate the proposed treatment alternatives.

Cultural Landscape Report / Environmental Assessment Review

The *CLR/EA* will be released for public review in March 2008. To inform the public of the availability for the *CLR/EA*, the NPS will publish and distribute a letter or press release to various agencies, tribes with an interest in Hot Springs National Park, and members of the public on the park's mailing list, as well as place an ad in the local newspaper. Copies of the *CLR/EA* will be provided to interested individuals, upon request. Copies of the document will also be available for review at the Fordyce Bathhouse and on the NPS website.

The *CLR/EA* is subject to a 30-day public review and comment period. During this time, the public is encouraged to submit their written comments to the NPS address provided below:

**CLR/EA Comments
ATTN: Superintendent
Hot Springs National Park
101 Reserve Street
Hot Springs, AR 71901**

Following the close of the comment period, all public comments will be reviewed and analyzed, prior to the release of a decision document. In response to internal NPS and public review, the NPS will make appropriate changes to the *CLR/EA* as needed.

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Appendix A: NPS Cultural Landscapes Inventory for Gulpha Gorge Campground*

Note: *Due to the length of this document, in order to reduce paper use and printing costs, Appendix A is provided in digital format as a pdf file on the enclosed compact disk.

National Park Service
Cultural Landscapes Inventory
August 2006



Gulpha Gorge Campground
Hot Springs National Park

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Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history, significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by

the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

Inventory Unit Description:

Brief Physical Description:

The Gulpha Gorge Campground is situated within Hot Springs National Park, several miles northeast of downtown Hot Springs, Bathhouse Row, and the Fordyce Visitor Center. The 16-acre site, a portion of which is devoted to picnic use, lies adjacent to U.S. Highway 7S; this road acts as the campground's eastern border while Gulpha Creek defines the western side. It lies in a valley surrounded by Indian Mountain to the east and Hot Springs Mountain on the west. This dramatic sense of enclosure is one of several unique aspects exhibited by the campground and its setting. Although the campground is located approximately three miles away from the core of downtown and Bathhouse Row, it is linked to the park's extensive network of trails.

Distinct features found here include: stone retaining walls lying along portions of the creek, remnant stone and concrete ruins associated with two (non-extant) dams, Mission 66-era rock walls, fire ring, steps, comfort stations, amphitheater and related seating; a Ranger Residence (originally the "Caretaker's Cabin"; now the VIP Residence--Building #41); and mature vegetation that may date to one or both periods of significance.

The Gulpha Gorge Campground retains integrity of location, design, setting, feeling, and association. The aspects of materials and workmanship have been diminished slightly due to the loss over time of several key features such as the dams and associated swimming pool, original comfort stations, foot bridge, bathhouse, and original "community hall," which underwent several instances of rehabilitation/remodeling over time and is currently identified as building #43, the contact station. (Certain elements of the original building may lie within this modern building; this is discussed further in the "Buildings and Structures" section.)

The overall condition of the campground is considered good: the landscape exhibits no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The landscape's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition (CLI v. 1.0 User's Guide 2005).

Period of Significance:

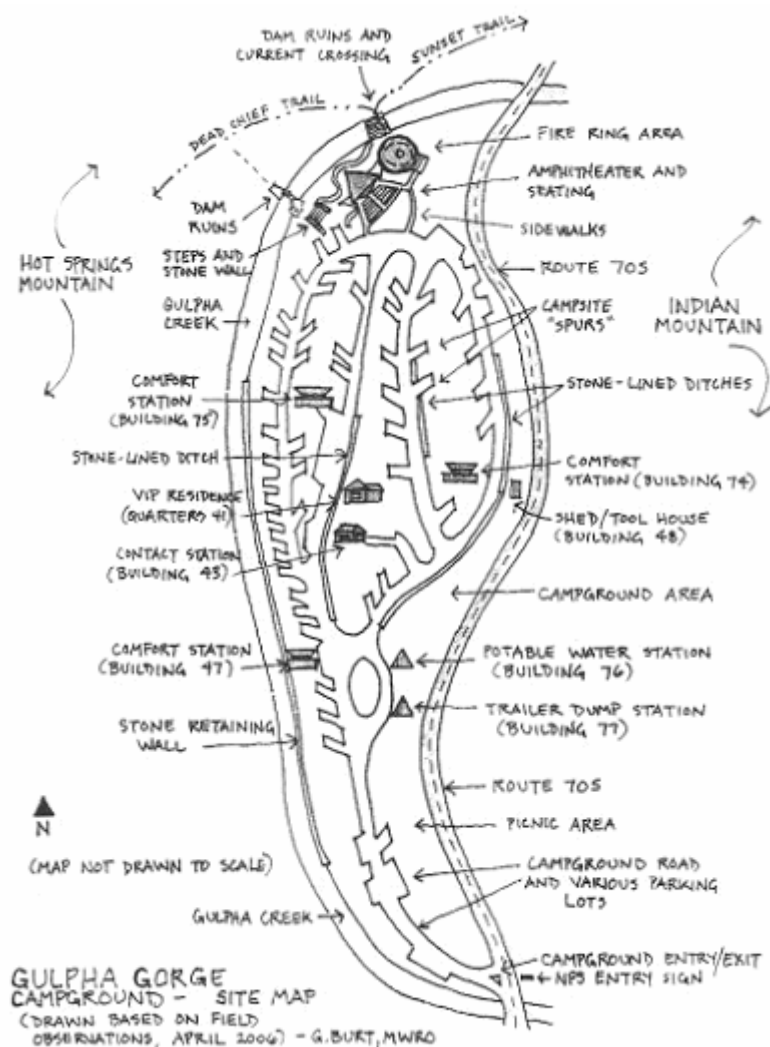
It is suggested that there be two periods of significance for the Gulpha Gorge Campground. The first is 1924-1934, covering the time that the park obtained the property, initial construction work was completed, and the CCC/CWA involvement at the campground. The second period is 1960-1965, reflecting Mission 66-era funded construction activities; much of the appearance of the campground today is a direct result of this later period.

Landscape Integrity and Summary of Landscape Analysis and Evaluation:

The campground retains many features associated with the two periods of significance. The stone retaining walls lying along portions of the creek, remnant stone and concrete ruins associated with two (non-extant) dams, and general camp layout and circulation are indicative of the first period. Also, the "Caretaker's Cabin" (now the VIP Residence--Building #41) was constructed during this period. The rock walls, campfire ring, steps, two of the three comfort stations, amphitheater and associated seating are associated with the second period. The overall layout and pattern of the campground was updated during this period. Many of the trees situated throughout the site likely date to the second period and some may date to the first.

As mentioned previously, several important original features no longer exist and this has diminished integrity to some extent, but the retention of other important landscape characteristics such as the overall spatial organization and layout, land use, circulation, topography, vegetation, setting and natural systems serve to reinforce the historic character and integrity of the landscape as a whole and assist with the conveyance of the campground's significance. Since 1924 when the park acquired the campground, the landscape has undergone an evolution that is reflected in the losses and additions as well as the continuity of form, order, use, features, and materials. The campground provides an excellent example of a landscape that reflects and emphasizes continuity while acknowledging a chronological "layering."

Site Plan



Site map of Gulpha Gorge Campground, drawn in field, April 2006. Not to scale.

Property Level and CLI Numbers

Inventory Unit Name:	Gulpha Gorge Campground
Property Level:	Landscape
CLI Identification Number:	975290

Park Information

Park Name and Alpha Code:	Hot Springs National Park -HOSP
---------------------------	---------------------------------

Park Organization Code: 7300

Park Administrative Unit: Hot Springs National Park

Concurrence Status

Inventory Status: Complete

Concurrence Status:

Park Superintendent Concurrence: Yes
Park Superintendent Date of Concurrence: 07/25/2006
National Register Concurrence: Eligible -- SHPO Consensus Determination
Date of Concurrence Determination: 08/18/2006

Geographic Information & Location Map

Inventory Unit Boundary Description:

The campground boundaries are defined by Gulpha Gorge Creek along the west edge and by U.S. Highway 7S on the east edge. The northern and southern boundary is defined by the points where the creek and the road intersect.

