Rebuilding the Jefferson Pool Houses, Warm Springs, Virginia

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Master of Architecture

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As I reflect upon Graduate School....
A special thank you to my family and my friends who are family for their love and support.
Steve, Hunter, & Frank- thank you for your patience and for your guidance.
Thank you to my classmates and Riva mates- and to all of the professors and faculty I have had the pleasure to know and work with during my time at Virginia Tech.
Abstract

The warm springs pools, a natural wonder, are worth protecting and preserving. They are an important monument to the history and culture of the area. Architecture has the opportunity to function as a catalyst to reuse and reinterpret spaces in order to strengthen their place in history.

This thesis is an investigation into the history of the warm spring pools and an analysis of existing conditions in order to determine the best approach to rejuvenate and enhance the structures. It is an attempt to design updated structures while maintaining a balance between the old and new.

Decisions on how to maintain and enhance the structures were made through study sketches, photographs and model building. The questions that are posed in the project include but are not limited to what can be changed or updated to not take away from what exists.
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“All who have described this noble fountain write with enthusiasm; nor is it indeed to be wondered at, for the world may be well challenged for its equal. It’s temperature, buoyancy, refractive power, transparency - all invest it with indescribable luxury to the feelings and to the site.”

The Mineral Springs of Western Virginia
(William Blake, 1846)
view of the existing ladies pool
view of the column supporting the ladies pool house structure

view of the column supporting the gentlemen's pool house structure

view of the oculus opening in the ladies pool house structure
view of the existing gentelmen's pool house

view of the existing gentelmen's pool

view of the existing gentelmen's pool house
One can go back thousands of years and find evidence of people ‘taking the waters.’ Some of the early American spas, established at the end of the eighteenth century, have existed in one form or another for more than 200 years.

The Warm Spring Pools are nestled in a tranquil valley between two long Allegheny mountain ranges off of Rt.220 in the western most part of Virginia. People have been traveling to these pools for centuries, whether for the supposed health benefits or for a relaxing soak. The springs, known locally as the ‘Jefferson Pools’ are fed by natural mineral springs circulating deep beneath the earth’s surface. The crystal-clear water remains at a steady 98 degrees throughout the year.

The pools are listed among the most endangered historic sites in Virginia and the oldest bath structures in the country. The gentlemen’s pool structure, built in 1761, is octagonal in shape with a diameter of 40 feet. The ladies pool structure, built around an adjacent spring in 1836, is slightly larger with a diameter of 50 feet. Both pool structures have roofs with an oculus opening, supported by a large central column.

The structures are a mere container for the true experience: soaking in the natural warm spring pools: A place to connect to nature and the energy of the earth, with (semi) protection from the elements.

The structures are now two centuries old, and little about them has changed, but deterioration is evident. A restoration is long-overdue.
elevations of existing structures

elevations of proposed structures
preliminary studies
preliminary studies
model studies
“It is essential to the quality of the intervention that the new building should embrace qualities which can enter into meaningful dialogue with the existing situation. For if the intervention is to find its place, it must make us see what already exists in a new light. We throw a stone into the water. Sand swirls up and settles again. The stir was necessary. The stone has found its place. But the pond is no longer the same.”

Thinking Architecture
crystalline studies
study models of the building structures
preliminary studies of crystalline forms
5 elements in harmony
WOOD - FIRE - EARTH - METAL - WATER
structural model with superimposed crystalline forms
roof studies
axonometric study of building structure
compression ring design
truss studies
foundation studies
gentlemen's roof structure design - plan view
axonometric drawing of the two building structures
model studies of roof/wall truss structures
building model photographs
“where people gather to bask in the healing powers of the earth...”

Thermae Romae
New roof system without the central columns.  
Truss legs around perimeter of the pool create alcoves outside of dressing rooms.

*Ladies pool*
Hexadecagonal exterior walls open to a central octagonal oculus.  
Diameter increased by 8’

*Gentlemen’s pool*
Symmetrical octagonal exterior walls open to a central octagonal oculus.  
Diameter increased by 6’
plan, section, elevation of proposed buildings
gentlemen's pool
Images

1  Ladies pool house, exterior photograph
2  Ladies pool house, interior photograph
3  Photographs: gentlemen's oculus opening with supporting column,
       detail of column supporting gentlemen's pool house roof,
       ladies oculus opening with supporting column
4  Gentlemen's pool house, exterior & interior photographs
6  Warm Springs advertisement & map of Bath County, Virginia
7  Existing site plan & sketch section of structures
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34-42 Model studies, 3/8" : 1' scale study model of the Ladies pool house
43  Existing pool houses, pencil
44  Proposed pool houses, pencil
46  Plan, section, elevation of proposed pool houses, pencil
48  Site plan of proposed pool houses, pencil
49  Existing gentlemen's pool house, pencil sketch
50  Proposed gentlemen's pool house, pencil sketch
Sources


and

7132 Hotel
7132 Vals, Switzerland

All drawings and photographs were made by the author unless noted otherwise.