

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
I	INTRODUCTION	1
II	SUMMARY OF FINDINGS AND RECOMMENDATIONS	2
III	THE PROPOSED CONCEPT FOR THE HOT SPRINGS THERMAL POOLS COMPLEX	6
IV	MARKET ANALYSIS	8
	Available Markets	8
	Competition	20
	Weather	20
V	PROJECTED ATTENDANCE AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	24
	Annual Attendance	24
	Attendance Patterns	26
VI	FINANCIAL ANALYSIS	29
	Revenue	29
	Operating Expenses	32
	Net Income	34

LIST OF TABLES

<u>Number</u>		<u>Page</u>
1	ANNUAL ATTENDANCE AT THE HOT SPRINGS MOUNTAIN TOWER	10
2	MONTHLY ATTENDANCE AT HOT SPRINGS MOUNTAIN TOWER	11
3	REPORTED NUMBER OF CONVENTION DELEGATES VISITING HOT SPRINGS BY MONTH	13
4	REPORTED NUMBER OF TOUR BUS VISITORS TO HOT SPRINGS BY MONTH	14
5	POPULATION BY DISTANCE FROM THE PROPOSED SITE	17
6	MARKET AREA INCOME CHARACTERISTICS 1990	18
7	RACE DISTRIBUTION BY MARKET AREA: 1990	19
8	MARKET AREA AGE DISTRIBUTION (1990)	21
9	CLIMATOLOGICAL DATA FOR THE HOT SPRINGS AREA	23
10	PROJECTED ATTENDANCE AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	25
11	PROJECTED ATTENDANCE PATTERNS AND CAPACITY REQUIREMENTS FOR THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	27
12	ESTIMATED TARGET TICKET MIX AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	30

LIST OF TABLES

<u>Number</u>		<u>Page</u>
13	PROJECTED REVENUE AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	33
14	ESTIMATED HOURLY WAGES AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	35
15	PROJECTED OPERATING EXPENSES AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	36
16	PROJECTED NET INCOME FOR THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX	37

Section I

INTRODUCTION

The City of Hot Springs, Arkansas is proposing the development of a thermal pools complex that would utilize the water from the hot springs that made the area famous. The goal of the project is the enhancement of tourism, the primary industry in the Hot Springs area.

As a first step in the development process, the City of Hot Springs retained the services of Heery International, a design and engineering firm that specializes in the planning and development of aquatic facilities. In turn, Heery retained the services of **William L. Haralson & Associates, Inc. (WLHA)**, an economics consulting firm, to prepare a market and financial feasibility study for the proposed project.

This report contains the findings and recommendations of WLHA's feasibility study of the Hot Springs thermal pool complex. The report is presented in six sections. Following this introduction is a summary of the study's findings and recommendations. Subsequent sections, then, present documentation in support of the findings and recommendations presented in Section II.

This report was prepared by Mr. William L. Haralson, President of WLHA, with the assistance of Ms. Donna Place of the WLHA staff. Appreciation is extended to the staff of the City of Hot Springs, the Hot Springs Advertising and Promotion Commission, and others who provided assistance in the preparation of this study.

Section II

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This section of the report presents a succinct summary of the findings and recommendations of the feasibility study of the proposed Hot Springs thermal pools complex. Only the salient points of the study are presented in this section; subsequent sections provide additional information.

Findings and recommendations of this study are as follows.

- **RECOMMENDED CONCEPT.** Visitors come to Hot Springs expecting to see the hot springs that made the area famous. Unfortunately, there is very little to see today. The original springs have either been capped or the water piped into the bathhouses situated along Bathhouse Row in downtown Hot Springs, which -- with one exception -- have been closed. The Heery Project Team believes that the proposed project has the potential for broad market appeal if properly designed. The thermal pools complex should present an interpretation of the hot springs that is both educational and entertaining. Further, it should be designed to appeal to those that wish merely to see the thermal pools as well as those desiring the bathing experience. Accordingly, great emphasis should be focused on the aesthetics of the project as well as its functionality as a hot springs spa. Creative treatment of the facility is requisite, including the design of the pools, rockscape, plant materials, walkways, and various amenities. Visitors should have an array of experiences available to them, including sightseeing, shopping, dining, photo opportunities and, of course,

participatory water recreation. To encourage maximum attendance, a two-tiered admission rate should be available for those wishing to utilize the pools and for those wishing to sightsee, shop and/or dine. The facility should be designed to appeal to visitors of all ages and should be open to the public on a year-round basis -- both day and night.

- **AVAILABLE MARKETS.** There are two generic markets from which the proposed thermal pools project will derive support. The more significant market is the tourist market, which, in 1991, is estimated to have totaled some 1.77 million. In addition, the project will also receive support from the resident market living within 100 miles of Hot Springs, which totaled some 1.6 million population in 1990.

The tourist market is comprised of several segments, including family vacationers, convention delegates, tour bus groups, and racing fans attending meets at the local racetrack, Oak Lawn. On a seasonal basis, approximately half of the area's 1.77 million tourists visit the area during the months of June, July and August, with the balance distributed over the other nine months of the year.

The resident market is, in reality, an excursion market. Of the 1.6 million population in the resident market, 95 percent reside beyond 15 miles, primarily in the Little Rock Metropolitan Area.

- **COMPETITION.** Although there is a wide variety of activities available to visitors in the Hot Springs area, WLHA is of the opinion that the proposed project can fill a special niche in the market. Research of the Hot Springs tourist market has revealed that at least

half those surveyed were engaging in sightseeing and other activities that would be consistent with attending the proposed thermal pool project.

- **ATTENDANCE.** Based on an analysis of available markets and leisure activities in the Hot Springs area, attendance at the proposed facility is projected at 167 thousand in 1994 (the assumed first year of operation), increasing to 195 thousand by 1996, and 199 thousand by 1998. The peak month for attendance is projected to be July, with 20 percent of annual attendance. The project's design attendance level is estimated to be approximately 900 persons.

- **INCOME.** Based on projected attendance and per capita spending patterns, the proposed thermal pool complex is projected to generate revenue of \$1.5 million in 1994, increasing to \$1.9 million by 1996, and \$2.1 million by 1998. Deducting for operating expenses, gross operating income is projected at \$469 thousand by 1994, \$782 thousand in 1996, and \$889 thousand in 1998. Preliminarily, the project is estimated to cost \$3.5 million; thus, assuming bond financing of 6.0 percent interest over 15 years the debt service constant would be approximately 10 percent, or \$350 thousand per year. On this basis, net income is projected at \$119 thousand in 1994, increasing to \$432 thousand in 1996, and \$539 thousand in 1998.

- **RECOMMENDED ADMISSION PRICES.** WLHA recommends a two-tiered pricing structure for admission to the proposed thermal pools complex. For those wishing to utilize the pools in a participatory fashion, WLHA recommends admission prices of \$8.95 and \$7.95 for adults and children, respectively. For those wishing to visit to sightsee, dine and/or shop, WLHA recommends reduced spectator's admission

prices of \$4.95 for adults and \$2.95 for children. Finally, for those wishing an annual pass, WLHA recommends that an individual pass be priced at \$49.95 and a family pass at \$149.95.