State and County:

State: AR
County: Garland County

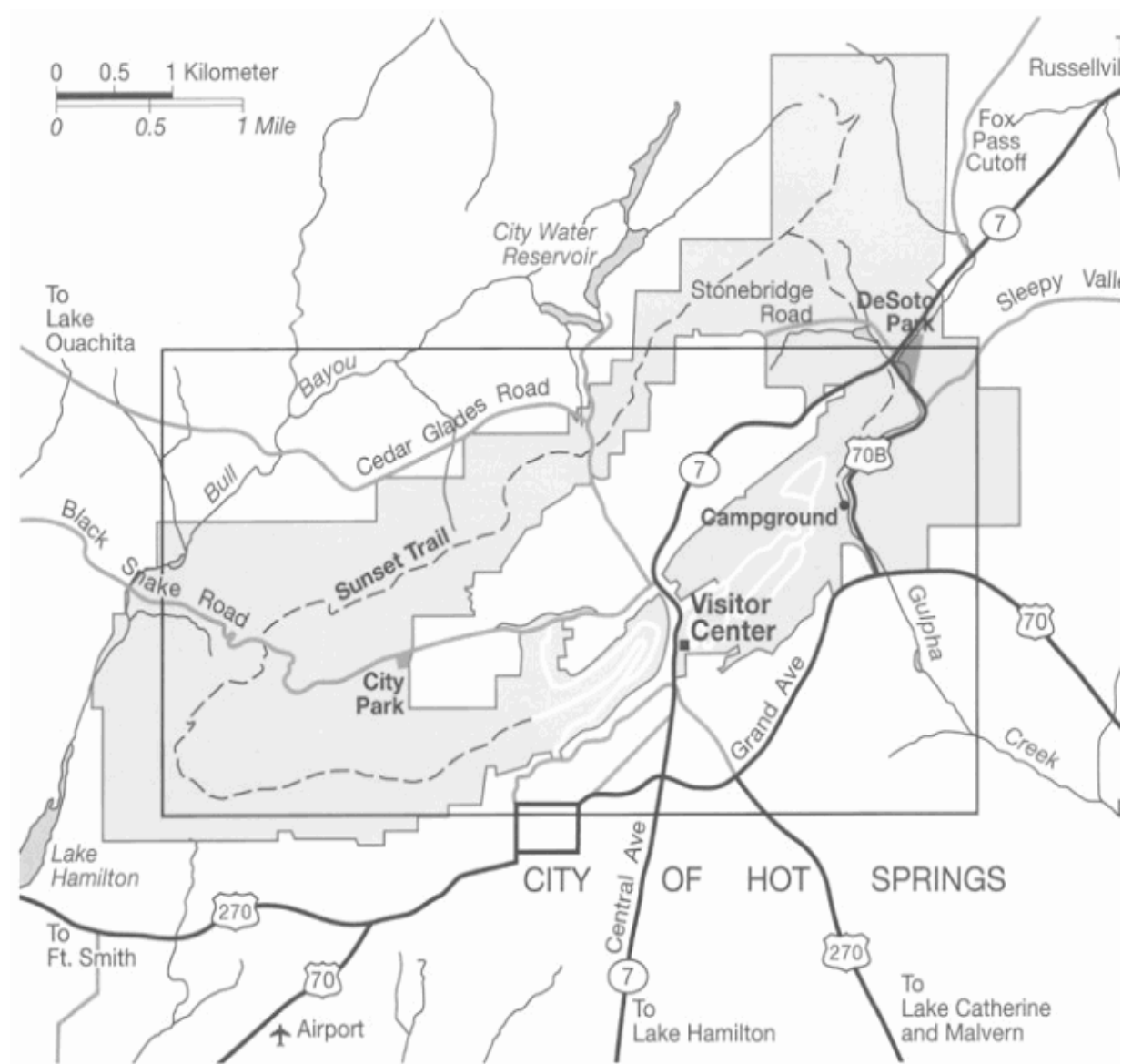
Size (Acres): 16.00

Boundary UTMS:

<u>Source</u>	<u>Type of Point</u>	<u>Datum</u>	<u>UTM Zone</u>	<u>UTM Easting</u>	<u>UTM Northing</u>
GPS-Differentially Corrected	Line	Other Datum	15	496,656	3,820,487
GPS-Differentially Corrected	Line	Other Datum	15	496,628	3,820,319
GPS-Differentially Corrected	Line	Other Datum	15	496,717	3,820,069

Gulpha Gorge Campground Hot Springs National Park

Location Map:



Location map indicating relationship of the campground to surrounding park and city of Hot Springs.

(Source:

NPS web site

<http://data2.itc.nps.gov/parks/hosp/ppMaps/HOSPmap2%2Epdf>)

Management Information

General Management Information

Management Category: Should be Preserved and Maintained
Management Category Date: 06/09/2006
Maintenance Location Code: 61341

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement:

Management Agreement Explanatory Narrative:

The NPS does not have a management agreement associated with this property.

NPS Legal Interest:

Type of Interest: Fee Simple

Public Access:

Type of Access: Other Restrictions

Explanatory Narrative:

Campers must register at contact station, pay a fee, acquire a permit, and follow posted rules and regulations. Use of the amphitheater and/or fire ring area also requires a permit. Access to the picnic area is open between hours of 6:00 a.m. to 10:00 p.m. Picnicking activity within the campsites is prohibited unless registered for that specific campsite and the camping fee is paid.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

The surrounding mountain slopes remain much as they existed during the period of significance. This sense of enclosure reinforces the overall historic integrity of the site.

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Undocumented

National Register Explanatory Narrative:

Prior to the completion of the CLI for the Gulpha Gorge Campground, the landscape was not documented through either the National Register or the Arkansas SHPO.

National Register Eligibility

National Register Concurrence:	Eligible -- SHPO Consensus Determination
Contributing/Individual:	Individual
National Register Classification:	Site
Significance Level:	Local
Significance Criteria:	A - Associated with events significant to broad patterns of our history

Period of Significance:

Time Period:	AD 1924 - 1934
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Recreation
Facet:	General Recreation
Other Facet:	Tourism; Camping
Time Period:	AD 1960 - 1965
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Recreation
Facet:	General Recreation
Other Facet:	Tourism; camping
Time Period:	AD 1960 - 1965
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	NPS Mission 66--Landscape Architecture
Time Period:	AD 1924 - 1934
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	The 1930's: Era Of Public Works

Area of Significance:

Area of Significance Category	Area of Significance Subcategory
Entertainment - Recreation	None
Landscape Architecture	None

Statement of Significance:

Gulpha Gorge Campground is eligible for listing to the National Register under Criterion A for its association with trends related to the design and development of campgrounds in national parks. The development of this campground since its acquisition in 1924 has been directly affected by work related to the Civilian Conservation Corps (CCC), the Civilian Works Administration (CWA), and Mission 66-funded improvements. Although certain original features once associated with the campground no longer exist, the overall balance of continuity of use, evolution of campground facilities, and retention of distinctive characteristics contribute to the distinct historic character and identity of this site.

Gulpha Gorge Campground Hot Springs National Park

The park acquired Gulpha Gorge Campground at a time when design, layout, and improvement of campgrounds in national parks were a major focus. In 1918, Director Stephen Mather appointed Charles P. Punchard, Jr., as the National Park Service's first landscape engineer (as park designers were called at the time). Among other pressing matters, Punchard gave special attention to the development and layout of park campgrounds. In the years following the end of World War I throughout the 1920s, parks saw an increased need for new or enlarged campgrounds to accommodate an increase in visitors. This period coincided with a burgeoning popularity in automobile use and related recreational opportunities. Punchard's efforts entailed locating and developing permanent "automobile camps" or rehabilitating existing camps, such as Gulpha Gorge (McClelland 1998, 136, 143).

