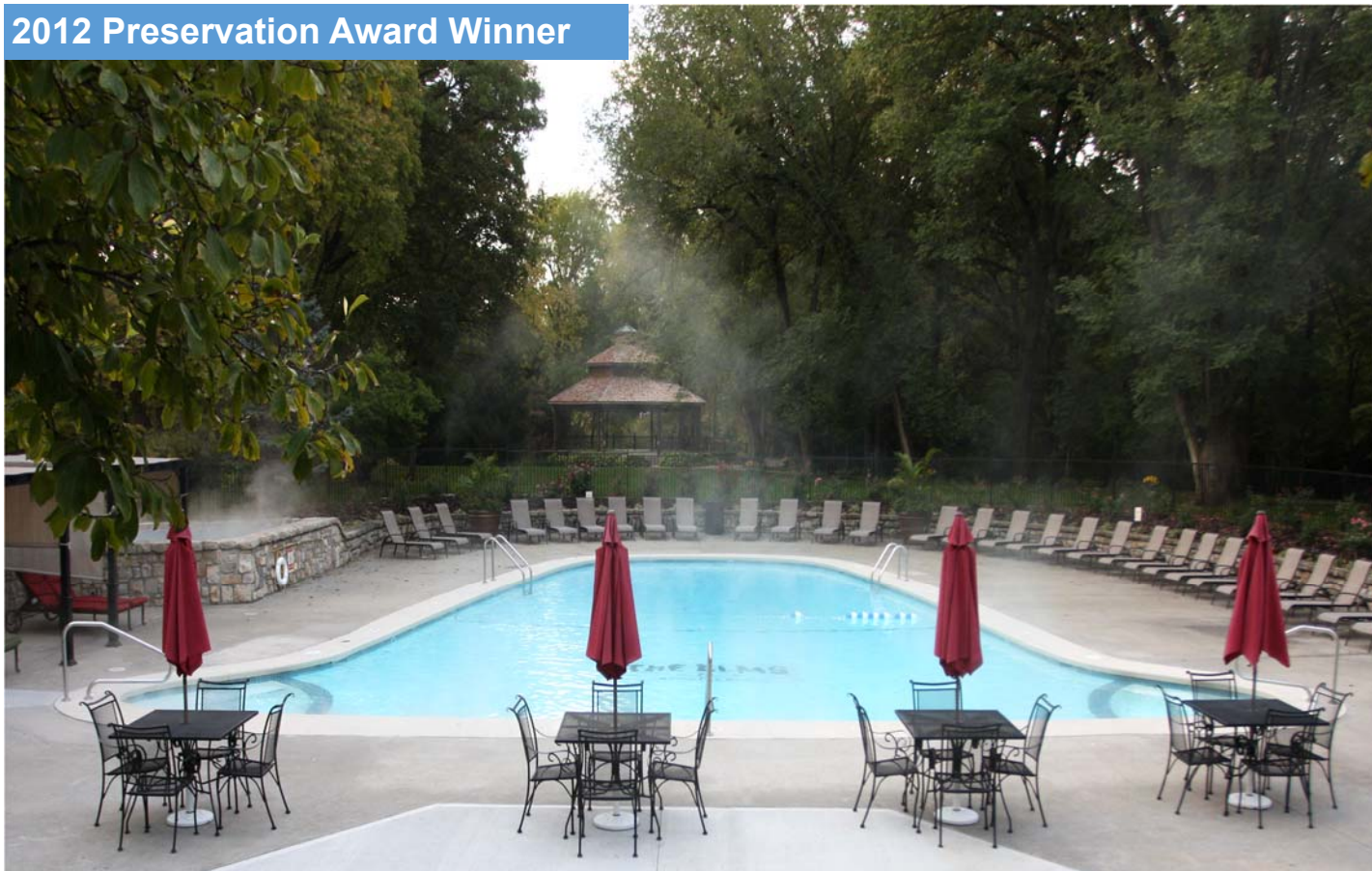


2012 Preservation Award Winner



### PROJECT ASSESSMENT

#### *“What needed to be done”*

The Elms Hotel & Spa has been the gem of Excelsior Springs, Missouri for decades. The Hotel survived two fire destructions, bankruptcy, repeated piecemeal renovations, and is known to healing advocates and ghost hunters. It is also known as a retreat to newly elected President Truman in 1948. Over the years the entire facility and many of its amenities such as the swimming pools and spa fell into disrepair and neglect. In 2011 The Elms received its best revival to date when a massive \$20M renovation began.

Having been painted repeatedly, the surface was peeling badly with structure cracks and Freeze / Thaw damage showing through the degrading finish. Aged recirculation lines were broken and leaking. Pool lights were outdated and needing replacement. Dated pool heaters, filters and pumps, all with temporary ‘Band-Aids’ were in disrepair. Poorly re-surfaced,

the heated outdoor therapy spa’s grey concrete

shown through the peeling surface material making the vessel appear as though it was constantly dirty. A structure crack developed through one wall of the spa allowing spa water to freely drain on to the sidewalk.

This restoration Project’s goals were to update the appearance and aesthetics of both outdoor vessels, the indoor lap pool, recirculation lines, pool coping and waterline tiling, and pool equipment, all the while keeping their same structural configuration and setting, but reviving the appeal this facility enjoyed in past decades.

All the pools were to be converted to Salt Generating Chlorine sanitation and brought up to VGB Compliance.

A new soaking and therapy spa was to be constructed within the confines of a new Grotto area.