- **CONCESSIONS.** The City of Hot Springs has indicated its intention to own and operate the thermal pools complex; however, the food and beverage and merchandise concessions will be contracted out to the private sector. WLHA recommends that the complex include at least two food and beverage facilities, one of which should be a restaurant with indoor and outdoor seating. Additional food outlets can be limited to snack bars. Based on retail sales revenue potential, the project should contain some 2,500 square feet of merchandise space. Depending on the site selected for the proposed complex, it may be desirable to design the dining and shopping facilities to permit access without entering the thermal pools complex.

- **OPERATING SCHEDULE.** WLHA recommends that the proposed thermal pools complex be open year-round except for certain holidays, such as Thanksgiving, Christmas, and New Year's Day. During the summer season -- Memorial Day through Labor Day -- the facility should operate approximately 12 hours per day, while, during the rest of the year, a 10 hour day would be sufficient.

Section III

THE PROPOSED CONCEPT FOR THE HOT SPRINGS THERMAL POOLS COMPLEX

The City of Hot Springs can be said to owe its very existence to the many natural hot springs located in the 4,700 acre Hot Springs National Park. However, in spite of the importance of these springs to the history and development of Hot Springs, there is, at present, no opportunity for visitors coming to the City to see or get the sense of what the hot springs were, originally.

In primitive times, the area where Hot Springs is located was called the "Valley of the Vapors" because of the hot springs which steamed from the rocks on the side of Hot Springs. Until altered by civilization, the springs were an impressive site. Clouds of vapor billowed up from the numerous spring openings along the bank and hillside east of what is now called Hot Springs Creek. The hillside was covered with cone-like crusty formations called tufa. The springs created their own eco-system with ferns and other plants that thrived in the warmth and mist created by the springs.

The first bathing facilities were simply the natural, shallow pools where thermal water from the springs commingled with the cool waters of the stream. Within the past century, profound changes have taken place in the Valley of the Vapors. A series of bathhouses were developed in downtown Hot Springs, along what is known as "Bathhouse Row". Water from the springs was collected and stored in an underground reservoir, from which was distributed to the various bathhouses as needed. Gradually, as with other thermal water spas in the U.S., the Hot Springs bathhouses lost their appeal and were closed. Today, the Buckstaff is the only bathhouse on Bathhouse Row that is available to the public for bathing.

It is the goal of the City of Hot Springs to recreate many of the visual elements and physical experiences available before the springs were capped. Exact replication of the original springs is not necessary nor possible; rather, the intent is to present an interpretation of what the springs were like in their primeval form. Accordingly, the design team should be given wide latitude in the interpretation of the springs to insure the project has unique character and breadth of appeal among the visitors to the Hot Springs area.

An analysis of the Hot Springs tourist market -- which is presented in the next section -- has revealed that it is comprised of a number of diverse segments. In response to that diversity, the proposed Hot Springs thermal pools complex should offer an array of visitor experiences, to the extent possible. Thus, the attraction should offer things to see as well as things to do. Many visitors, including children, will want contact with the water and may spend several hours swimming and playing in the water. In addition, however, a number of visitors, including those whose time is limited, may wish to see the thermal pools but not actually get in the water. For this segment of the market, the complex should offer a sightseeing experience. For yet another group, the complex might provide the setting for lunch or dinner, if facilities are provided for that purpose. Further, the complex might be the setting for certain social functions, such as wedding receptions, family reunions and convention-related functions. It should be stressed, however, that the extent to which the facility appeals to these diverse users will depend on facility design and aesthetics.

Section IV

MARKET ANALYSIS

This section of the report presents an analysis of the markets that will provide support for the proposed Hot Springs thermal pools complex. In addition, the impact of weather and competition in the Hot Springs area are discussed.

AVAILABLE MARKETS

The proposed project will have two generic markets from which to derive attendance: the tourist market and the resident market. These will be discussed, in turn.

Tourist Market

For purposes of analysis in this study, WLHA has defined a tourist as an individual visiting the Hot Springs area who (1) spends the night or (2) lives more than 100 miles from Hot Springs. This definition is used by the Arkansas Department of Parks and Tourism in its studies of tourist travel within the State. Data from this agency and local sources were used in assessing the tourist market in Hot Springs.

According to the study entitled IMPRESSIONS OF ARKANSAS, which was published by the Arkansas Department of Parks and Tourism, Garland County, where Hot Springs is located, attracted some 1.77 million tourists in 1991. This figure was approximately 5 percent higher than the 1990 figure; however, a review of past data for Garland County and the State of Arkansas revealed that the growth rate of the tourist market for both areas is approximately 1 percent per year. The lack of growth in the Hot Springs area is indicated by the annual attendance levels

at Hot Springs Mountain Tower. As shown in Table 1, attendance at the Tower in 1991 was higher than that of 1990 but lower than that recorded for 1984 through 1986.

Table 2 presents a summary of attendance at Hot Springs Mountain Tower for the 12 months of 1991. It may be noted that attendance at the Tower ranged from 2,171 in January to 29,337 in July. As a percent of annual attendance, the summer months of June, July, and August accounted for just over 50 percent of the total. Other strong months were March, May, September, and October. It may be noted that only four months of the year -- January, February, November, and December -- account for less than 5.0 percent of the annual total.

In addition to determining the magnitude and seasonality of the Hot Springs tourist market, it is also of significance to ascertain the composition of the market. Based on information derived from various sources, it would appear that the tourist market is comprised of the following elements.

- o Families
- o Racing Fans
- o Convention Delegates
- o Tour Bus Groups
- o Empty Nesters

The largest of the groups shown above is families, who come to Hot Springs and the surrounding area during the summer months between Memorial Day and Labor Day. Families are believed to account for most of the 50 percent share of the tourist market that visits the area during the summer.

The second largest segment of the tourist market is racing fans who attend Oak Lawn during the racing season, which extended from January 24 through April 18 in 1992. Attendance at Oak lawn was just over one million during the 1991

Table 1

ANNUAL ATTENDANCE
AT THE
HOT SPRINGS MOUNTAIN TOWER

<u>Year</u>	<u>Attendance</u>
1984	154,871
1985	150,675
1986	151,652
1987	146,581
1988	149,508
1989	147,329
1990	141,804
1991	149,351

Source: Hot Springs Mountain Tower
Attendance Records.

Table 2

MONTHLY ATTENDANCE AT
HOT SPRINGS MOUNTAIN TOWER
(1991)

	<u>Attendance</u>	<u>Percent of Year</u>
January	2,171	1.45%
February	4,098	2.74
March	12,281	8.22
April	8,888	5.95
May	13,566	9.08
June	22,233	14.89
July	29,337	19.64
August	23,438	15.69
September	11,908	7.97
October	12,179	8.15
November	5,744	3.85
December	<u>3,508</u>	<u>2.35</u>
TOTAL	149,351	100.0%

Source: Hot Springs Mountain Tower Attendance Records.

season; however, only about one-third of those can be counted within the 1.77 million tourists visiting the Hot Springs area. According to both the Arkansas Department of Parks and Tourism and the Hot Springs Advertising and Promotion Commission, approximately 35 percent -- or 350 thousand racing fans -- should be included in the tourist market figure of 1.77 million. The balance are comprised of Arkansas residents from the Little Rock area and other areas located within 100 miles of Hot Springs.