Punchard's basic requirements for national park campgrounds included: availability of good drinking water, accessible sanitary toilet facilities, selecting sites based on water supply and potential screening from roads, and potential for building dams to create reservoirs. Trees were cut and brush was removed to provide space for roads, parking, camp sites and outdoor living. Fireplaces, seats, tables and shelters were considered necessities. Punchard viewed campground improvements as a priority; in 1920 he urged the "higher development of the automobile campground" to proceed "with renewed vigor" (ibid., 144-145).

Little is currently known about the camp before the park assumed control. It is likely that the campground was a small, locally established site, with only minimal services and features before it was donated to the park in 1924. Engineer and philanthropist John Fordyce, son of Samuel Fordyce, donated the campground to the park through the local Chamber of Commerce. Upon acquisition, the campground's facilities and general condition were well below the standard of what was deemed acceptable by the NPS. As documented in the Superintendent's Report (FY1925): "The 16 acres of land, when taken over, were densely covered with underbrush, and there were several marshy places. The underbrush was cleared away; low places were filled in; ditches were cut and tile was laid to drain wet places. A comfort station for men and women, with pressure flush toilets, was erected...A road was built to open up parts of the grounds for camp sites...The dressing rooms were remodeled."

To further bring this campground up to the level defined by Punchard, the next several years saw a flurry of work intended to greatly improve the campground's appearance and functionality. Using Punchard's campground requirements as a guide, park workers continued to clear brush, make improvements to the camp road, water, and electrical system, graded and leveled grounds, dug ditches, and planted trees and shrubs. A dam along the adjacent creek had previously been built, creating a reservoir or swimming pool; this pool was drained and the dam was repaired and reconstructed during this time. Workers constructed an additional comfort station as well as a rustic "community hall" (Superintendent's Annual Reports, 1920s).

By 1932 the campground had undergone major improvements and visitor use was consistently high. Ongoing improvements included the construction of the Caretaker's Cabin as well as a new bathing building that contained changing booths. In this year, the "Meinecke Plan" for campground development was released by the U.S. Forest Service. This plan called for the "extensive rehabilitation of existing campgrounds" as well as closing of older outdated campgrounds and construction of new ones. Although developed through the Forest Service, the plan and the related work was closely adhered to,

and Meinecke's theories were carried out extensively in the NPS (*ibid.*, 281-282). Elements of the plan were carried out at Gulpha Gorge: one-way loop roads, parking "spurs" off the road with adjacent campsites offering equal amenities, and protection of existing vegetation in addition to planting additional vegetation between camp sites to increase privacy (*ibid.*, 279-280). Plans drawn and approved in 1932-33 indicate that the overall layout and location of circulation pathways and camp features at Gulpha Gorge were established at this time. Noted NPS landscape architect Charles E. Peterson, a disciple of Thomas C. Vint, signed these plans for distribution.

The Emergency Conservation Work program (ECW), signed into law by President Roosevelt on March 31, 1933, provided funding for the creation of the Civilian Conservation Corps (CCC). The CCC was viewed as a means to carry out a wide range of useful and needed work projects in state and national parks, including campground improvement. By May of that year a temporary camp had been established near Hot Springs to accommodate CCC workers. The improvements to Gulpha Gorge that had been accomplished since 1924 would be augmented by the additional work efforts by CCC workers in 1933.

CCC work in NPS campgrounds included clearing, grubbing, and thinning underbrush; marking of trees and screening vegetation for preservation; planting additional trees and shrubs as needed; and construction of campground-related features such as comfort stations, signs and picnic tables. The design and layout of campgrounds sought to accommodate further increases in automobile traffic and trailer camping (*ibid.*, 336, 372). CCC work at Gulpha Gorge included much of this type of work effort; specific projects included building a rock culvert and rock retaining wall along Gulpha Creek, further excavation of the existing swimming pool and new dam, and removal of certain mature trees and preservation of others (Superintendent's Annual Report for 1933).

CCC workers departed Hot Springs in December of 1933, and the work on the dam was continued and completed by workers funded through the Civil Works Administration (CWA) in 1934. The intervening years saw few major projects at Gulpha Gorge. Of note, the official name of "Gulpha Gorge Campground" was approved by the park superintendent in 1939; previous to this time, the campground had been known variously as "free auto camp," "government free campground," "government free tourist camp," "public campground," etc. Also during this time, the swimming pool was closed in 1941 due to tests indicating the water was polluted; the "community hall" was remodeled for use as a garage and fire tool cache in 1945; and the dam was dynamited in 1947 (Superintendent's Annual Reports, 1930s and 1940s).

By 1957, the park saw a renewed focus on the campground with the establishment of Mission 66, the NPS's multimillion-dollar program intended to alleviate the backlog of park work needed to meet the demands of a post-World War II influx of visitors and automobile traffic. Although broader in scope than the Punchard and Meinecke plans, Mission 66 did have as a major component an emphasis on upgrading campgrounds throughout the park system. In September of 1957, a "Master Plan Conference" was held at Hot Springs that included a representative of the Washington, D.C.-based Mission 66 staff as well as two representatives from the Eastern Office of Design and Construction. It is unclear to what extent Gulpha Gorge was discussed at this meeting, but by 1960 a renewed emphasis on improvements at the campground was under way (Shugart, 2000).

Between 1960 and 1965, in keeping with Mission 66 goals, the park constructed several new structures and the overall layout of the campground was redesigned to accommodate additional camping spurs and parking areas. Two new comfort stations were constructed in 1960 and a third was built soon after (1968). The “community hall” was remodeled once again ca. 1963-65 for use as a registration/ranger’s station. Although a major rehabilitation, it is believed a portion of the original 1926 building still remains within the newer structure, although this has yet to be conclusively proven. In 1965 the old changing bathhouses were razed to make room for a new, 300-seat amphitheater with adjoining stone and mortar retaining walls, fire pit, seating, steps, and paved surfaces. A new entrance road was completed in this year and other assorted camp features were installed such as picnic tables, fireplaces, and trash receptacles. Finally, landscape improvements were completed such as topsoiling, grading, and planting trees and shrubs (Superintendent’s Annual Reports for 1960s).

Gulpha Gorge campground today possesses key elements and retains integrity for both periods of significance: 1924-1934 and 1960-1965. The overall layout pattern and circulation alignment, the CCC-constructed rock work along the creek, and the Caretaker’s Cabin all date to the first period. The ruins and traces of the non-extant dams are still very evident and are important elements of the campground’s history. The campground conveys the goals of the Mission 66-era with regard to “quintessential” campground features: the amphitheater and the campfire circle (McClelland 1998, 468). These extant landscape features reinforce the historic character and assist with the conveyance of the site’s significance. As mentioned previously, the Gulpha Gorge campground cultural landscape retains integrity of location, design, setting, feeling, and association; the aspects of materials and workmanship have been diminished to some extent due to the loss of several key features over time. However, these aspects are reinforced through the subsequent addition of the Mission-66 funded comfort stations, amphitheater and associated rock walls, seating, and campfire ring.

Although associated with and representative of a national trend regarding the design, development and management of campgrounds in national parks, Gulpha Gorge campground is considered significant at the local level for its role in and importance to the city of Hot Springs and the surrounding region for over 82 years.