# BEFORE HISTORIC RESTORATION PROJECT

## ON-SITE INSPECTION

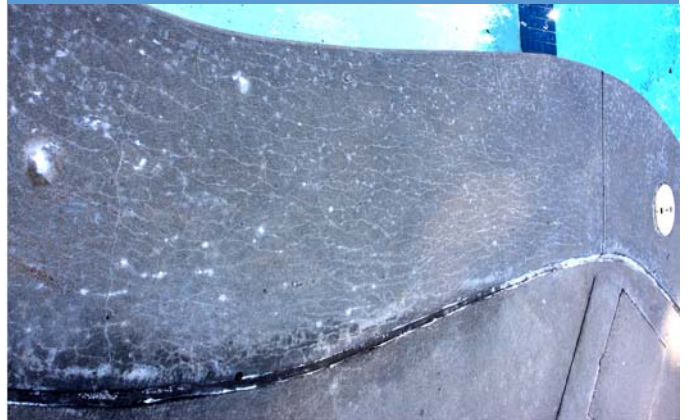
Structurally Cracked & Painted Pool



Disastrous Plumbing Room



Expandable Aggregate Damaged Concrete



Outdoor Therapy Spa



Crack Through Outdoor Spa Wall





## RESTORATION PLAN

### *“How it was done”*

Beginning progress on the outdoor pool and spa simply meant a lot of demolition, removal of layers of pool paint and poor surfacing materials. Fill soil below a wide concrete coping apron allowed for a 'ready' space for new plumbing lines. Excavation to the Frost Depth level and installation of SCH 80 PVC lines set the stage for a long term recirculation line-life. Environmentally friendly hydro-blasting (Ultra High Pressure Water-Jetting) was used to remove pool paint and deteriorated concrete. Exposed rusted and degraded metal recirculation lines and metal light conduits were removed. New recirculation lines, and

skimmers were installed and put under pressure through-

**New Recirculation Lines in the Trenches**



An important consideration with this Project was addressing structural issues in the outdoor pool and outdoor separate spa. Severe Freeze / Thaw damage and cracking affected both vessels. Pool paint was a failure in the main pool and not a considered as a solution with longevity in mind. Cement-based surfacing generally does not necessarily solve structural issues. Organic sealants such as those used in epoxy injection tend to reflect up through a new cement pool surface producing a 'zebra-effect'. While more costly, a polymeric surface serves to seal the cracking and stop the possibility of sub-surface reflection from crack repair materials. These considerations led to the INTER-GLASS® system being chosen on the outdoor pool and spa. Keeping with the Architect's design choice, the outdoor spa received a total tile finish using the INTER-GLASS® system. The entire pool equipment room was gutted. Old equipment and the patch-quilt of PVC recirculation line repairs were removed. New PVC lines were installed in the trenches and run into the equipment room. Once the lines were set in the equipment room, separate Pressure Tests were placed on

out the new cantilever coping pour as required by City inspectors.

Paint and other failing surfacing materials on the outdoor spa were completely removed down to a sound concrete base. In addition to repairing a structure crack in the spa wall, several broken and compromised recirculation and air lines had to be removed and replaced.

With work starting in early 2012, temperatures and winter precipitation played presented a trying time in accommodating and meeting the Completion Schedule.

**Gutted Spa to Sound Concrete Base**



suction and return systems.

Aqua colored waterline tile was installed around the top of the main pool. Forms were attached to the tile and a new concrete cantilever was set into place along with frost-proof depth and No Dive tile. A non-skid, tan colored textured finish was installed over the concrete cantilever. The indoor pool and spa did not have structural issues. Aqua colored waterline tile and like colored Diamond Brite® was the material of choice on the indoor vessels.

A new, large shot-crete therapy and relaxing spa was constructed in the new Grotto area. Using the Laticrete® tile installation system, this new vessel received a fully glass tile finish, new heater, filter and equipment.

All the pools and spas were outfitted with salt generating chlorine systems.



# THE ELMS HOTEL & SPA – HISTORIC RESTORATION PROJECT

## EXCELSIOR SPRINGS, MISSOURI

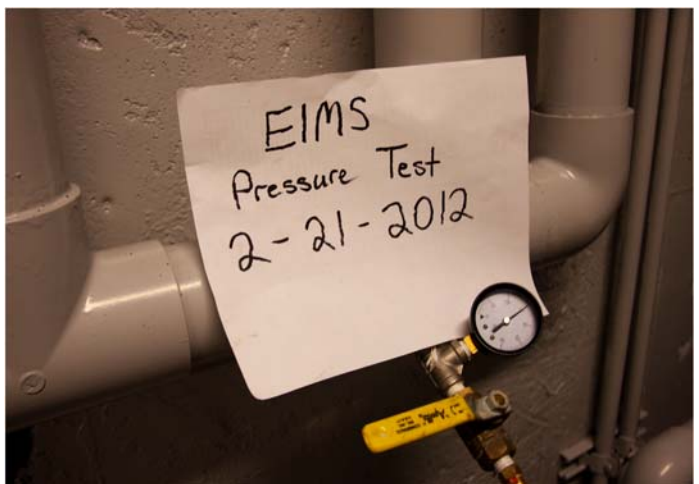
New Concrete Cantilever Placement in Progress



Outdoor Fully Tiled Spa



Restored Indoor Lap Pool



New Fully Tiled Grotto Spa



Revamped Natural Rock Coping



### PROJECT SPECIFICATIONS:

TOTAL SQ. FT.:	7,850 TOTAL SQUARE FEET
POOL SHAPES:	FREE FORM
TYPE OF CIRCULATION:	SKIMMERS
TYPE OF CONSTRUCTION:	SHOTCRETE, FORMED & POURED
TYPE OF INTERIOR FINISH:	INTER-GLASS®, Tile, Diamond Brite®
Construction Manager:	Widewaters Construction, Inc.