

INSIDER

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Stained Glass Restoration Project
Underway at the Capitol

Restoring “The Great Window” to Its Original Splendor



By Wanda Seeney

“A once-in-a-lifetime opportunity” is how Dale Cassmeyer, deputy director for OA’s FMDC Planning, Design and Construction Unit, describes the stained glass project underway at the Missouri State Capitol. Years of wear and tear to the massive stained glass ceiling or “The Great Window” necessitated a refurbishing that provided a rare, up-close view

of the artwork.

The project includes the removal, repair, and restoration of “The Great Window” which dates back over 100 years. The artist, Herman T. Schladermundt from New York, was commissioned to design and fabricate the artwork for the Capitol, and from 1920-1922 the stained glass was constructed. 2022 marks the first time in over a century that proper repairs will be made to the stained glass.

The design work and planning for the project began in 2019 and construction started in October. The project will preserve the integrity of the stained glass, which was in poor condition. There were cracks, broken and missing pieces of glass, as well as a deteriorating structural support system.

“On the reverse of the stained glass there are coins tied with metal rods drilled through the glass, and fixed to the lead supports from previous, improper restoration attempts,” said Andrew Friedmeyer, the project manager who oversees the design phase. “Therefore, making that support system more sound will be part of the repairs.”

The total project cost is roughly \$3.4 million, while the appraised value of the artwork is approximately \$17.3 million.

“We are restoring a multimillion-dollar piece of art that the state of Missouri owns,” said Cassmeyer. “The citizens will be proud to know that we are maintaining and restoring a \$17 million to \$18 million piece of art for future generations to enjoy,” he added.

Bob Rehagen, FMDC project construction administration, believes the project shed light (no pun intended) on how critical repairs were needed. In addition to repairing, replacing, or restoring segments of the glass, repairs will be made to the surrounding steel structure that encases it. Also, the lightwell, ornamental plaster frame, and surround are planned to be restored and painted. The removed stained glass will be refurbished to resemble its original colors and shapes.

“The art depicts imagery that is the history of Missouri, development along the river, state natural resources, agriculture, and so much more,” Friedmeyer said.

During the removal process, a few people have the unique opportunity for an up-close view of the magnificent work of art. The glass is positioned 85 feet above the Grand Stair where structural scaffolding and protection are constructed,



Up-close view of the stained glass panel.

Stained glass and skylight.



allowing the work to take place. A huge undertaking, it will take 18 months to rebuild “The Great Window.”

There are four phases of the project:

- Removal of the stained glass
- Shipment to and restoration in the state of California for 12-18 months
- Plaster repairs, painting, and reinstalling scheduled to begin May 31, 2024
- Estimated completion date is Nov. 1, 2024

The project will take 18 or 19 trucks to move 27 square feet maximum of glass, per truck, and involves the work and expertise of multiple contractors.

The general contractor, Pro-Prost Joint Venture from Jefferson City, Mo., coordinates all of the work and design. Judson Studios, a subcontractor