The third segment of the Hot Springs tourist market is comprised of delegates to conventions held in the City. Table 3 presents a summary of convention delegates for the 12 months of 1991. As shown, the total delegate count for the year was 93.9 thousand. The peak month was September, with 20.34 percent of the annual total. Other important months were June, July, August, and October. According to City staff, the number of convention delegates is likely to remain constant over the next several years due to capacity constraints of convention facilities.

The fourth segment of the tourist market is bus groups. Table 4 presents a summary of reported bus group activity by month in 1991. It may be noted that the monthly pattern of visitation of this group is the reverse of that shown for attendees to Hot Springs Mountain Tower. This anomaly is explained by the fact that most persons on these buses are senior citizens whose schedule allows them to take tours when there is less crowding and prices are generally lower. According to Mr. Don Raulie, Executive Director of the Hot Springs Advertising and Promotion Commission, the actual number of bus groups coming to Hot Springs is somewhat higher than the 449 shown in Table 4, since it is not possible to account for every bus that enters the City. As shown, the number of bus group visitors shown in Table 4 totals 21.1 thousand. While this is only a small percentage of the total tourist market, this segment of the market is readily identifiable and the numbers

Table 3

REPORTED NUMBER OF CONVENTION
DELEGATES VISITING HOT SPRINGS
BY MONTH
(1991)

	<u>Delegates</u>	<u>Percent of Year</u>
January	2,550	2.72%
February	3,104	3.31
March	6,776	7.22
April	6,844	7.29
May	8,518	9.07
June	11,182	11.91
July	6,938	7.39
August	8,995	9.58
September	19,101	20.34
October	10,146	10.80
November	5,131	5.46
December	<u>4,628</u>	<u>4.93</u>
TOTAL	93,913	100.0%

Source: Hot Springs Mountain Tower Attendance Records.

Table 4

REPORTED NUMBER OF TOUR
BUS VISITORS TO HOT SPRINGS
BY MONTH
(1991)

	<u>Number of Buses</u>	<u>Visitors</u>	<u>Percent of Year</u>
January	3	141	0.67%
February	20	940	4.45
March	74	3,478	16.48
April	61	2,867	13.59
May	57	2,679	12.69
June	21	987	4.68
July	23	1,081	5.12
August	22	1,034	4.90
September	45	2,115	10.02
October	113	5,311	25.17
November	6	282	1.34
December	<u>4</u>	<u>188</u>	<u>0.89</u>
TOTAL	449	21,103	100.0%

Source: Hot Springs Advertising and Promotion Commission

can be increased if the proposed thermal pools complex can be designed to appeal to these visitors.

The fifth segment of the Hot Springs tourist market is empty nesters, middle-aged couples whose children are raised and out of the house. The size of this market segment is not known; however, by virtue of the age distribution of the general population, it is likely that empty nesters comprise some 15 to 20 percent of the population.

Resident Market

Since the tourist market is defined as those persons residing beyond 100 miles of Hot Springs, it is appropriate to define the resident market as those persons residing within 100 miles. However, research has shown that a person's propensity to visit a particular attraction will diminish as the distance from the residence to the attraction increases. In acknowledgement of this so-called "distance decay" phenomenon, WLHA has segmented the resident market area into seven zones as follows:

Market Area Zones
(Distance from the Proposed Site)

0 to 5 Miles
5 to 10 Miles
10 to 15 Miles
15 to 25 Miles
25 to 50 Miles
50 to 75 Miles
75 to 100 Miles

The following discussion of market area demographics is based on these market area zones.

Population

Table 5 presents a summary of population data for the resident market area. As shown, census data are provided for 1980 and 1990, while projections are provided for 1995.

As shown in the table, the population of the total market area in 1990 was 1.60 million, up from 1.49 million in 1980. By 1995, the population of the market area is projected to increase to 1.68 million.

Within the market area, most of the population is located in the outer zones. As shown, within 15 miles of downtown Hot Springs, the population in 1990 was 81.1 thousand in 1990, only 5.0 percent of the total market area population. Most of the market area population is located in those zones beyond 25 miles, where the Little Rock Metropolitan Area is located.

Incomes

Table 6 presents a summary of income patterns among the seven market area zones, with U.S. figures included for comparison. As shown, both per capita and median household incomes throughout the market area are below the national average. However, it should also be noted that the cost of living in Arkansas is also well below the national average.

Race Distribution

Table 7 presents a summary of the race distribution among the seven market area zones. Within 25 miles of Hot Springs, the population is predominantly white, while beyond 25 miles the percent of the white population is more in line with the national average. The percentage of blacks is higher than the national average in the 0 to 5 mile zone and beyond 25 miles of Hot Springs, while the percentage of "other" is quite low throughout the market area, compared to the U.S. figure.

Table 5

POPULATION BY DISTANCE
FROM THE PROPOSED SITE

Distance From Site	1980 Number (000)	1980 Percent of Total	1990 Number (000)	1990 Percent of Total	1995 Number (000)	1995 Percent of Total	Average Annual Change			
							1980- 1990		1990- 1995	
							Number (000)	Percent	Number (000)	Percent
Within 5 Miles	42.3	2.8%	43.7	2.7%	43.9	2.6%	0.1	0.2%	0.0	0.0%
5 to 10 Miles	20.2	1.4%	23.9	1.5%	25.8	1.5%	0.4	1.8%	0.4	1.6%
10 to 15 Miles	11.3	0.8%	13.5	0.8%	14.9	0.9%	0.2	1.9%	0.3	2.1%
Subtotal	73.8	5.0%	81.1	5.0%	84.6	5.0%	0.7	1.0%	0.7	0.9%
15 to 25 Miles	32.5	2.2%	34.8	2.2%	36.5	2.2%	0.2	0.7%	0.3	1.0%
25 to 50 Miles	398.8	26.7%	427.5	26.6%	449.1	26.8%	2.9	0.7%	4.3	1.0%
50 to 75 Miles	443.5	29.7%	484.2	30.2%	509.6	30.4%	4.1	0.9%	5.1	1.1%
75 to 100 Miles	542.1	36.4%	577.1	36.0%	597.2	35.6%	3.5	0.6%	4.0	0.7%
Total (0-100 Miles)	1,490.7	100.0%	1,604.7	100.0%	1,677.0	100.0%	11.4	0.8%	14.5	0.9%

Source: CACI, Inc.-Federal

Table 6

MARKET AREA
INCOME CHARACTERISTICS: 1990

<u>Market Area</u>	<u>Per Capita Incomes</u>		<u>Median Household Incomes</u>	
	<u>Dollars</u>	<u>Index (U.S.=100)</u>	<u>Dollars</u>	<u>Index (U.S.=100)</u>
0 to 5 Miles	\$10,305	0.84	\$18,291	0.64
5 to 10 Miles	10,716	0.87	24,385	0.85
10 to 15 Miles	11,160	0.91	27,258	0.96
15 to 25 Miles	8,704	0.71	20,277	0.71
25 to 50 Miles	11,165	0.91	24,809	0.87
50 to 75 Miles	9,457	0.77	22,047	0.77
75 to 100 Miles	9,303	0.76	20,530	0.72
TOTAL U.S.	12,313	1.00	28,525	1.00

