
# In With the Old, In With the New

## *The Ruby Fuller Education Building Renovation and Expansion Project*

*By Joseph Pooler and Marcus Swayzer*

Originally a Methodist church, the Ruby Fuller Education Building was constructed in 1915 in Port Arthur, Texas. In 1976, the building was deeded to the Lamar University System's Lamar-Port Arthur and renamed after Ruby Fuller, who worked as a Sunday School teacher at the church for 42 years.

Until 2017 the original building and an addition, the Education Annex, housed College classes, offices, and events. In August 2017, Hurricane Harvey struck, causing extensive flooding damage to the building. Following Harvey, the 86th Texas Legislative Session provided the College with $6.32 million for renovations to the building.

The Ruby Fuller Education Building Renovation and Expansion Project aimed to reinstitute and enhance College operations in the building. The project included repairing hurricane-related damages, removing the entire first-floor sanctuary and second-floor mezzanine, and replacing these spaces with offices, classrooms, a bookstore, and a small deli. An original classroom addition was removed, allowing for a secondary entrance to the building. The project also demolished the existing 5,575 SF Education Annex to accommodate a new 4,700 SF two-story facility, including a large multipurpose room for events and gatherings. The renovated space and expansion comprise approximately 10,000 SF.

The College's approach to its project provides an exceptional example of what can be done on renovations with tight budgets and schedules. The design for the project blended the historical with the modern, allowing for a transformation of the building's interior while preserving many of its iconic exterior features. The project team collaborated to complete all work on time, within budget, and as envisioned. Clients undertaking similar projects will benefit from a similar approach to their work.

### The Vision

As of 2020, people of Hispanic and Latin heritage made up nearly 40% of the City of Port Arthur's population and 25% of the College's population. To better support those communities, Lamar State College Port Arthur wanted to repurpose the Ruby Fuller Building to house its Title V Grant Program—Title V coaches and tutors are dedicated to supporting the College's Hispanic and Latin population. The College also wanted the Ruby Fuller Building, a facility named after a life-long teacher, to house its education classes. To these ends, the College envisioned a facility equipped with everything necessary to deliver exceptional educational experiences for students, faculty, and staff.

Despite the desire for modern convenience, the College also wanted to maintain the building's historicity. In 2009, the Texas Historical Commission designated the Ruby Fuller Building as a Texas Historical Landmark. The College deemed it important to maintain this historical designation. That meant protecting the building's exterior Gothic and Tudor architecture, including the stained-glass windows, doors, brickwork and stone detailing, two towers and crenelations, main staircase, and roof.

### The Project

*Teambuilding and Project Kickoff*

The first challenge for the College was putting together a team with the experience and expertise required to deliver its vision. First, the College hired Sigma Engineers as the designer. With experience designing religious and education facilities, as well as renovations, in southeastern Texas, Sigma had a background tailored to the College's goals. To help drive progress and meet the project's budget, schedule, and quality goals, Lamar State College Port Arthur also hired Hill International during pre-construction to provide project management services.

"Our work began in design and continued through construction and close-out," says Hill Project Manager Marcus Swayzer. "We started with rigorous design reviews, working closely with the architect and the College to coordinate design efforts. We also provided independent estimates, created a master schedule for the project, and helped with contractor procurement. In addition, once we had the team assembled, we led a kickoff meeting to ensure we were all on the same page. These efforts helped ensure a strong start to the project, gave the client confidence, and provided an excellent value in contractor procurement."

*Preserving History*

With design complete and contractor O'Donnell/Snider Construction (OSC) aboard, the project began construction. During structural shoring and structural wood framing of the building, the whole team worked to ensure the hundred-year-old building would be structurally sound and all architectural elements would work within the space allotted.

"Each player brought their own expertise to the pre-construction inspections," says Swayzer. "Sigma confirmed their drawings against existing conditions, and OSC and Hill did structural inspections to make sure demolition could go off without a hitch. This was important because the perimeter of the building and almost all external features were to remain in place during construction. Working together, we were able to identify and remedy several potential obstacles before work got started."

"When we started working on the construction


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project, we found several surprises that were not detected during the design phase," Lamar State College Port Arthur Director of Purchasing and Contracts Maria D. Garcia says. "To our advantage, Marcus was able to help us make decisions on these surprises. He was the person who represented us whenever we were lost on how to move forward on these issues."

For example, the building's existing plenum space was too small for the planned HVAC system and ductwork. To make room, the design called for total roof demolition and rebuild. However, based on pre-demolition inspections, the team was afraid roof demolition would threaten the building's structural integrity. After quick collaboration, the team decided it was safer and more cost effective to shore the existing roof and raise the ceiling instead of replacing the entire roof. This was done at no added cost to the project.

