



VECTORWORKS CASE STUDY



RENOVATING THE BUNDESHAUS
WITH VECTORWORKS ARCHITECT



THE BUILDING THAT HOUSES THE SWISS FEDERAL ASSEMBLY AND THE FEDERAL COUNCIL IS UNDERGOING AN EXTENSIVE RENOVATION TO RESTORE IT TO ITS FORMER RESPLENDENT GLORY AND UPDATE ITS SYSTEMS TO MODERN STANDARDS. AEBI & VINCENT USED VECTORWORKS ARCHITECT TO CREATE PLANS FOR THE SFR 83 MILLION BUNDESHAUS RENOVATION PROJECT.

The Swiss Parliament Building, or the Bundeshaus, in Bern is undergoing its first extensive renovation since its inauguration in 1902. The project's primary components are restoring the building to its original condition, renovating existing office space to accommodate more parliament officials, adding a new visitors' entrance for the 100,000 tourists who visit the historic building each year, and modernizing building systems. Due to the sheer scale of the project, extensive planning and organization was required. And more than 100 companies are involved with the many aspects of the SFR 83 million renovation. Bern architectural firm Aebi & Vincent Architekten SIA AG is orchestrating the massive project with plans created using VectorWorks Architect.

Since the original architectural plans for the buildings were still in good shape, Aebi & Vincent redrew them in VectorWorks Architect, importing some additional measurements that were taken onsite.

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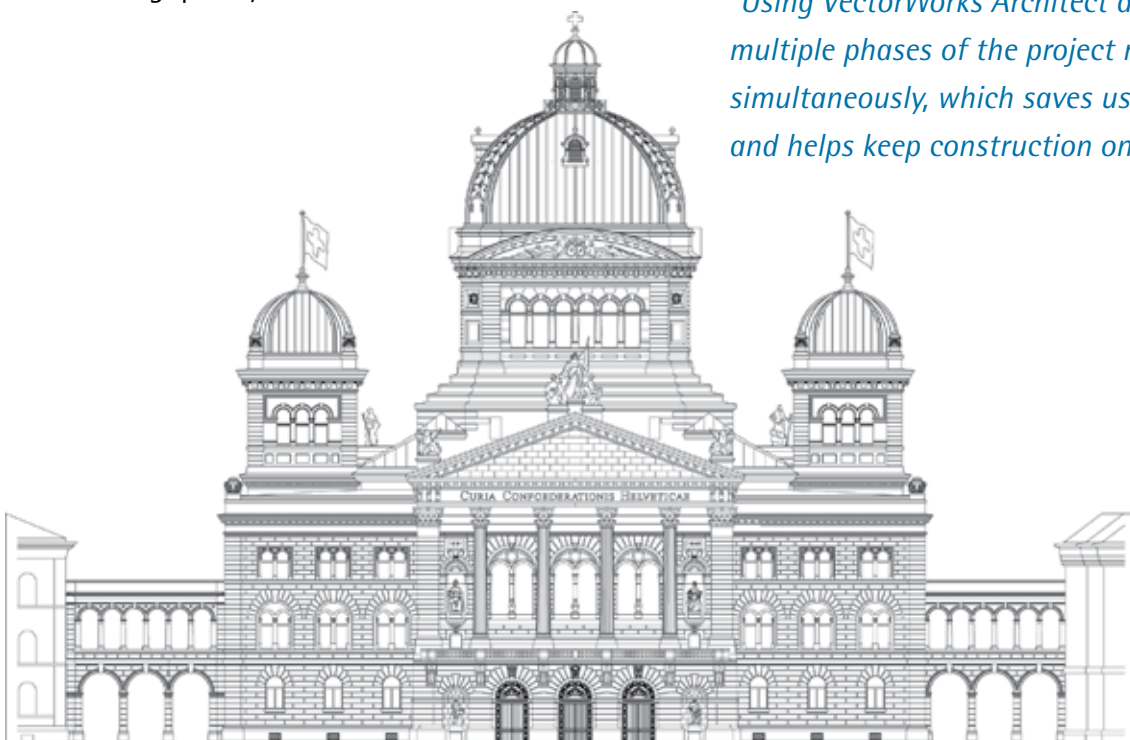
Aebi & Vincent has 35 licenses of VectorWorks and has been using the software on all its projects since 1997. The firm finds VectorWorks to be uncomplicated and easy to learn, allowing new and contract employees to begin conceptualizing and drawing quickly.

COLLABORATING ON A GRAND SCALE

On the Bundeshaus, the firm took advantage of VectorWorks' workgroup referencing technology, which allows many team members on the project to work on different parts of the project at the same time, as well as collaborate with the numerous outside contractors and consultants involved on the project.

"While my colleagues continue with construction drawings, I can work on the fire protection plans, for example," says Telley. "Using VectorWorks Architect allows us to keep multiple phases of the project moving along simultaneously, which saves us a lot of time and helps keep construction on schedule."