Source: CACI, Inc.-Federal

Table 7

RACE DISTRIBUTION BY
MARKET AREA: 1990

<u>Market Area</u>	<u>White</u>	<u>Black</u>	<u>Other</u>	<u>Total</u>
0 to 5 Mile	87.0%	11.8%	1.2%	100.0%
5 to 10 Miles	95.7%	3.0%	1.3%	100.0%
10 to 15 Miles	97.1%	1.9%	1.0%	100.0%
15 to 25 Miles	89.5%	9.7%	0.8%	100.0%
25 to 50 Miles	80.0%	18.7%	1.3%	100.0%
50 to 75 Miles	81.6%	17.1%	1.3%	100.0%
75 to 100 Miles	83.8%	14.1%	2.1%	100.0%
TOTAL U.S.	82.0%	11.1%	6.9%	100.0%

Source: CACI, Inc.-Federal

Age Distribution

Table 8 presents a summary of age distribution among the seven market area zones, compared to the U.S. pattern. As shown, within 25 miles of Hot Springs, the population is somewhat older than the national average, while among residents of those zones beyond 25 miles the population is younger than the national average. To a great extent, the figures for those zones within 25 miles of Hot Springs reflect the appeal of the area for retirees, which are shown in the 55 and over age bracket.

COMPETITION

In the broadest sense of the word, any attraction or activity that competes for the public's leisure time could be considered competition for the proposed Hot Springs thermal pools complex. However, it is also the presence of the many recreational opportunities in the Hot Springs area that make it the tourist destination that it is. Without question, there is a wide variety of recreational opportunities in the Hot Springs area. In addition to the hot springs that provided the initial impetus for the development of the area, Hot Springs and Garland County are blessed with natural beauty and three man-made lakes: Hamilton, Ouachita, and Catherine. Other attractions in the area include the Oak Lawn Racetrack, Magic Springs theme park, and myriad smaller attractions.

The significant point to be made concerning competition is that there is no attraction in the area that would offer a similar entertainment experience, and the proposed project is perceived as having a unique market niche in the Hot Springs market.

WEATHER

Given the nature of the proposed attraction, it is appropriate to give consideration to the weather patterns that prevail in the Hot Springs area. Table

Table 8

**MARKET AREA AGE DISTRIBUTION
(1990)**

<u>Age Category</u>	<u>0 - 5 Miles</u>	<u>5 - 10 Miles</u>	<u>10 - 15 Miles</u>	<u>15 - 25 Miles</u>	<u>25 - 50 Miles</u>	<u>50 - 75 Miles</u>	<u>75 to 100 Miles</u>	<u>Total U.S.</u>
Under 5	6.5%	6.8%	6.7%	7.2%	7.5%	8.1%	8.0%	7.3%
5 to 11	8.9	9.7	9.4	10.0	10.6	11.0	10.8	10.1
12 to 16	6.1	7.1	6.8	7.1	7.2	7.3	7.2	6.8
17 to 21	<u>5.9</u>	<u>7.2</u>	<u>6.9</u>	<u>7.3</u>	<u>7.2</u>	<u>7.8</u>	<u>7.4</u>	<u>7.6</u>
Subtotal	27.4%	30.8%	29.8%	31.6%	32.5%	34.2%	33.4%	31.8%
22 to 29	11.4	13.0	12.1	12.8	12.5	13.3	13.0	13.1
30 to 44	19.7	20.5	18.1	20.9	24.1	21.5	20.6	23.4
45 to 54	9.4	11.0	10.4	10.5	10.2	10.0	9.9	10.3
55 and Over	<u>32.1</u>	<u>24.7</u>	<u>29.6</u>	<u>24.2</u>	<u>20.7</u>	<u>21.0</u>	<u>23.1</u>	<u>21.4</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Median Age	38.5	34.6	36.7	34.1	33.1	31.6	32.6	33.3

Source: CACI, Inc.-Federal

9 presents a summary of weather data for Hot Springs on a monthly basis. Factors summarized include temperature data, precipitation, and humidity.

Shown on the left side of Table 9 are normal high and low temperatures by month for Hot Springs. It may be noted that the area has a moderate climate with normal high temperatures ranging from 50 degrees in the winter to nearly 93 degrees in July and August. Low temperatures, which occur at night, range from just under freezing levels in the winter to 70 degrees in July.

The center portion of Table 9 presents precipitation data for the Hot Springs area. As shown, the area experiences significant precipitation throughout the year. The greatest amounts of precipitation occur in the spring, with the month of May representing the wettest month with 5.3 inches of precipitation. Less precipitation occurs during the summer and fall months.

The frequency of precipitation exhibits a similar pattern with the winter months averaging 9 to 10 days of measurable precipitation, compared to 7 to 8 days during the summer.

Finally, Table 9 presents data regarding relative humidity. As shown in the table, the area experiences a consistent level of humidity throughout the year in the range of 50 to 60 percent.

Table 9

CLIMATOLOGICAL DATA
FOR THE HOT SPRINGS AREA

<u>Month</u>	<u>Normal Temperatures</u>		<u>Precipitation</u>		<u>Relative Humidity at</u>	
	<u>High</u>	<u>Low</u>	<u>Inches Monthly</u>	<u>Precipitation Days (1)</u>	<u>12 pm</u>	<u>6 pm</u>
January	50.1	28.9	4.24	10	61%	64%
February	53.8	31.9	4.42	9	58	58
March	61.8	38.7	4.93	10	56	55
April	73.5	49.9	5.25	10	56	56
May	81.4	58.1	5.30	10	58	59
June	89.3	66.8	3.50	8	55	58
July	92.6	70.1	3.38	8	57	60
August	92.6	68.6	3.01	7	56	60
September	85.8	60.8	3.55	7	59	65
October	76.0	48.7	2.99	6	51	62
November	62.4	38.1	3.86	8	58	64
December	52.1	31.1	4.09	9	61	65

(1) Days with .01 inches or more.

Source: National Oceanic and Atmospheric Administration.

Section V

PROJECTED ATTENDANCE AT THE PROPOSED HOT SPRINGS THERMAL POOLS COMPLEX

This section of the report presents WLHA's projections of attendance at the proposed Hot Springs thermal pools complex. In addition, projections of the facility's design level attendance are also presented.

ANNUAL ATTENDANCE

In deriving projections of attendance for the proposed facility, WLHA reviewed attendance levels and market penetration rates at a number of existing aquatic attractions. It should be noted, however, that the proposed Hot Springs thermal pools complex is envisioned to be unique from existing water parks and other aquatic attractions. One major difference is that it will rely on theming and aesthetics for appeal and will not include water slides and other thrill attractions that are popular with children. In addition, the complex will have appeal to those wishing to spectate, dine or browse in the retail shops, as well as to those wishing to get in the thermal pools. On balance, the project is perceived to have appeal for all age groups but will lack the repeat visit potential inherent in more intensely participatory attractions.

Table 10 presents WLHA's projections of attendance at the proposed Hot Springs thermal pools complex. As shown, the table is divided into three parts, each of which will be discussed below.