National Historic Landmark Information

National Historic Landmark Status: No

World Heritage Site Information

World Heritage Site Status: No

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Designed

Current and Historic Use/Function:

Primary Historic Function: Campground/Picnic Area

Primary Current Use: Campground/Picnic Area

Current and Historic Names:

Name	Type of Name
Gulpha Gorge Campground	Both Current And Historic
Free Auto Camp	Historic
Automobile Tourist Camp	Historic
Free Auto Trailer Camp	Historic
Public Campground	Historic
Government Free Campground	Historic
Government Auto Camp	Historic
Government Free Tourist Camp	Historic

Ethnographic Study Conducted: No Survey Conducted

Chronology:

Year	Event	Annotation
AD 1924	Land Transfer	Campground donated to park by John Fordyce through Hot Springs Chamber of Commerce Associated person: John Fordyce
AD 1925 - 1926	Built	Community Hall constructed
AD 1932	Built	Caretaker's Cabin constructed
AD 1933	Built	CCC crews built dry stone retaining wall along creek and rock culverts
	Excavated	CCC crews excavated swimming pool as part of project to deepen and enlarge the swimming area
AD 1934	Built	CWA-funded crew completed construction of new dam
AD 1941	Abandoned	Swimming pool was closed due to pollution
AD 1945	Rehabilitated	Community Hall remodeled into a garage and fire cache storage
AD 1947	Destroyed	Dam was dynamited
AD 1960 - 1965	Rehabilitated	Community Hall again remodeled, this time into a ranger's station and later a registration station
AD 1960	Built	Two comfort stations constructed with Mission 66 funding
AD 1965	Built	300-seat amphitheater, adjoining stone and mortar retaining walls, fire pit, seating, steps, and paved surfaces constructed; also a new entrance road completed, as part of Mission 66 funding
AD 1968	Built	Third comfort station constructed

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The campground retains many important landscape features, most of which are associated with either or both periods of significance. The stone retaining walls lying along portions of the creek, remnant stone and concrete ruins associated with two (non-extant) dams, and general camp layout and circulation are indicative of the first period. Also, the “Caretaker’s Cabin” (now the VIP Residence--Building #41) was constructed during this period. The rock walls, campfire ring, steps, comfort stations, amphitheater and associated seating are associated with the second period. Many of the trees situated throughout the site likely date to the second period and some may date to the first.

As mentioned previously, several original built features no longer exist, and this has diminished the overall integrity slightly, but the retention of other important landscape characteristics such as the overall spatial organization and layout, consistent land use, circulation alignment, site topography and adjacent slopes, vegetation (primarily in the number and massing of mature trees), setting and natural systems serve to reinforce the historic character and integrity of the landscape as a whole and assist with the conveyance of the campground’s significance. Since 1924 when the park acquired the campground, the campground landscape has undergone a consistent, orderly evolution that is reflected in some losses and changes but more importantly in the continuity of form, order, use, features, and materials. The campground provides an excellent example of a dynamic landscape that reflects and emphasizes continuity while acknowledging change. It can truly be said that a visitor today can very much experience and gain a sense of the landscape as it was ca. early 1930s and again ca. early 1960s.

Aspects of Integrity: (applicable to this property)

Location
Design
Setting
Materials
Workmanship
Feeling
Association

Landscape Characteristic:

Spatial Organization

The general pattern and organization of this campground has remained essentially intact since the initial planning and design dating to the first period of significance, enduring subtle updates over time and the renewed planning during the second, up through current day. The alignment of the loop road and pattern of camping spur layout has evolved in subtle ways from the layout

indicated in maps from both periods of significance. What exists today is a result of gradual evolution of the camp site over 80+ years, in response to changing demands and needs of camp users and vehicles and park management policies. Subtle change of this sort is reflective of a dynamic, evolving landscape and such minimal changes do not seriously detract from the integrity of the site. Additional aspects of spatial organization that retain integrity include the defining edges of road (current U.S. Highway 7S) and Gulpha Creek, the overhead plane formed by the consistent massing of trees and canopy throughout the campground, and the immediate surroundings of the landscape—the sense of enclosure formed by neighboring Indian Mountain and Hot Springs Mountain.

Acknowledging that some individual features have been lost or endured change, including the loss of several buildings and structures and the dam and swimming pool, the essential patterns have remained generally intact. Additional buildings have been constructed to assume similar three-dimensional form in the landscape. The current spatial separation of the picnic area from the camping/amphitheater area dates to the early 1960s-Mission 66 period. The current spatial organization, appearance and function closely reflects the historic spatial organization, appearance and function and strongly reinforces the site's overall integrity.

Vegetation

The 1932 “Meinecke Plan” for campgrounds (discussed previously) focused on, among other issues, the preservation of as many mature, healthy trees as possible in order to provide substantial shade from the dense canopy overstory, and retention and planting of shrubs and smaller trees between camp sites to provide separation, privacy, and an overall natural setting that visitors expected (McClellan 1998, 280). Review of period photographs indicates that the vegetation at Gulpha Gorge conveyed these intentions and a large number of trees have consistently been present throughout the entire campground. This presence of a wide variety of large mature trees has not changed over time and is still the case today. A comparison of a listing of trees from 1933 and more current observations indicate that many of those species still exist. Various trees may not be of a type present during that earlier time, but of all the landscape characteristics, vegetation is the most dynamic in nature and it is expected that specimens will ultimately die and be replaced by the same or similar species.

One notable change at the campground between the current appearance and the historic period is that, again reflective of the Meinecke Plan, shrubs were planted between the individual camp sites to provide compartmentalization as well as to provide some degree of privacy and screening. Currently, there is little understory vegetation to provide this separation between camp sites. Although there is substantially less shrubbery between the camp sites, the massing and number of trees does continue to provide needed shade and a pleasant natural setting. The shrubbery once located between camp sites could potentially be gradually reinstituted to recover this functional aspect.

It is infeasible at this time to identify each individual tree as contributing; perhaps if a tree identification project is undertaken in the future this could yield helpful information to the park. In general, this characteristic retains integrity, primarily due to the overall number and massing of the trees. Integrity would be heightened by the gradual replanting of shrubs as mentioned.

Circulation

Hot Springs Superintendent's reports dating from the 1920s through the 1960s periodically mention work being performed on the circulation system within the campground and on the adjacent highway. Work ranged from major improvements of roadway segments (i.e., work on the "original Gulpha Gorge Road" in 1928, and subsequent improvements in 1936-1937 to the "new county road," later identified as U.S. Highway 70B and currently known as Highway 7S), to minor periodic resurfacing. Maps dating to the early 1930s, compared with existing conditions, indicate that the alignment of the portion of the highway that runs along the east side of the campground has not substantially changed over time. The location of Highway 7S as the defining eastern edge of the campground has always been a critical characteristic, as a boundary feature. North of the campground, a segment of the Sunset Trail lies along what was the original highway roadbed.

Within the campground, minor additions/alterations over time such as the number and location of parking spurs, location of parking areas, subtle realignment of the campground loop roads, and slight variations to the entrance to the park have not affected the overall integrity of this landscape characteristic.

The circulation systems at Gulpha Gorge, though likely altered somewhat since the period of significance, retain a continuation of use and integrity of location, setting, feeling and association. Their presence assists with the conveyance of the site's historic character.

Character-defining Features:

Feature: Highway 7S

Feature Identification Number: 110656

Type of Feature Contribution: Contributing

Feature: Campground roads

Feature Identification Number: 110660

Type of Feature Contribution: Contributing

Feature: Campground spurs

Feature Identification Number: 110662

Type of Feature Contribution: Contributing

Feature: Parking areas

Feature Identification Number: 110664

Type of Feature Contribution: Contributing

Buildings and Structures

Historically, there were several buildings and structures that no longer exist at Gulpha Gorge. These include:

- Three comfort stations, a garage with storerooms, a pump and meter house, original dressing room shacks, and a 1932 bathing building with changing booths
- 2 dams, currently represented by submerged/partially submerged stone and concrete ruins in two locations in Gulpha Creek (see “Archeological Features” section)

Extant buildings and structures constructed during either the first or second period of significance include:

- The Caretaker’s Cabin (currently the VIP residence or quarters #41), built in 1932. This building has been determined eligible to the National Register and is documented in current LCS records.
- The stone retaining walls along the creek, built by CCC labor in 1933. These too have been determined eligible and are documented in the LCS.
- The Mission 66 amphitheater, associated rock walls, and fire ring. These are not currently listed in the LCS but are considered contributing to the significance of the cultural landscape.
- Two Mission 66-era comfort stations (buildings #47 and #74), built in 1960
- The “community hall” (currently building #43)—this was originally constructed in 1925-1926 and endured several rehabilitation/remodeling projects over the interim. Over the years it has been converted into a garage and storage for fire cache, a ranger’s station and garage, and ultimately became the current registration/contact station (building #43). It is not clear what if any portion of the original building still exists within the current structure—this is open to some debate. (As part of a 2003 Section 106 compliance action, Mark Blaeuer, Section 106 coordinator for the park, presented an excellent explanation of the evolution of the building and a rationale for the current thought that portions of the original structure lie within.) Although the building has undergone major alterations over time and individually may lack distinction and integrity, as a significant component of the overall cultural landscape it is considered contributing. It is in the same location, reinforces the character, setting and feeling of the campground, and it conveys the culmination and adaptation of a long evolution of campground needs and building uses.