In their inspections, the team also took careful note of existing architectural finishes and developed a plan for the refinished materials. The contractor selectively removed more than 75% of the exterior wood trim and reconditioned, reinstalled, and repainted it. Through coordination, attention to detail, and documentation, the team also replaced existing brick lintels and repointed existing masonry and mortar. Hill inspected the contractor's mockups for masonry, EIFS/stucco, ceramic tile, orange peel texture of the finished drywall/paint, restoration of exterior wood, and roofing and communicated their observations to the College prior to construction. This helped ensure all restoration work adhered to Texas Historical Commission requirements and allowed the client to develop a comfort level with the finished product.

The team also preserved and repurposed several original elements inside the building, including the stained-glass windows, pews, and church organ. With Hill's assistance tracking preservation tasks, OSC protected each window and performed selective demolition to salvage the pews and organ.

By carefully inspecting the perimeter of the building, meticulous restoration practices on the building exterior, and selective demolition and preservation of the building's interior, the project team preserved and restored the Ruby Fuller Building's iconic Gothic and Tudor exterior. This allowed the building to keep its designation with the Texas Historical Commission.

*Freshening Things Up*

The College wanted an interior that would enable end users to enjoy all the conveniences of a modern collegiate facility. Whereas the exterior of the building remained fundamentally unchanged, the interior received a total renovation.

A modern look prioritizing convenience and utility, filled with bright colors and plenty of open space characterizes Sigma's design. New interior features include air conditioning, a new electrical system, redesigned drainage for resilience against future storm surges, and compliance with the Americans with Disabilities Act (ADA) to provide equitable education opportunities to all students at the College. Individual classrooms enjoy rearrangeable furniture for flexible learning arrangements. A new floor plan takes advantage of the existing stained-glass windows to allow natural light into counselor offices, classrooms, student gathering areas, coffee bar, labs, and other open spaces. Large, nearly floor-to-ceiling windows open into classrooms and architecturally frame the project's main goal: teachers teaching.

During design, Hill worked with the client and Sigma to confirm interior drawings conformed with Texas State University System (TSUS) specifications for classroom and lab spaces. Hill also helped ensure ADA requirements were met. During construction, Hill implemented quality control measures to support OSC. Timely inspections helped prevent delays for any rework, ensured prompt payments for the contractor, and kept the project on schedule. Hill also promoted a full-team approach by leading regular meetings throughout the project. These meetings helped ensure prompt information transfer throughout the project organization and allowed the whole team to work together to overcome problems. The result: a modernized interior that provides Title V Grant employees and other college faculty and staff everything they need to support their students.

*Project Management Information System Support*

To support the College's budget, schedule, and quality goals, the Hill team used TSUS's e-Builder project management information system (PMIS) to monitor costs, store documents and drawings, develop a master schedule, create and track milestones, track issues and punch list items, and much more. As a Certified eBuilder Partner, the Hill team used the PMIS to give the client greater confidence, offer timely advice for resolving challenges, and identify risks to the project in time for mitigation. Additionally, as the Hill team had experience on other TSUS projects, Hill was able to easily incorporate the System's procedures, as well as the requirements of the Texas Historical Commission, into the PMIS. This helped keep the team abreast of all stakeholder requirements throughout construction.

The results of this support speak for themselves. The project was delivered on time for the 2022/2023 school year and within its $6.32 million construction budget. "We're very proud of what we did to support the Ruby Fuller project," affirms Marcus. "But it was a tremendous team effort, and the whole team did their part to achieve this goal."

## An Exemplary Project, an Exemplary Facility

Through teamwork and careful adherence to the College's goals, the team delivered the Ruby Fuller Education Building Renovation and Expansion Project on time, within budget, and as envisioned. The result is a building with a beautiful, restored exterior and high-quality interior build-out. The project also enabled the College to preserve a key landmark and ensured the Ruby Fuller Building kept its designation with the Texas Historical Commission.

Most importantly, the College has a restored facility ready to host classes, events, and other educational programs for years to come. Its historical exterior provides a dignified home for the College's Title V Grant Program and education classes by helping to enshrine the activities that take place inside. The modern interior provides everything needed to support the College's Hispanic and Latin population and education students.

Building the right team, a targeted approach to preservation balanced with a total modernization, and the use of a comprehensive PMIS helped the College deliver a highly functional and beautiful facility on time and within budget. This approach can provide a template for other clients undertaking similar restoration projects.

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