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MAINTAINING HISTORICAL ELEMENTS AND MODERNIZING OUTDATED SYSTEMS

The sandstone structure is comprised of three buildings: The Chamber of the National Council, the Chamber of the Council of States, and the Hall of the Dome, which separates the two chambers. Each is slated to be carefully restored to its original splendor, with input from art historians and government officials to ensure historic accuracy. Restoration efforts include removing carpets and refinishing the original parquet floors underneath. Suspended ceilings that were installed in the 1960s will also be removed. And the dome

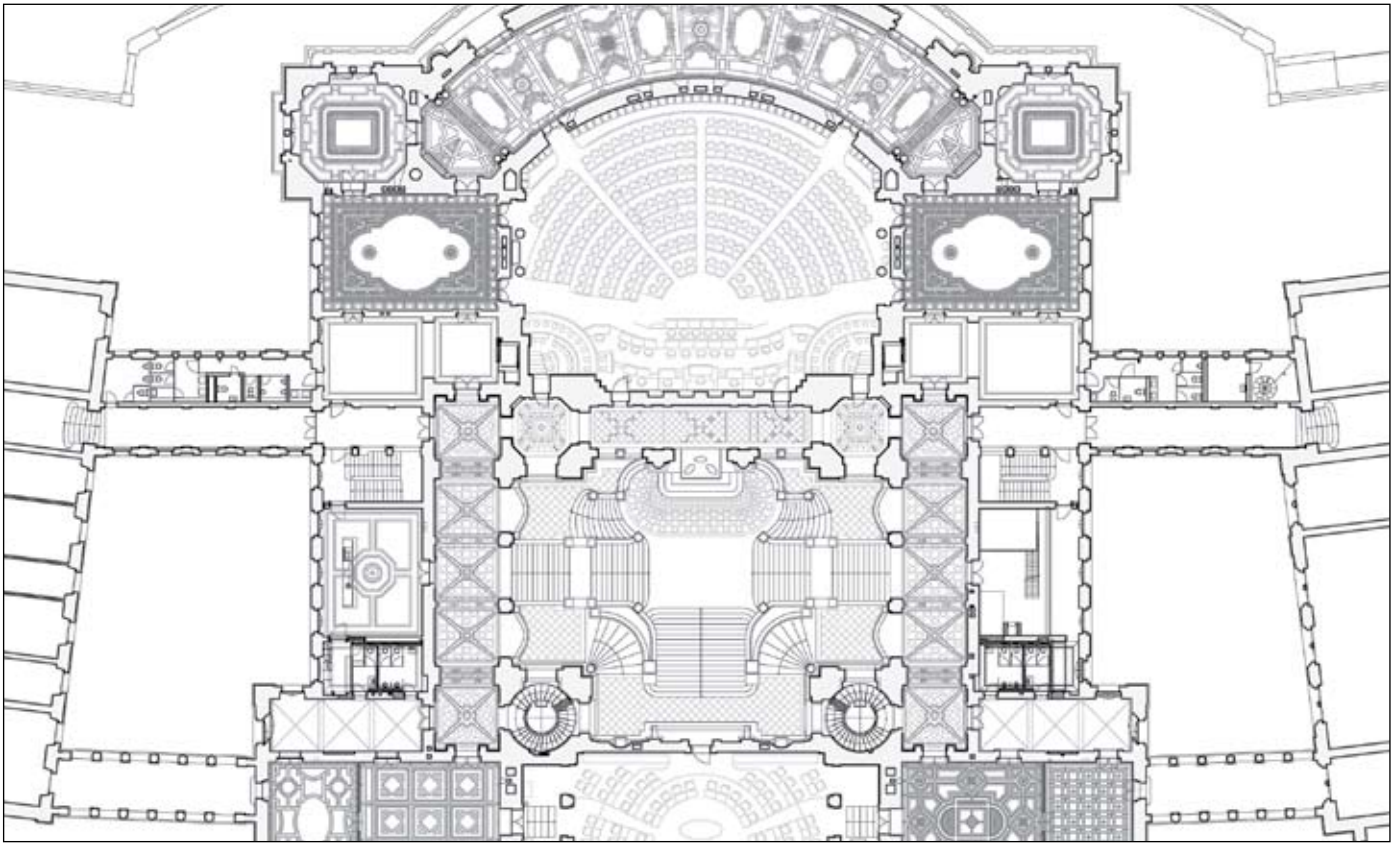


will receive a thorough cleaning to remove the century-old soot from coal-burning lamps that has accumulated. Modern, energy-saving light sources will be installed to brighten the dome and simulate the lighting emitted from the carbon-arc lamps that also were installed for a period of time.

When the buildings were built, the electrical and heating systems were top-notch for their time. But in order to meet today's stringent code requirements and modern needs, all new mechanical, electrical, and plumbing systems are being installed.

Other new additions to the Bundeshaus include a cafeteria, meeting space for events, a relocated visitor's entrance to meet the increasing demands of security for the highly-trafficked historic building, which attracts more than 100,000 visitors each year, and new office space for government officials on the third floor of the Bundeshaus.





RESTORING THE THIRD FLOOR

Currently, the third floor of the Bundeshaus is an architectural anomaly. During the 60s, the third floor was “modernized” to reflect the taste of the time, with dropped ceilings, partitions, and carpet. Using photographs and other reference materials that provide extensive documentation of the original details, as well as input from historians and government officials, Aebi & Vincent have developed plans and bills of materials for contractors to restore the interior to its original state.

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The third floor will also be renovated to match the footprint of the first and second floors and make more room for offices and meeting space. In addition to restoring the space to its original condition, this entails adding a staircase in the central dome hall to connect the second and third floors and adding lights to the interior of the dome to highlight the ornate ceiling and statues.

“Because this space is going to be used throughout the renovations, it was important for us to work quickly, and VectorWorks Architect allowed us to quickly conceptualize what we wanted to do and develop plans, often while work was being done at the same time,” says Telley.

ALL-PURPOSE PROGRAM FOR ALL-ENCOMPASSING PROJECT

Government will be in session during the three-year renovation period, and all work is expected to be completed in 2008.



"Although this project was a considerable challenge for us, due to the level of planning and coordination required, as well as the large number of demands from different consultants and contractors, VectorWorks Architect handled the full scope of the project, from our first sketches and concepts down to the specifications the metalworkers needed to know to construct new handrails," says Telley. "With the help of VectorWorks Architect, we were able to maintain the dignity of this grand, historic building, while meeting the needs of a modern parliament."

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