Buildings and structures that have been built since the second period of significance include:

- Three structures lying along the east side of the campground—a water access station, a trailer dump station, and a storage/tool shed.
- Third, “upper” comfort station (building #75) constructed in 1968 (FMSS data). This comfort station, built outside the defined period of significance, is not considered contributing to the significance of the site, but because it is built with the same form and appearance and provides identical use to the other comfort stations, is considered contributing to the character of the landscape.

Character-defining Features:

Feature: Contact Station (building #43)

Feature Identification Number: 110768

Type of Feature Contribution: Contributing

Feature: VIP Residence (quarters #41)

Feature Identification Number: 110774

Type of Feature Contribution: Contributing

Feature: Stone retaining wall

Feature Identification Number: 110780

Type of Feature Contribution: Contributing

Feature: Amphitheater, walls, fire ring

Feature Identification Number: 110784

Type of Feature Contribution: Contributing

Feature: 2 Comfort stations

Feature Identification Number: 110798

Type of Feature Contribution: Contributing

Feature: Water access station

Feature Identification Number: 110804

Type of Feature Contribution: Non Contributing

Feature: Trailer dump station

Feature Identification Number: 110810

Type of Feature Contribution: Non Contributing

Feature: Storage/tool shed

Feature Identification Number: 110816

Type of Feature Contribution: Non Contributing

Feature: 1968 comfort station

Feature Identification Number: 110820

Type of Feature Contribution: Non Contributing

Small Scale Features

Small-scale features at the campground include the seating that faces and is part of the amphitheater, the associated stone and mortar benches and steps, drinking fountains, stone-lined drainage ditches, stone curbs, picnic tables (concrete and typical wood variety), various signs, street lights and light poles, and stone-lined surface at the camp entrance. Of all the landscape

characteristics discussed, the least amount of information has been discovered that might shed additional light on these features. Future research and/or discussions with park staff may reveal useful information regarding these features. Based on professional judgment at the time of this inventory, it is felt that contributing features include the stone-lined drainage ditches, stone curbs, street lights and light poles. More recent campground facilities built subsequent to the Mission 66 period are not contributing at this time. (In 2004, bench seating associated with the amphitheater, composed of recycled plastic and wood chips, replaced the wood bench seating that was severely deteriorated and rotting. Funding for this project was provided by a National Park Foundation grant and a donation from Unilever Corp. Although not considered contributing historically, the seating reinforces the overall character and integrity of the amphitheater.)

Character-defining Features:

Feature: Stone-lined drainage ditches

Feature Identification Number: 110822

Type of Feature Contribution: Contributing

Feature: Stone curbs

Feature Identification Number: 110824

Type of Feature Contribution: Contributing

Feature: Street lights and light poles

Feature Identification Number: 110828

Type of Feature Contribution: Contributing

Feature: Drinking fountains

Feature Identification Number: 110830

Type of Feature Contribution: Non Contributing

Feature: Picnic tables

Feature Identification Number: 110834

Type of Feature Contribution: Non Contributing

Feature: Signs

Feature Identification Number: 110836

Type of Feature Contribution: Non Contributing

Feature: Bench seating at amphitheater

Feature Identification Number: 110840

Type of Feature Contribution: Non Contributing

Natural Systems and Features

Little is currently known about the campground prior to the park assuming control. It can be surmised that whoever observed this site and decided to establish a campground here was very likely impressed by the advantageous combination of a relatively level valley floor situated between two mountain slopes, access to an adjacent spring (Iron Spring), large rock outcrops, a well-flowing stream, and what was probably a generous massing of trees and shrubs. The dense canopy would provide ample shade and an understory of shrubs, grass and wildflowers would provide a lush natural setting. The original campground included a constructed dam that formed a swimming pool, providing recreational opportunities, and early, primitive shacks that served as changing booths. The park's adaptation to this campground included substantial clearing of brush and general overgrowth to open up the grounds for additional camping spaces as well to present an overall neat and orderly appearance. Buildings and structures constructed by the park were of the rustic appearance prevalent at the time. This balance of natural, rustic surroundings combined with a more managed approach within the campground, while providing facilities exhibiting rustic design characteristics, has been a consistent occurrence over time. This reflects the general intent of Charles P. Punchard, National Park Service landscape engineer, who in 1919 sought to preserve natural resources while providing "improvements for the comfort and accommodation of park visitors" (McClelland 1998, 137). This policy was acted on and renewed in 1932 with the release through the U.S. Forest Service of "A Camp Ground Policy," which essentially set forth Emilio Meinecke's ideas and plans for campground design and management (McClelland 1998, 278). Gulpha Gorge campground exhibits a true balance of a cultural adaptation and response to the rugged natural setting. The characteristic of natural systems and features retains integrity and continues to assist with the conveyance of the site's significance.

Land Use

The evolving spatial organization and pattern of the campground (discussed previously) was shaped by the land uses already in place in 1924 as well as various needs and uses that came about over the intervening years. Land uses for the campground have essentially changed very little since the first and through the second period of significance, through current day. This site has been used consistently as a campground since the NPS assumed control and management responsibilities in 1924. Inspection of period photographs and review of records and annual reports indicate that from the earliest days, the park's intention was to set a tone here by reducing the number of large trailers, associated hook-ups, and limits on long-term camping. Use of this campground has focused more on daily uses such as lunch picnicking, swimming, campfire gatherings and other outdoor leisure activities. This has continued over time and these uses continue to be the predominant focus. Additional campground uses currently include programs centered at the amphitheater, weddings, interpretive and educational programs, an Artist-in-Residence program, and opportunities to hike the trails that are linked with the campground.

Due to the retention of consistent types of use of this campground since the park assumed control in 1924, this landscape characteristic retains substantial integrity and greatly contributes to the historic character.

Archeological Sites

The remains of the two dams, currently represented by a combination of submerged and exposed concrete and stone ruins, are considered historic features that contribute to the significance of the campground. As ruins or traces, these are considered to be primarily archeological in nature. The concrete slab and stone pedestrian crossing that currently lies over the site of the earlier dam is likely a more recent construction. These “stepping-stones,” in combination with a slight build-up of mortar and stone and a broad, terraced concrete slab, act as a minor dam of sorts, reminiscent of the dam and swimming pool that existed pre-1941. Although currently listed on the LCS as an eligible structure, more research is needed to determine the construction history and potential significance of these features. Research in conjunction with the CLI has not discovered information specific to these more recent features.

In 1990, as part of a plumbing construction project, artifacts were discovered and are registered with the state of Arkansas (site 3GA760). This project is detailed in the report entitled “Comments on Historical Artifacts from Gulpha Gorge, Hot Springs National Park, Arkansas,” by James E. Bradford and Charles M. Haecker. Full reference can be found in the bibliography of this inventory report.

Landscape Characteristic & Features Graphics:

Characteristic: Buildings and Structures



1933 view of dam, swimming pool, and bath house in background. (Source: HOSP archives, 2006).



