

A large, multi-story historic brick building with arched windows and a decorative cornice. The building is the subject of the restoration project.

McGill Restoration Demonstrates Artistry with Historic Preservation

530 W. Broadway is a historic brick building in the heart of Council Bluffs, IA. Lund-Ross Constructors was the primary renovation contractor and they put the historic preservation masonry scope to bid. McGill Restoration had worked as a subcontractor with the primary on numerous projects and the bid was accepted.

THE CHALLENGE

Replicate and Restore Historic Brick Features

Historic preservation requires unique solutions to match materials while restoring the historic look of a structure. In many cases, modern methods and tools combine with preserved materials to complete tricky jobs. The real challenge however is artistry from experienced masonry professionals like the incredible crew at McGill Restoration. At 530 W. Broadway, the project called for specific material matching and attention to detail from the McGill Restoration team.

SOURCING OVERSIZED AND UNIQUE BRICK PIECES

Bricks used in the original construction of 530 W. Broadway are oversized when compared to modern brick styles. At 8 ¼" sizing, the McGill Restoration team was tasked with locating matching bricks. This called for a search of salvage yards and sources specializing in demolition and salvage of historic materials. Engineers and best practices in historic preservation all called for the specific brick sizing, leaving no alternative avenues for replacement with off-sized bricks.

Further, the old brick installed over windows had unique curvatures where even salvaged bricks would not suffice as replacements. The team would need to find a solution that matched the shape and style of brick over each window segment. Without matching bricks available, a mold system was necessary.

THE BIGGEST ISSUES WERE:

- ✓ Sourcing unique brick sizes
- ✓ Matching window curvatures
- ✓ Sourcing historic documentation
- ✓ Meeting tight timelines



MATCHING ARTISTRY BASED ON OLD PHOTOGRAPHS

Corbels and keystone pieces throughout the building had artistic curvatures and unique styling. The only reliable reference point for the original masonry was found in old photographs. Without detailed drawings, the crew was left to study photos and lean on their artistic masonry skills and experience. With five journeymen on the crew, plans were made to work through each element with consideration for the original period styling.

MEETING TIMELINE AND CHANGE ORDER EXPECTATIONS

A majority of the work was completed within eight months but change orders and touch-ups stretched the overall timeline to around one year. Managing budget and meeting additional requests from the contractor required careful attention to resource allocation and time management for the crews.

THE SOLUTION

Find Creative Solutions to Unique Historic Preservation Challenges

McGill Restoration planned for every detail and invested the energy to source and even manufacture the right materials for the job. Every aspect of historic preservation with input and guidance from engineering was met, while also executing restoration with the artistic vision needed to match original aesthetics.

SCOPE OF WORK:

While the project highlights are largely artistic and relative to the challenges of material matching, there was also the need to service mortar and ensure every brick was structurally secure and installed to last.

The full scope of 530 W. Broadway included:

- ✓ Tuck pointing – removing and replacing mortar
- ✓ Brick infill
- ✓ Brick replacement

Although the scope is simple on paper, the actual processes were tedious, calling for the highest levels of expertise in masonry and historic building preservation. The team came together, working through each segment of the building on a brick-by-brick basis to recreate the original feel of the structure.



LOCATING OVERSIZED BRICKS AND CASTING MOLDS

Oversized bricks were sourced from a historic brick salvage in Iowa. They matched the 8 ¼" size and fit the time period with look-alike coloration. With bricks sourced, the masonry crew was ready to grind out and replace mortar while fitting the bricks in corbels and keystone pieces.

Unfortunately, the salvage bricks would not fit curved sections over windows and sourcing matches was a tall and bleak order. Rather than looking for a needle in a haystack, McGill Restoration cast molds of the original brick used and manufactured replacements with the exact sizing required. Matching coloration created the right look and each window segment received was restored to the original shape and style.

REPLICATING CORBELS AND KEYSTONE PIECES

Corbels and keystone pieces presented the greatest challenges in terms of design replication. Armed with historic photographs, the masonry crew studied each element and manifested an artistic approach to restore the original designs.

Experience and the ability to think out of the box were the real keys to restoring these elements. While engineering and the original build determined material choice, the masons were really left to get in the right mindset and use their collective experience to set bricks and match the photographed designs.



RESPONDING TO CHANGE ORDERS

As with any historic preservation project, work is day-to-day with new issues and extra requirements being revealed throughout the project. Several change orders and additions to the scope were added and the McGill Restoration team worked to ensure the crew members and resources were available to the primary contractor throughout the project.

RESULTS

530 W. Broadway Historic Brick Successfully Restored

Out-of-the-box thinking, artistic masonry skills and dedication to perfection all led to a successful outcome at 530 W. Broadway. The result of McGill Restoration's work is demonstrated through restored brick and masonry throughout the building with special attention to corbels, keystone pieces and the curved window segments.

RESTORED INTEGRITY OF MORTAR AND BRICK REPLACEMENTS

Between every brick is the mortar that holds everything together. Carefully removing and replacing mortar while infilling and/or replacing brick was completed on every element within the scope of the project. Careful brick placement reflects the original design and with new mortar, durability is built into the preservation of the building.



PRESERVED AESTHETIC OF PROMINENT HISTORICAL BUILDING

Historic preservation is meant to have an aesthetic that matches the original construction. In this project, sourcing the correct materials and manufacturing custom bricks returned the deteriorating segments of brick to the original aesthetic. With brick renewal and restoration, the building is ready for new retail and residential tenants without changing the traditional feel of the structure.



ACTED AS A TRUSTED SUBCONTRACTOR

Delivering exceptional results while maintaining communication and adherence to the general contractor guidelines is top priority at McGill Restoration. The entire team worked hard from day one, planning the details, communicating with engineers and maintaining timelines while completing the work. A minimal footprint approach used boom lifts for access while staying outside the busy exterior work zones that required street closures and space for other subcontractor and primary contractor crews.



The McGill Way: 530 W. Broadway Highlights



**Designed molds for
unique brick sizes**



**Met timeline
expectations**



**Leveraged artistry
and crew experience**



**Restored bricks to
match historic look**

Want to Work with McGill Restoration?

Do you have a unique historical preservation project that requires expert masons and detailed planning?

McGill Restoration is ready to help see your project to fruition. Get in touch with our experts today.

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