Table 10

**PROJECTED ATTENDANCE AT THE PROPOSED
HOT SPRINGS THERMAL POOLS COMPLEX**

<u>Population (000)</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
0 to 5 Miles	43.9	43.9	43.9	44.0	44.0
5 to 10 Miles	25.4	25.8	26.2	26.6	27.0
10 to 15 Miles	14.6	14.9	15.2	15.5	15.7
15 to 25 Miles	36.2	36.5	36.8	37.2	37.5
25 to 50 Miles	444.8	449.1	453.4	457.7	462.0
50 to 75 Miles	504.5	509.6	514.7	519.8	524.8
75 to 100 Miles	593.2	597.2	601.2	605.2	609.3
Tourists					
Summer	916.6	925.8	935.0	944.4	953.8
Balance of Year	908.6	917.7	926.9	936.1	945.5
<u>Market Penetration Rate (%)</u>					
0 to 5 Miles	20.0	20.0	20.0	20.0	20.0
5 to 10 Miles	13.0	15.0	15.0	15.0	15.0
10 to 15 Miles	8.0	9.0	10.0	10.0	10.0
15 to 25 Miles	3.0	4.0	5.0	5.0	5.0
25 to 50 Miles	2.0	3.0	4.0	4.0	4.0
50 to 75 Miles	1.0	2.0	3.0	3.0	3.0
75 to 100 Miles	0.5	0.7	1.0	1.0	1.0
Tourists					
Summer	10.0	10.0	10.0	10.0	10.0
Balance of Year	5.0	5.0	5.0	5.0	5.0
<u>Attendance (000)</u>					
0 to 5 Miles	8.8	8.8	8.8	8.8	8.8
5 to 10 Miles	3.3	3.8	3.9	4.0	4.1
10 to 15 Miles	1.2	1.3	1.5	1.6	1.6
15 to 25 Miles	1.1	1.5	1.8	1.9	1.9
25 to 50 Miles	8.9	13.5	18.1	18.3	18.5
50 to 75 Miles	5.0	10.2	15.4	15.6	15.7
75 to 100 Miles	3.0	4.2	6.0	6.1	6.1
Tourists					
Summer	91.7	92.6	93.5	94.4	95.4
Balance of Year	<u>45.4</u>	<u>45.9</u>	<u>46.3</u>	<u>46.8</u>	<u>47.3</u>
TOTAL ATTENDANCE	167.3	181.8	195.3	197.5	199.4

Source: William L. Haralson & Associates, Inc.

The upper portion of Table 10 presents projected population for each of the market segments discussed in Section IV. In addition to the seven resident market area zones, the tourist market is further segmented to show the summer market and the balance of the year.

The middle portion of the Table 10 presents WLHA's estimates of market penetration for each of the market segments previously discussed. For the resident market area zones, penetration is estimated to be highest in the 0 to 5 mile zone and lowest in the 75 to 100 mile zone. The penetration rate among summer tourists is estimated at 10 percent, while that for other tourists is estimated at 5 percent. The higher figure for the summer tourists reflects the higher propensity of Americans to participate in water recreation during the Memorial Day to Labor Day period, compared to the rest of the year.

The lower portion of Table 10 presents WLHA's projections of attendance at the proposed Hot Springs thermal pools complex for the period 1994 through 1998. As shown, attendance is projected at 167 thousand in 1994, increasing to 195 thousand in 1996, and 199 thousand by 1998. It may also be noted that the tourist market is projected to be the dominant source of attendance for the proposed attraction, with summer tourists accounting for roughly half of total attendance.

ATTENDANCE PATTERNS

If the proposed Hot Springs thermal pools complex is to achieve its attendance potential, it must be developed to accommodate the levels of attendance that will be generated during its busiest periods of operation. Accordingly, it is necessary to project not only annual attendance but design period attendance. Table 11 presents WLHA's projections of design level attendance for the proposed facility. As shown, the complex is projected to experience a peak month's attendance equal to 20 percent of annual attendance. This figure is based on the

Table 11

**PROJECTED ATTENDANCE PATTERNS
AND CAPACITY REQUIREMENTS
FOR THE PROPOSED HOT SPRINGS
THERMAL POOLS COMPLEX**

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Annual Attendance	167,300	181,800	195,300	197,500	199,400
Peak Month @ 20% of Year	33,460	36,360	39,060	39,500	39,880
Average Weekly Attendance During Peak Month	7,553	8,208	8,817	8,916	9,002
Peak Day Attendance @ 20% of Week	1,510	1,642	1,763	1,783	1,800
Peak In-grounds Attendance @ 50% of Day	755	821	882	892	900
Pool Capacity Requirements @ 60% of Peak In-grounds Attendance	453	492	529	535	540
Pool Area Requirements @ 25 Square Feet Per Person	11,330	12,312	13,226	13,375	13,503

Source: William L. Haralson & Associates, Inc.

assumption that the facility would operate year-round and exhibit a monthly attendance pattern similar to that shown for the Hot Springs Mountain Tower in Table 2. Further, the peak day of the week is expected to account for 20 percent of weekly attendance, a pattern that is typical for an attraction in a tourist market. Next, given anticipated arrival and departure patterns and average length of stay of 4 hours, peak in-grounds attendance -- or design period -- is estimated to be 50 percent of peak day attendance. This figure is projected to be 755 in 1994, increasing to 882 in 1996, and 900 in 1998. It represents the design level for the project's support facilities, including parking, lockers, food service, and deck furniture. Finally, it may be noted in Table 11 that pool capacity requirements are estimated at 60 percent of design level. This factor is applied to the design level for two reasons: (1) not every attendee will be an active participant -- some will be spectators; and (2) even among active participants, only a portion will be in the pools at one time. They will be in-grounds, however, necessitating the need to provide adequate deck space around the pools. As shown in Table 11, pool area requirements are projected at 11,300 in 1994, increasing to 13,500 by 1998. In addition, two to three times that amount of space should be devoted to deck space, depending on design.

Section VI

FINANCIAL ANALYSIS

This section of the report presents an analysis of the financial performance of the proposed Hot Springs thermal pools complex. Included are estimates of per capita expenditures, and projections of revenue, operating expenses, and net income.

REVENUE

Revenue is a product of two factors: attendance and per capita expenditures, the average amount of money spent per person attending an attraction. Attendance was discussed in Section V, while per capita expenditures are discussed below.

Per Capita Expenditures

The proposed attraction will benefit from two types of per capita spending: admission fees and in-grounds spending. These will be discussed, in turn.

Admissions

Table 12 presents WLHA's estimated ticket mix and resulting per capita expenditure figure for admissions at the proposed complex. As shown, WLHA has assumed six admission rates that fall into three categories.

Full admission tickets, which entitle access to the pools, are estimated to account for 60 percent of total attendance, with adults (ages 12 and older) accounting for 50 percent and children, 10 percent. WLHA has assumed full admission prices to be \$8.95 and \$7.95 for adults and children, respectively.

Table 12

ESTIMATED TARGET TICKET MIX
AT THE PROPOSED HOT SPRINGS
THERMAL POOLS COMPLEX

<u>Ticket Category</u>	<u>Effective Admission Rate</u>	<u>Percent of Attendance</u>	<u>Per Capita Expenditure</u>
Full Admission			
Adult	\$8.95	50%	\$4.48
Child	7.95	10	0.80
Spectator Admission			
Adult	\$4.95	20%	\$0.99
Child	2.95	5	0.15
Season Pass			
Individual	\$ 49.95	10%	\$0.62
Family	149.95	<u>5</u>	<u>0.37</u>
TOTAL		100%	\$7.41

Source: William L. Haralson & Associates, Inc.