Quarters 41 (source: CLI inventory)



Stone retaining wall (source: CLI inventory)



Mission 66 amphitheater and seating (source: CLI inventory)



Fire ring, steps, rock walls (source: CLI inventory)



Comfort station #47 (source: CLI inventory)



Building #43 (source: CLI inventory)

Characteristic: Archeological Sites



*Remains of upper dam and current crossing steps
(source: CLI inventory).*

Condition

Condition Assessment and Impacts

Condition Assessment: Good

Assessment Date: 06/30/2006

Condition Assessment Explanatory Narrative:

Definition: the landscape exhibits no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The landscape's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition (CLI v. 1.0 User's Guide 2005).

Stabilization Measures:

Current stabilization measures for Gulpha Gorge include the repair of stone retaining walls and stone surface water collection/draining raceways; current specific stabilization projects include repairing the concrete footbridge over Gulpha Creek by the amphitheater, replacement of deteriorated concrete picnic tables, and repairing rockwork and benches at the ring of fire area.

Impacts

Type of Impact:	Soil Compaction
Impact Description:	Frequent visitation could lead to areas of soil compaction
Type of Impact:	Structural Deterioration
Impact Description:	Combination of time and deferred maintenance leads to deterioration of concrete picnic tables, sheds, buildings, retaining walls, benches, etc.
Type of Impact:	Deferred Maintenance
Impact Description:	Self-explanatory
Type of Impact:	Erosion
Impact Description:	Erosion of creek edges and retaining wall due to creek flow; erosion of soil due to compaction; erosion of rock features due to exposure to elements
Type of Impact:	Flooding
Impact Description:	Infrequent flooding of creek but potentially very damaging to resources when this happens
Type of Impact:	Vandalism/Theft/Arson
Impact Description:	Typical instances of graffiti, damage to structures and vegetation, etc.

Stabilization Costs

Landscape Stabilization Cost: 31,410.08
Cost Date: 04/13/2006
Level of Estimate: C - Similar Facilities
Cost Estimator: Park/FMSS

Landscape Stabilization Cost Explanatory Description:

FMSS work order hierarchy indicates there is a parent work order entitled "Rehab Rock Walls Gulpha Creek." Child work orders under this parent work order include "Repair Rock Wall" and "Repair Rock Benches." Total stabilization cost for these work orders totals \$31, 410.08. Additional landscape-related work reported through FMSS is typical cyclic, recurring, and deferred maintenance such as repairing the flag pole, removal of hazardous trees, replacing signs, etc. and these costs are not reported here.

Treatment

Treatment

Approved Treatment: Undetermined

Approved Treatment Document Explanatory Narrative:

Currently there is no treatment document completed for Gulpha Gorge Campground; however, a CLR for the park is underway and may provide treatment recommendations for this landscape.

Approved Treatment Costs

Landscape Treatment Cost: 0.00

Landscape Approved Treatment Cost Explanatory Description:

No treatment costs are in place at this time.

Bibliography and Supplemental Information

Bibliography

Citation Author:	Shugart, Sharon
Citation Title:	“The Hot Springs of Arkansas: A Chronology of Hot Springs Events”
Year of Publication:	2002
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	Harrison, Laura Soulliere
Citation Title:	National Register documentation: “Historic Resources of Hot Springs National Park” (draft; never approved)
Year of Publication:	1988
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	Bradford, James E. and Charles M. Haecker
Citation Title:	“Comments on Historical Artifacts from Gulpha Gorge, Hot Springs National Park, Arkansas.” Park Papers HOSP-02, Sante Fe, N.M.
Year of Publication:	1993
Citation Publisher:	NPS, SWRO, Div. of Anthropology, Branch of CRM
Source Name:	Other
Citation Author:	Carr, Ethan
Citation Title:	“Mission 66: Modernism and the National Park Dilemma” final draft
Year of Publication:	2005
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	McClelland, Linda Flint
Citation Title:	"Building the National Parks"
Year of Publication:	1998
Citation Publisher:	Johns Hopkins University Press
Source Name:	Other

Citation Author:	NPS staff
Citation Title:	List of Classified Structures (LCS)
Year of Publication:	2006
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	various
Citation Title:	Memos, letters and correspondence obtained from HOSP library and archives
Year of Publication:	2006
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	various
Citation Title:	Facilities Management Software System (FMSS) database information
Year of Publication:	2006
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	Tolson, Hillary A.
Citation Title:	"Laws Relating to the National Park Service: The National Parks and Monuments"
Year of Publication:	1933
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	various
Citation Title:	Hot Springs National Park Superintendent's Monthly Reports, 1920-1970
Citation Publisher:	NPS
Source Name:	Other
Citation Author:	various
Citation Title:	Hot Springs National Park Superintendent's Annual Reports, 1920-1970
Citation Publisher:	NPS
Source Name:	Other

Citation Author: Harrison, Laura Soulliere

Citation Title: National Register Multiple Property Documentation Form: “The Development of the Thermal Waters, the Federal Reservation and National Park, and the Hot Springs Region” (draft; never approved)

Year of Publication: 1990

Citation Publisher: NPS

Source Name: Other

Appendix B: Consultation and Coordination Documents

May 1, 2007
For Immediate Release
Diane East, 501/623-2824

Public Scoping Meeting for national park Cultural Landscape Report
Scheduled for May 9 at Hot Springs National Park

Hot Springs National Park is preparing a *Cultural Landscape Report* (CLR) including an Environmental Assessment. The CLR will be used by the National Park Service (NPS) as a guide in the treatment and use of the park's historic landscapes.

In order to inform interested parties and incorporate their interests, comments, and concerns into the report, a public open house will be held on May 9, 2007, in the Ozark Bathhouse in Hot Springs National Park from 1-3 p.m.

Representatives of the project team and NPS staff will be available to explain the project efforts to date, and discuss issues and concerns with the public. The meeting format will be informal and the public is welcome to come anytime between 1 and 3 p.m.

"Hot Springs National Park contains extensive historic landscape resources that are significant examples of our nation's past," said Josie Fernandez, Hot Springs National Park Superintendent. "Bathhouse Row, one of the most prominent park historic landscapes, has been designated as a National Historic Landmark."

In addition to Bathhouse Row, the park contains several other potentially significant historic landscapes. The CLR is being prepared to help provide a comprehensive understanding of the historic development of these landscapes, evaluate their significance, and provide treatment recommendations that respond appropriately to their historic characteristics while accommodating current and future needs.

Treatment recommendations address how the park can adequately protect and manage the historic landscape resources, resolve any life safety concerns, rehabilitate or restore missing features, remove or mitigate the impacts of non-historic features, and meet uniform accessibility requirements where applicable. The Environmental Assessment components of the report analyze the impacts of each treatment alternative.

People unable to attend the meeting may provide input, by contacting Dale Moss, Assistant Superintendent, Hot Springs National Park, at 501-623-2824. A public review draft of the report will be available for examination in the summer of 2007. If you would like to be notified when the draft is available for review, please contact Assistant Superintendent Moss.

-NPS-

10 May 2007

MEMORANDUM

From: Brenda W. Williams, ASLA

To:



RE: CULTURAL LANDSCAPE REPORT AND ENVIRONMENTAL ASSESSMENT
Hot Springs National Park, Arkansas
06127.00

Subject: Trip Report, May 7-10, 2007

Members of the project team, including myself, Will Ballard (Woolpert, Inc.), Tina Bishop and Robyn Bartling (Mundus Bishop Design), Geoff Burt (MWRO), and Marla McEnaney (MWRO), traveled to Hot Springs.

Tuesday, 8 May 2007

- The project team presented the 75% draft of the CLR/EA to park staff, including: Assistant Superintendent Dale Moss, Chief of Interpretation and Cultural Resources Lisa Garvin, Ranger of Interpretation Jeff Heitzman, Facility Manager Leonard Lawson, Grounds Supervisor, Mitch Hunter, Natural Resource Manager Steve Rudd, Ranger of Interpretation and Cultural Resources Mark Blaeuer, Interpretive Program Assistant Gail Sears, Museum Specialist Sharon Shugart.
- Comments regarding the treatment alternatives, and development of a recommended treatment approach were solicited from the staff.
- The project team prepared a summary of a potential preferred alternative (attach).