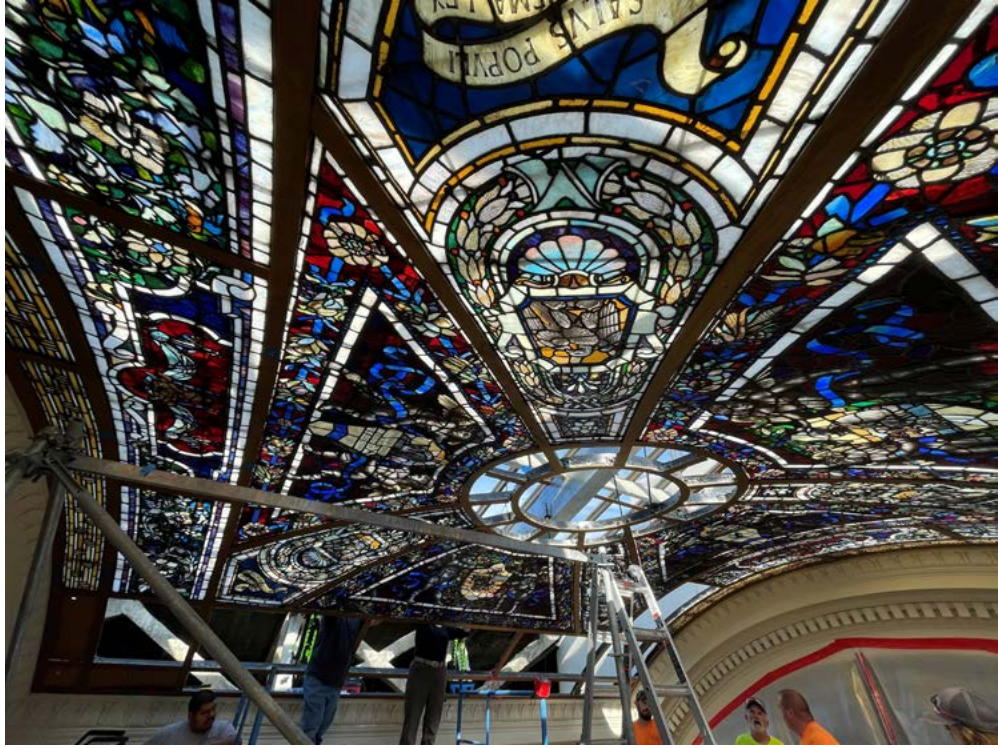
and stained glass specialist from California is responsible for full restoration and repairs. Subcontractor Jacksonville Stained Glass from Jacksonville, Ill., assists with the removal and the building of crates for storage and shipping. The consultant STRATA Architecture + Preservation is an expert in historic rehabilitation and works with distinguished stained glass consultant Julie Sloan.

“Julie is a world-renowned stained glass consultant from Lake Placid, New York,” said Friedmeyer. “We are lucky to have her working with us on this project.”

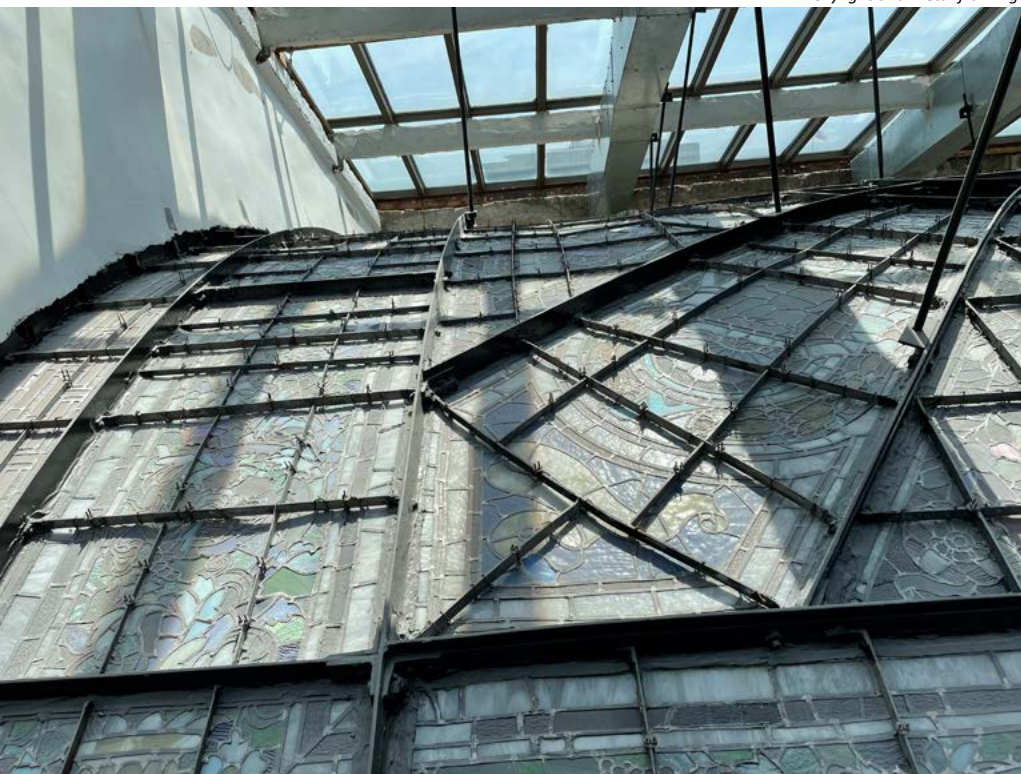
“I’m excited about it because of its historic nature; the glass is authentic to the building,” said Rehagen. “The team we have are great contractors. They explain what they’re doing every step of the process,” he added.