A second category of tickets is assumed to be established for spectators. As shown, WLHA estimates that 25 percent of total attendance will be accounted for by spectators. WLHA has assumed admission prices for spectators of \$4.95 and \$2.95 for adults and children, respectively.

Finally, WLHA has assumed the establishment of two categories of season passes -- one for individuals at \$49.95 and one for families at \$149.95. These passes would most likely be purchased by residents of the Hot Springs area.

As shown in the right-hand column in Table 12, the weighted per capita expenditure for admissions for the proposed complex is estimated to be \$7.41 for 1994. This figure was derived by multiplying the admission price for each category by the percent of attendance estimated for each category. For season passes, one additional step was required to account for multiple visits per pass. For individual passes, an average of 8 visits was assumed, while, for family passes, 20 visits were assumed.

In-grounds Spending

In addition to admissions, attendees at the proposed attraction can be expected to spend money on food and beverage, merchandise and rentals, such as lockers and cabanas (if provided). WLHA's experience with water parks and other attractions has revealed that attendees will spend between \$2.50 and \$3.00 for food and beverage items. Moreover, the financial records of the Hot Springs Mountain Tower indicate that that attraction is currently generating \$2.85 per capita in merchandise sales. Thus, it would appear that even a very short length of stay attraction in the Hot Springs tourist market is capable of generating substantial discretionary spending.

In-grounds per capita expenditures for the first year of operation of the proposed complex, then, are estimated as follows:

<u>Category</u>	<u>Expenditures (1994 dollars)</u>	
	<u>Gross</u>	<u>City's Share</u>
Food & Beverage	\$3.00	@ 20% \$.60
Merchandise	3.00	@ 15% .45
Rentals	.50	@ 100% .50
Other	<u>.10</u>	@ 100% <u>.10</u>
TOTAL	\$6.60	\$1.65

It may be noted that food and beverage and merchandise are assumed to be privately operated concessions, with the City receiving a share of total.

Total Revenue

Table 13 presents WLHA's projections of revenue accruing to the proposed Hot Springs thermal pools complex. These projections are based on the attendance projections derived in Section V and the per capita expenditure patterns discussed above. For 1995 and subsequent years, per capita expenditures are projected to escalate at 4.0 percent per annum. As shown in Table 13, revenue is projected at \$1.51 million in 1994, increasing to \$1.91 million in 1996, and \$2.11 million in 1998.

OPERATING EXPENSES

Operating expenses for the proposed Hot Springs thermal pools complex are difficult to estimate in detail until after the design of the project has been completed. In the meantime, WLHA has estimated such expenses on a preliminary basis.

A major line item of operating expenses for the proposed project will be labor. For purposes of analysis, WLHA has assumed that the facility will have a

Table 13

PROJECTED REVENUE AT THE PROPOSED
HOT SPRINGS THERMAL POOLS ACCRUING
TO THE CITY OF HOT SPRINGS

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Attendance (000)	167.3	181.8	195.3	197.5	199.4
<u>Per Capita Expenditures</u>					
Admissions	\$ 7.41	\$ 7.71	\$ 8.02	\$8.34	\$8.67
Food and Beverage (1)	0.60	0.62	0.64	0.67	0.70
Merchandise (2)	0.45	0.47	0.49	0.51	0.53
Rentals	0.50	0.52	0.54	0.56	0.58
Other	<u>0.10</u>	<u>0.10</u>	<u>0.11</u>	<u>0.11</u>	<u>0.12</u>
Total	\$9.06	\$9.42	\$9.80	\$10.19	\$10.60
<u>Revenue (000)</u>					
Admissions	\$1,239.69	\$1,401.68	\$1,566.31	\$1,647.15	\$1,728.80
Food and Beverage	100.38	112.72	124.99	132.33	139.58
Merchandise	75.29	85.45	95.70	100.73	105.68
Rentals	83.65	94.54	105.46	110.60	115.65
Other	<u>16.73</u>	<u>18.18</u>	<u>21.48</u>	<u>21.73</u>	<u>23.93</u>
TOTAL	\$1,515.74	\$1,712.57	\$1,913.94	\$2,012.54	\$2,113.64

(1) At 20 percent of total expenditures.

(2) At 15 percent of total expenditures.

Source: William L. Haralson & Associates, Inc.

general manager, assistant manager, and a maintenance supervisor. The starting salaries for these positions are assumed to be as follows:

General Manager	\$30,000
Assistant Manager	20,000
Maintenance Supervisor	20,000

In addition to the salaried personnel listed above, the facility is assumed to have the hourly labor staff shown in Table 14. As shown, the facility is estimated to require 9 year-round positions and 11 additional positions during the summer, when the pools are assumed to receive their greatest use. Each year-round position is assumed to require 3,820 hours of staffing, while each summer position will require 1,200 hours. Starting wage rates for the hourly staff range from \$6.50 to \$10.00, and, while these rates may seem high for the type of positions shown, there will be the need to attract and retain high quality employees to represent the proposed complex to the public. As shown, first year wages are estimated at \$341.6 thousand.

Table 15 presents WLHA's preliminary estimates of operating expenses for the proposed Hot Springs thermal pools complex. In the absence of a more definitive basis for estimating expenses, WLHA has attempted to establish a generous operating budget for the project. As shown, total operating expenses are projected at just over \$1.0 million in 1994, increasing to \$1.13 million in 1996, and \$1.22 million in 1998.

NET INCOME

Table 16 presents WLHA's projections of net income for the proposed Hot Springs thermal pools complex. Revenue and operating expense projections have been carried forward from Tables 13 and 15, respectively, to derive gross operating

Table 14

ESTIMATED HOURLY WAGES AT THE
PROPOSED HOT SPRINGS THERMAL
POOLS COMPLEX
(First Year)

<u>Function</u>	<u>Number of Positions</u>		<u>Hours Per Season (1)</u>		<u>Hourly Wage Rate</u>	<u>Total Wages</u>
	<u>Year-Round</u>	<u>Summer</u>	<u>Year-Round</u>	<u>Summer</u>		
Lead Lifeguard	1	0	3,820	0	\$ 8.00	\$ 30,560
Lifeguards	2	4	7,640	4,800	6.50	80,860
Head Cashier	1	0	3,820	0	8.00	30,560
Cashiers	1	2	3,820	2,400	6.50	40,430
Grounds Clean Up	2	4	7,640	4,800	6.50	80,860
Security	1	1	3,820	1,200	8.00	40,160
Emergency Medical Technician	<u>1</u>	<u>0</u>	<u>3,820</u>	<u>0</u>	10.00	<u>38,200</u>
TOTAL	9	11	34,380	13,200		\$341,630

(1) Assumes 100 day summer season at 12 hours per day, a 262 day spring, fall and winter season at 10 hours per day for a total of 3,820 hours per year.

Source: William L. Haralson & Associates, Inc.