Wednesday, 9 May 2007

- The project team discussed the summary of the potential preferred alternative with park staff including: Superintendent Josie Fernandez, Assistant Superintendent Dale Moss, Management Assistant Diane East, Facility Manager Leonard Lawson, Ranger of Interpretation and Cultural Resources Mark Blaeuer, Natural Resource Manager Steve Rudd, and Museum Specialist Sharon Shugart.
- A public scoping meeting was held in the afternoon. Boards providing an overview of the project and the treatment alternatives were displayed in the Ozark Bathhouse and project team members as well as park staff explained the project objectives and schedule to members of the public, answered questions, and documented comments. Staff members at the public scoping meeting included: Superintendent Fernandez, Management Assistant East, Ranger Blaeuer, Museum Specialist Shugart, Chief of Interpretation Garvin, and Interpretive Program Assistant Sears..
- Attendees of the public scoping meeting included:
 - Deborah Phillip-Carroll, Friends of the Fordyce Board Member, 109 Tausman, Hot Springs, 71901, 501-623-7991, dvalleyofdolls@hotsprings.net

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f 734 663 5044

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- Clyde Covington, 112 Orchard Street, Hot Springs, 71913, clydecovington@sbcglobal.net
- Jean Wallace, Hot Springs City Parks Arborist, P.O. Box 700, Hot Springs, 71902, jwallace@cityhs.net
- Kathy Sellman, Hot Springs Planning Department, 133 Convention, Hot Springs, 71902, ksellman@cityhs.net
- Mara Kohn, The Sentinel-Record, 300 Spring Street, Hot Springs, 71913, 623-7711, marah@hotsr.com
- Susan Harper, 136 McDonald, Hot Springs, 71913, 767-3388, sharper@aol.com
- Brian D. Reilly, 411 Albert Pike, Hot Springs, 71913, 321-2225
- Jerry Rephan, 208 First Street, Hot Springs, 71913, 501-321-1551, jrephan@hotsprings.net
- Comments recorded at the public meeting include:
 - General / Entire Park
 - Linking green spaces throughout the city is good.
 - Naturalistic landscape – good.
 - Working with the Rehabilitation Center is important, because the historic sites/resources are closely related to each other.
 - Remove fluted concrete.
 - Anniversary was great—drew community to the park!
 - Inspiring
 - Protect ostracod populations.
 - Protect hot water flows.
 - Publicize Olmsted connection to the design of the park.
 - Work to enhance and recreate the historic designs.
 - Eliminate “Christmas tree” display in Arlington Lawn.
 - Bathhouse Row
 - The idea to move the Noble Fountain to the corner of Central and Reserve is good.
 - Along Bathhouse Row, although the trees on the west side of Central Avenue might be seen as creating a “double-row effect” along the overall corridor, the addition of a second row of trees along BH row would help to ensure a continuous canopy corridor— in particular necessary for age succession.
 - Keep curbs, many functions, flood, etc.
 - Review video on flood of 1990.
 - Like interior row of trees.
 - Don’t like interior row of trees—would cover up the bathhouses.
 - Remove fluted concrete.
 - Move Noble Fountain.
 - Recreate historic entrance #2.
 - Add accessible route from Formal Entrance to South Park (Entrance #2).
 - Rebuild the pavilion at the Formal Entrance.
 - See alternative #3, Formal Entrance plan—the soft vegetation should be done.

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- Formal Entrance
 - Like idea of opening up bottom of Formal Entrance—remove plantings.
 - Remove auto drop off at the Formal Entrance.
 - Like the pavilion at the top of the Formal Entrance.
 - Would like Formal Entrance as a priority.
 - Recreate the historic entrance.
- Mountain Sidegrounds / Grand Promenade
 - Preserve the Grand Promenade.
- Tufa Park
 - Opening up the springs is a good idea (visibility of springs is needed).
 - Tufa Park would be an asset—could see water/stone.
 - Expose rock outcrops and springs.
- Wooded Park
 - Need accessible route at North end of Promenade.
- Arlington Lawn
 - Minimize maintenance area.
- Whittington Park
 - Whittington Park is a key part of Hot Springs National Park.
 - Plan for Whittington Park is wonderful in particular adding a new pavilion to accommodate summer concerts is good.
 - Do close the street through Whittington Park as proposed.
 - Preserve trees in the park.
 - Events at Whittington are important to community, luminaries, band concerts, etc...
 - Whittington Park pavilions are a great idea.
 - Consider sprinkler system but protect critical root zones of existing trees (Whittington Park?)
- Mountains
 - All historic stonework should be preserved.
 - Older concrete pads on Sunset Trail should be considered for reconstruction.
 - Dismantled tower metal (West Mountain) should be removed.
 - Trails should have scenic protection by removal of cut trees, logs. Fallen trees can remain.
 - The trails should receive all proper maintenance.
 - Planned burning should be discontinued.
 - Invasive plant species should be removed and native species protected.
 - Protect natural conditions, mature trees, wildlife.

Thursday 10 May 2007

- Brenda Williams met with Superintendent Josie Fernandez and Management Assistant Diane East.
 - Josie emphasized that the park supports the consideration and analysis of all legitimate landscape treatments.
 - It will be especially important that the recommended treatment includes a detailed implementation plan. The implementation plan should provide guidance for the

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park regarding project packages that realistically reflect current budget restraints, and also provide goals for the future.

- Recommendations that require coordination with other entities should be written so that the document will strongly direct these efforts. They should “hold muster” with other entities, and be able to withstand any changes in staff and/or leadership at the park. In particular, recommendations for changes to Central Avenue and the storm drainage in Whittington Park should provide strong guidance.
 - State traffic engineers should be contacted for review of the CLR/EA. If possible, engage the Arkansas Highway department in a conversation about the CLR recommendations prior to submitting the public review draft. This is the Arkansas Highway and Transportation Department. In addition, the Department of Environmental Quality should be on the list of organizations to be notified about the review draft of the document.
 - Josie noted that Highway 7 is a “historic scenic byway” and that the majority of the route includes two lanes.
 - Impact issues related to Central Avenue may include impacts to the historic landscapes (Magnolias, views, historic character) visitor safety, soundscape, universal accessibility, and visitor experience.
 - The portions of Central Avenue immediately north and south of Bathhouse Row are two-lane, however, the portion along Bathhouse Row is four-lanes. The widening of the road in this area (in comparison to the road directly to the north and south) appears to encourage drivers to speed up and create a more hazardous condition in the heart of the park.
 - Josie mentioned that Roger Giddings lives in the Hot Springs area and asked if he had been contacted during the preparation of the report. He has not been contacted, but should probably be on the list of “interested parties” for public review. His address is 201 San Mateo Drive, Hot Springs, Arkansas, phone is 525-3190.
 - Josie loves the water and stone features we’ve proposed along the Grand Promenade. She indicated that she would love to “bring the vapors back to the valley.”
- The project team was pleased with the progress made in communication regarding the treatment alternatives and toward a recommended treatment during our time at the park. We’d like to thank all of the park staff once again for their cooperation and assistance while we were in Hot Springs. In addition, we thank the park staff for their assistance is setting up for, and addressing visitors during the public meeting.

END OF MEMORANDUM

Attachment: Potential Preferred Alternative

Note: Comments received after the completion of the public meeting from Jerry Rephan include several that are not within the scope of the CLR/EA. These comments have been shared with Superintendent Fernandez.

- HSNP air quality regulations are the lowest of any National Park. Standards of air quality should be raised.

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- Maintenance: 1) Trash is too often found on display springs; 2) drinking fountains are too often out of order.
- Access: roads and Arlington Lawn should be opened 24/7 as in the past. New fee requirements on Reserve Avenue (to access the hot water fountain) should be reversed.
- Free access and inexpensive access to thermal bathing should be available. "its historic"
- Cut trees should be used, not burned. Huge waste of resources occurs.