Despite the necessary repairs, Missouri is fortunate to have had pre-World War I lead used for the stained glass because it holds up better than lead produced after the war. This contributed to its great condition, despite its age.

Every phase of the project is a huge undertaking that requires great planning, detail, and instruction.



Stained glass ceiling.



Skylight and metal framing.

From the construction of the scaffolding to the transport of the artwork, restoration, and storage - every step is documented. For example, the glass will be stored at three different locations. This is for insurance purposes and the overall value of the artwork, which prohibits it from all being stored in one location. Due to the enormous size and design of the stained glass, the art is removed in sections, and all pieces are numbered and cataloged, noting which truck they are on. 3-D laser scans made by the consultant showed exact curvatures and ripples in the glass. The scans will be



Metal hoist.



Reverse side of stained glass showing coins and screws.

archived, which will be useful for future work.

“Every little detail was picked up on the scans,” said Rehagen. “We were provided 3-D models in case anything goes wrong in the future.”

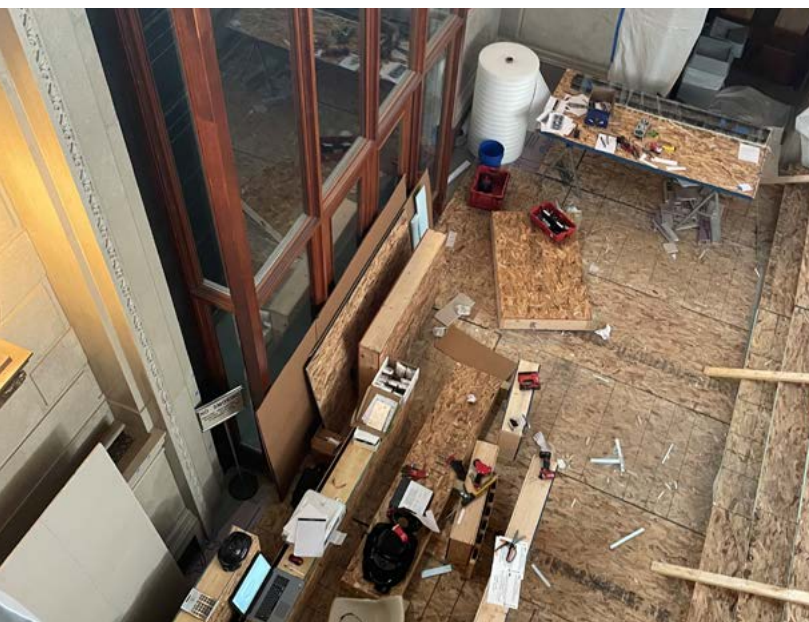
Alternate projects include the rehabilitation of the bronze doors leading to the Grand Stair inside the Capitol. Before 9/11, the bronze doors were open to citizens every day. Also, on the roof of the building, three original historic copper skylights will be restored, two new matching skylights replaced, and 17 existing aluminum skylights are slated for repair and refinishing with lead-free paint. These projects are scheduled for completion before the start of the 2023 legislative session.

“This is a once-in-a-lifetime opportunity,” said Cassmeyer. “I’m thrilled to be able to learn from all these experts. It’s an incredible process. I think it opens up more opportunities for citizens to see the entire Capitol – eventually the bronze doors, even. Members of the House and Senate have mentioned missing being able to go down the Grand Stair for the purpose it was intended.”

“I’m humbled to be working on something this historic in nature,” said Friedmeyer. “A project of this scale and significance is something to be proud of.”

The project will remain closed off to the public for the next two years. Once completed, a beautiful display of colors will again render the captivating gaze of school children and tourists, as well as state legislators who have the privilege of passing by often as they work to serve Missourians. Restoring “The Great Window” to its original splendor will be worth the wait!

Work area.



Aerial view of the Capitol atrium.