Table 15

PROJECTED OPERATING EXPENSES
FOR THE PROPOSED
HOT SPRINGS THERMAL POOLS COMPLEX
(Dollars in Thousands)

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Salaries	\$ 70.00	\$ 72.80	\$ 75.71	\$ 78.74	\$ 81.89
Wages	341.60	355.26	369.47	384.25	399.62
Payroll Taxes	45.28	47.09	48.97	50.93	52.97
Advertising/Promotion	200.00	208.00	216.32	224.97	233.97
Maintenance/Repairs	80.00	83.20	86.53	89.99	93.59
Utilities	100.00	104.00	108.16	112.49	116.99
Chemicals/Supplies	60.00	62.40	64.90	67.49	70.19
Miscellaneous	<u>150.00</u>	<u>156.00</u>	<u>162.24</u>	<u>168.73</u>	<u>175.48</u>
TOTAL EXPENSES	\$1,046.88	\$1,088.75	\$1,132.30	\$1,177.59	\$1,224.70

Source: William L. Haralson & Associates, Inc.

Table 16

PROJECTED NET INCOME
FOR THE PROPOSED
HOT SPRINGS THERMAL POOLS COMPLEX
(Dollars in Thousands)

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Revenue	\$1,515.74	\$1,712.57	\$1,913.94	\$2,012.54	\$2,113.64
Operating Expenses	1,046.88	1,088.75	1,132.30	1,177.59	1,224.70
Gross Operating Income	468.86	623.82	781.64	834.95	888.94
Debt Service	350.00	350.00	350.00	350.00	350.00
Net Income	118.86	273.82	431.64	484.95	538.94

Source: William L. Haralson & Associates, Inc.

income of \$469 thousand in 1994, increasing to \$782 thousand in 1996, and \$889 thousand in 1998. In deriving net income, WLHA assumed development costs of \$3.5 million, with bond financing of 6.0 percent and a debt service payment of \$350 thousand per year. Thus, subtracting the debt service payment from gross operating income yields net income of \$119 thousand in 1994, \$432 thousand in 1996, and \$539 thousand in 1998.

MEMORANDUM

TO: INTERESTED PARTIES
FROM: Lance 
DATE: December 15, 1992
RE: Heery Site Evaluation and Market Feasibility Studies

Attached is your copy of the final site evaluation study and market feasibility study from Heery Engineering per our contract.

LH:kr

Attachment

cc: Thermal Pool Committee
Cheryl Thornton
Gus H. Pappas
Board of Directors
Sentinel Record
Sharon Noble
Jim Scott
Doris Hawkins

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

I. Introduction

This study provides an evaluation of potential sites for the proposed thermal pool project and makes a recommendation as to which site most successfully meets the goals and objectives set forth for this facility. In consultation with the City of Hot Springs, the Spa Foundation and the Project Advisory Committee, a program of requirements has been established. From these requirements, a profile of the "ideal" site was established. This "ideal" site would have abundant established vegetation highly usable and varied topography; access to thermal water; be within walking distance to the downtown historic district; good vehicular access; high main street visibility; no utility or hydrologic problems; good mountain views and vistas; and proper sun orientation. In light of this information, a review of each potential site's natural systems, man-made attributes, subjective character and possible development costs was constructed in which each site was "scored" on how well it met the "ideal" site profile. This graphic and mathematical summary of the analysis allows for a clear comparison of site characteristics.

II. Site Description

The following sites are under consideration for the proposed project:

1. Arbor Street - located north of downtown. This site is bordered by the national park on the east, parking lots to the south, Park Avenue to the west and a variety of commercial and residential properties to the north. Arbor Street and Lodestone Street run through the site. A large portion of the site is vacant at this time. The existing buildings within the site are also, for the most part, vacant. There are several large areas of established vegetation present on the site. The parking access along Lodestone are within the 100 year flood boundaries. The approximate size is 4.6 acres.
2. St. Joseph's Site: This site includes the undeveloped northern portion of St. Joseph's Hospital off Whittington Avenue and a portion of its existing parking lot. The site has been cleared of most vegetation and is currently used as a gravel pit. There are no existing buildings on the portion of the site under consideration. The approximate acreage is 8.9 acres.
3. Doctor's Park: Located adjacent to St. Joseph's Hospital, a medical office facility off Pine Terrace is the primary property of this site. Frontage on Whittington Avenue and properties to the north are also to be included in the parcel. The medical office condominiums and associated parking areas are the main existing structures within the site. There are some residential buildings along Wahoo Street in the northern portion of the site. The St. Joseph MRI parking area exists along Whittington. There is plentiful established vegetation within the site. The approximate size is 10 acres.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

4. Waverly Site: The Waverly Hotel on Park Avenue currently occupies the site. The site slopes steeply in the north to south direction. There is some existing vegetation in the northern portion of the site. The approximate size is 2.3 acres.
5. Linden Park: This site occupies a portion of Linden Park, a city-owned park located northwest of the City off Linden Street accessible from Whittington Avenue. There are some small out buildings, athletic fields and parking lots within the park. Some areas of the park have also been used for gravel pits. There are few established trees within the site. The approximate size 10 acres.
6. Malvern Avenue: This site is located south of downtown between Malvern Avenue and Hot Springs Creek. Garden Street and Church Street form the north and south boundaries. Church Street currently runs through the site. There are several vacant buildings within the site. The western portion of the site is within the 100-year flood. There is little existing vegetation. The approximate size is 4 acres.
7. Gulpha Street: This site lies southeast of downtown and runs along both sides of Gulpha Street between Laurel Street and Vine Street. Palm Street crosses the site. The City of Hot Springs operates some service vehicle garages within the site. There are several vacant commercial and industrial buildings within the site. There is plentiful established vegetation within the site. The approximate acreage is 11.8 acres.
8. Reserve Street: This site lies north of the Gulpha Street site and adjacent to the Libby Memorial. It is bordered by Reserve Street, Palm Street, Convention Boulevard and Laurel Street. Beech Street and Beech Lane run through the site. All the buildings within the site are residential construction. The site slopes north to south with scattered pockets of established vegetation. The approximate size is 6.7 acres.
8. Romer Court: Located south of downtown. The Romer Court Motel currently stands on a portion of this site. It is bound by Court Street, Exchange Street, a service alley for proprietors running along Central Avenue, Chapel Street and Quapaw Avenue. Prospect Avenue and Crown Street run through the site. The site has little existing vegetation. There are existing occupied commercial buildings and parking lots located within the site boundaries. The approximate size is 8.3 acres.
10. Prospect Avenue: This site lies southwest of downtown near the Levi Hospital on Prospect Avenue. It is bound by Prospect Avenue, Market Street, Quapaw Avenue and Orange Street. The buildings within the site are residential construction. There are scattered pockets of established vegetation. The approximate size is 7.9 acres.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

III. Explanation of Matrix and Categories

Matrix based scoring is designed to give some mathematical basis to an evaluation. However, some degree of subjective judgement is unavoidable. Reasons for using some type of mathematic model (however imperfect) include:

1. The use of a matrix forces a decision as to the importance of different parameters for inclusion in the matrix.
2. The matrix forces a certain amount of consistency from one option evaluation to another.
3. The matrix allows for a total overview of concern rather than giving one parameter undue weight.
4. The matrix not only points out differences but also shared deficiencies which may allow for re-evaluation of user needs or the need for other sites for considerations.