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HOT SPRINGS NATIONAL PARK
CULTURAL LANDSCAPE REPORT / ENVIRONMENTAL ASSESSMENT



POTENTIAL PREFERRED ALTERNATIVE—Executive Summary

Overall Park

- Explore alternative energy sources and potential for sustainable practices.
- Incorporate CLR recommendations into Long Range Interpretive Plan.
- Incorporate information from the CLR into the wayside plan.
- Recommend preparation of a Vegetation Management Plan for the Cultural Landscape Study area.
- Conduct additional investigations:
 - Ground penetrating radar in the Mountain Sidegrounds for water and stone locations;
 - Archaeological
 - Vegetation Communities
 - Utilities
- Issues
 - Management change to more natural landscapes and manicured landscapes.
 - Amend NHL nomination to include information from the CLR.
 - Relate the CORE evaluation to the CLR.
 - Relate currently planned actions to the No-Action Alternative.

Bathhouse Row

- Remove fluted walls
- Evaluate short-term/long-term pullout
- Transportation study
- Preserve historic Magnolias—replace in-kind
- Add interior row of Elms
- Move Noble Fountain to corner of Reserve and Central, set back from Magnolia Promenade and protected. Situate upon a stepped platform with sloped sidewalk at interior sides.
- Hoke Smith Fountain – re-establish a fountain in the original location. Reconstruction if documentation warrants, otherwise new compatible water feature.
- Entrance #2 – remove utilities and interpret location of historic entrance.
- Comfort Stations – take advantage of the spaces in front of the comfort stations to provide “simple comforts” for visitors, including benches and drinking fountains.
- Re-establish the lawn park, restore hedges, maintain lawns, preserve Magnolias.
- Maurice Spring – rehabilitate.
- Interpret entrance #5

Foreground Park and Formal Entrance

- Adhere to Alternative #3
- Re-establish as an important landscape space.
- Re-establish exedra entry terrace at Bathhouse Row, including new compatible fountains and paving.

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- Remove brick paving at landing above Stevens Balustrade.
- Provide accessible route to the promenade.
- Re-locate the visitor drop-off
 - Possibly near the front of the Maurice Bathhouse in the long term.
 - Short term improve the appearance of the existing drop-off.
- Build overlook at the top of the formal entrance to re-establish the visual connection (no structure).
- Display Springs – rehabilitate and re-connect visually to the Mountain Sidegrounds (Grand Promenade).

South Park

- Entrance #1 –
 - preserve features related to entrance #1
 - Move Noble Fountain
 - Provide new pedestrian entrance from Reserve to Grand Prom
- Between Entrance #2 and Entrance #4: develop an accessible entrance
- Interpret Entrance #2
- Replant vegetation
- Expose rock outcrops
- Solve water seepage – consider a feature related to the rock outcrops and hot spring water
- Explore opportunity at existing spring

Tufa Park

- Preserve Historic topography, vegetation, paths, and stone features
- Conduct investigations to determine locations of outcrops and springs
- Expose rock outcrops
- Provide open hot springs

Wooded Park

- Re-establish woodland plant community (including removal of invasive exotics)
- Selectively thin in area of historic features (stone drainage channel and culvert)

Arlington Lawn

- Re-establish historic paths
- Expand hot water cascade by exposing more rock outcrops
- Re-align tufa terrace trail
- Alter hot water pools –reduce size and use native stone materials
- Modify amphitheater using native stone
- Remove pavilion
- Retain Arlington Lawn use for events

Mountains

- Stabilize and repair historic features
- Provide design guidelines for new features
- Provide guidance for repairs of historic features
- Preserve historic road and trail alignments and features
- Remove non-compatible impacting features
- Hot Springs Mountain Minimize visual impact of the observation tower development

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- Reduce parking and upgrade tower experience

Gulpha Gorge



- Preserve historic landscape patterns and features.
- Re-establish historic plantings for sustainability and improved visitor experience.
- Tree management
- Improve lighting (use compatible pole/standard and provide new light type to improve visitor experience).

Whittington Park

- Preserve historic creek walls, vegetation patterns, topography, and landscape spaces.
- Re-establish Whittington Park as the formal entrance into West Mountain.
- Preserve and stabilize Whittington Creek.
- Remove cut-through road by Myrtle Street and convert into a park space.
- Add two pavilions compatible with historic patterns.
- Preserve historic tree arboretum.

5 21 07 from Diane Re FW More comments on Cultural Landscape Plan

Diane East

Marla
To: bdqwilliams@charter.net,
McEnaney/Omaha/NPS@NPS
05/11/2007 03:22 cc: Josie
Fernandez/HOSP/NPS@NPS,
PM CDT Dale Moss/HOSP/NPS@NPS
Subject: More comments on
Cultural Landscape Plan

We've received some calls, prompted by today's Sentinel-Record article, with comments on landscaping in the park:

Robert Nagy (lives 1/2 time in Hot Springs, 1/2 time in Michigan): Bathhouse Row is beautiful, but it is getting difficult to take pictures of the bathhouses as the Magnolia trees are getting too large. They are hiding the bathhouses from view of people driving by and walking across the street. Could they be transplanted somewhere else and saved? There have been a variety of types of trees in front of the bathhouses throughout their history; use a different type possibly.

Eric Larue (Hot Springs): Whittington Park is nice, but there is no access to the water. He understands the creek is for storm drainage, but could steps be installed to the creek in some area(s) to allow visitors access to the water.

Diane



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

110 South Amity Road, Suite 300
Conway, Arkansas 72032
Tel.: 501/513-4470 Fax: 501/513-4480

January 29, 2007

David C. Dister
Woolpert, Inc.
409 East Monument Avenue
Dayton, Ohio 45402-1261

Dear Mr. Dister:

The U.S. Fish and Wildlife Service (Service) has reviewed the information supplied in your letter dated January 17, 2007, regarding the preparation of an Environmental Assessment for the Hot Springs National Park in Garland County, Arkansas. Our comments are submitted in accordance with the Endangered Species Act (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.).

The following endangered species are known to occur in Garland County: *Harperella (Ptilimnium nodosum)*. The Bald Eagle (*Haliaeetus leucocephalus*) is a threatened species that also occurs in Garland County. The Service will reserve further comment on this project until it has had the opportunity to thoroughly review the Environmental Assessment and the Cultural Landscape Report.

We appreciate your interest in the preservation of endangered species. If you have any questions, please call Jennifer Ballard at (501)513-4487.

Sincerely,

Margaret Harney
Acting Field Supervisor

SHPO coord Hot Springs NP Cultural Landscape Report

	Marla McEnaney
	04/30/2007 12:21 PM EDT

>-----|
|
| To: george@arkansasheritage.org |
| cc: |
| Subject: Hot Springs NP Cultural Landscape Report |
>-----|

Hi George,

I spoke to you a couple of weeks ago regarding the planning effort we are undertaking at Hot Springs NP. Next Wednesday, at 1pm, the park will be hosting a public meeting to present early findings and the range of preservation treatment alternatives currently under consideration. We are hoping that someone from the SHPO will be able to attend.

Later this summer, we will be sending you a draft Cultural Landscape Report and Environmental Assessment for your review under section 106. We will be asking for your concurrence that the alternatives presented in the document do not have any adverse effect. Once we have received concurrence, the document will be finalized. The alternatives will be fairly conceptual at that point; as they are implemented, the park will most likely be back in touch with you.

If you have any questions regarding the public meeting, and our request for your review, please do not hesitate to contact me.

Marla McEnaney
MWRO Historical Landscape Architect
127 E. College Ave.
Marquette MI 49855

906-235-7407 (office)
906-226-5373 (fax)



Hot Springs National Park
101 Reserve Street
Hot Springs, Arkansas 71901