This matrix will plot sites under consideration on a left axis with requirements on a top axis. A number between one and five is assigned, with five being a high score, as to how well the site meets that requirement. An overall score is then totaled for comparison. The different categories of concern were arrived at in conjunction with the City the Project Advisory Committee. In an effort to simplify the process, not all parameters received were included because some were deemed not essential to site selection. The final list of requirements are listed below with a brief explanation:

- **Existing Vegetation:** Part of the working program includes a consideration for activities set in a natural environment. This being the case, the amount and quality of the existing vegetation on site is extremely important. From a cost standpoint, the more quality vegetation available on site, the less money will be needed for landscaping.
- **Topography:** In general, topographic relief is a positive attribute for this type of project. The desire for a natural setting, with a variety of elevation changes for water and pool effects makes topographic relief necessary. Extreme topography could be problematic for construction and site circulation. In rating this category moderate topography that is not restrictive receives the highest rating.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

- **Sun Orientation:** The optimum site, in regard to sun orientation, would be one with good southern exposure, given the project includes outdoor bathing activities. Although the project is considered year around swimming is still considered an outdoor activity.
- **Hydrology:** Under this category, sites are rated as to the presents of floodplain, wetlands, springs, and saturated soil, all of which restrict development.
- **Thermal Water Availability:** The primary concern here is proximity and availability of thermal water to the site. The thermal water is available at one location, the intersection of Reserve and Central Streets. The sites were rated as to distance away from this point.
- **Zoning:** This category takes into account whether or not current zoning allows for this type of development, the level of difficulty to rezone if necessary, and the compatibility of surrounding zoning. Also considered are potential problems with easements, setbacks, buffers, and historic register properties. This is a near essential category.
- **Utilities:** Availability and adequacy of water, electricity, gas, sewer and stormwater to a site is considered here. This is an essential category.
- **Ease of Access:** Ease of access in and out of a site from a major circulation route are graded under this category. Although not essential, the selected site must have either good access or visibility.
- **Developed Acreage:** Approximately 3 acres are needed to meet the program requirements. Sites meeting or excluding this average rate high. This is an essential category.
- **Parking Acreage:** Approximately 3 additional acres are needed for parking requirements. Sites with this additional acreage or that have immediate access to existing public parking rate high in this category.
- **Expansion Potential:** Approximately 2 acres in addition to the above requirements is projected as being needed for expansion. Sites that have this added acreage or acreage adjacent to the site which is potentially available for purchase rate high.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

- **Proximity to National Park:** In an effort to place the facility in a natural setting and in a historical context, sites are rated as to adjoining or immediate proximity to the National Park.
- **Proximity to Historic District:** By placing the project on a site near the historic district, potential for tourist traffic increases. The tourist experience is optimized with the historic district and the proposed project benefiting from each other. Sites within easy walking distance to Bathhouse Row rate high in this category.
- **Main Street Visibility:** Visibility from a major thoroughfare to insure ease of locating the project by City visitors was deemed important. It is essential to have either visibility or good access.
- **Mountain View:** Once again, providing the natural setting and a proper historical context is considered near essential to this project. Meeting visitor expectation as to what Hot Springs is, is a primary goal. A mountain view helps to meet this goal and provides the aesthetic background desired for this type of project.
- **Street Noise:** To insure a tranquil environment for some of the passive experiences of the proposed project, the less street noise the better. A high rating in this category indicates little street noise.
- **Acquisition:** Ease of acquisition includes consideration of cost, land availability, and complexity of legal issues involved. A high rating here indicates a positive acquisition situation. This is a near essential category.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

IV. MATRIX Part I

Site	Exist. Vegetation	Topography	Sun Orient.	Hydro.	Thermal Water Avail.	Zoning	Utilities	Ease of Access	Devlp'd. Acreage	Parking Acreage	Expan. Potential	Proxi'y National Park	Proxi'y Historic District	Mountain View	Street Noise	Acq'istn.	Main Street Visi'bilty
Arbor St.	4	5	3	2	3	5	5	5	5	5	4	5	5	3	3	3	5
St. Joseph's	1	4	5	3	3	4	3	2	5	5	5	3	5	5	5	3	2
Doctors Park	5	4	5	5	2	5	5	5	5	5	5	3	4	5	5	3	4
Waverly	4	3	3	5	3	5	5	5	1	1	1	3	5	3	3	4	5
Linden Park	2	3	5	3	1	5	3	2	4	4	4	3	2	4	5	5	1
Malvern Ave.	2	2	5	2	4	5	5	5	5	4	3	2	3	2	3	3	5
Gulpha St.	5	4	4	3	4	4	3	3	5	5	4	2	1	2	3	3	2
Reserve St.	3	4	4	4	4	2	3	2	5	4	3	4	2	3	3	1	3
Romer Court	1	1	3	3	5	5	3	3	3	2	1	4	4	3	3	2	2
Prospect Ave.	3	4	4	4	4	1	3	2	4	3	2	2	3	3	3	1	3

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

SITE SELECTION "SCORES"

<u>Site</u>	<u>Criteria Total Scores</u>
Arbor Street	70
St. Joseph's	62
Doctors Park	75
Waverly	59
Linden Park	56
Malvern Avenue	60
Gulpha Street	57
Reserve Street	54
Romer Court	48
Prospect Avenue	49

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

V. FINAL SELECTION

The Doctor's Park site scored the highest among the current sites under consideration. In review, its scores in the area of natural attributes, vegetation and sun orientation were excellent. Like most of the sites, there are no apparent problems hydrologically. Topographically, the Doctor's Park site is more than adequate if not slightly restrictive. Only the Arbor Street site scored higher; unfortunately it slopes toward the north giving it poor sun orientation.

In the area of man-made attributes, Doctor's Park scored high in terms of zoning, utility availability, and ease of access. It however scored low in terms of thermal water availability. Although the tunnel which houses the waterlines run under Whittington Avenue adjacent to the site, the actual source of the thermal water to be used for the project is at Reserve and Central. It is for this reason that sites on the north side of the city generally, score lower in this category.

Acreage of the Doctor's Park site is adequate for the initial development and parking needs. Expansion would probably require more land acquisitions, than are currently planned but this does not appear to be an insurmountable problem given the adjacent land use.

Doctor's Park scored adequately with regard to proximity issues. The Arbor Street site is the only site that borders onto the National Park. All others are within a few blocks of the Park. The Doctor's Park site scored fairly well in its proximity to the historic district and, in a related category, in main street visibility. Although not directly adjacent to downtown, the short walk to the site from downtown is pleasant.

In terms of the more intangible qualities, the Doctor's Park site scored high. The mountain view from the Doctor's is potentially the best of any of the sites under consideration, the St. Joseph's site also having good mountain views. Noise potential is low for Doctor's Park as are most of the sites north of the city.

In the final category, land acquisition, Doctor's Park scored well. The departure of St. Joseph's Hospital from the area may make the owner's of Doctor's Park more motivated to sell the property than if the Hospital had stayed. Other properties needed are primarily low cost residential in nature and should be readily available. Other sites may be more easily acquired or may already be city property, like Linden Park; however, they generally scored low in all other areas.

HOT SPRINGS THERMAL POOL

SITE EVALUATION STUDY

In the final analysis, the Doctor's Park site is the best all-around site scoring adequately in most categories and high in those categories essential to treating the environment sought for this project such as vegetation, topography, view and level of noise. The only area of concern is with thermal water availability. This is more of a cost issue and not an insurmountable problem. The final recommendation is the Doctor's Park site.