# **A4LE PROJECT AWARDS**

TRANSFORMATION

# **BRASSFIELD ELEMENTARY SCHOOL RENOVATIONS**

WAKE COUNTY PUBLIC SCHOOL SYSTEM

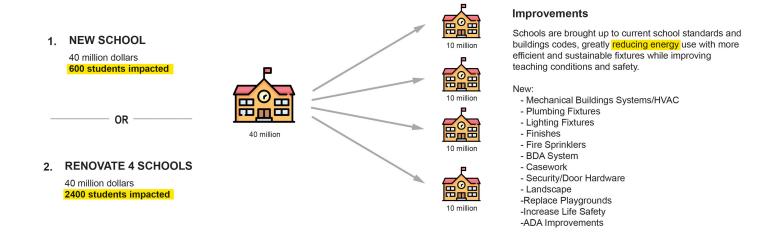


## 1 | EXECUTIVE SUMMARY

Saving and existing building is one of the most sustainable approaches to design. The county school board set an agenda to save and renovate as many existing school buildings as possible instead of a full tear-down and replacement.

This renovation project was the first of this type for the County. After 34 years of use, Brassfield Elementary was selected as a prototype for this renovation approach. The parameters included keeping the existing building and transforming the space for under 10million dollars, to then present a building that felt new for the student and teacher population at this public school.

Instead of tearing down the building and constructing a new school to serve 600 students, this prototype establishes a sustainable approach that uses the same tax-payer funds to upgrade four existing schools and have a greater impact for 2400 students. The construction time-frame limited to 6 months and code path limited to Alteration level one - no new walls or openings. All design opportunities were focused on the reflected ceiling plane, enhancing natural light and greater energy efficiency.



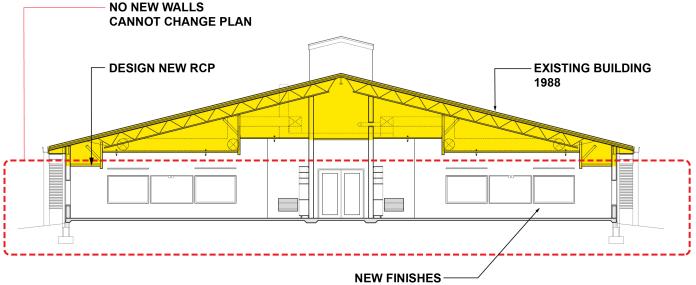


#### 2 | SCOPE OF WORK AND BUDGET

The design opportunities were inspired by the code path constraints. The existing building and the Alteration - Level 1 code path created a requirement where in order to realize the design in the given time-frame, the team could not move existing walls or add new windows. The project added a new sprinkler system to increase life safety, but otherwise the team had to work within the exiting systems and conditions. There were a lot of opportunities in the Reflected Ceiling plane and that was the opportunity for design innovation and integration.

The construction of the project had to be completed in a 6 month time frame in order to accommodate the year-round school schedule and the time-frame that the temporary school building could be used by this school population. This constraint challenged the design team to work closely with the CM at Risk to determine a design scope that would be feasible to achieve a 70,000sf renovation within the 6 months allocated and any material lead times.

The budget for the project was \$7,400,000.



- An alteration level 1 permit allows for the following:
- 1. Removal and replacement, or covering of existing materials, equipment, fixtures using new materials that serve the same purpose.
- 2. Does not include reconfiguration of space.



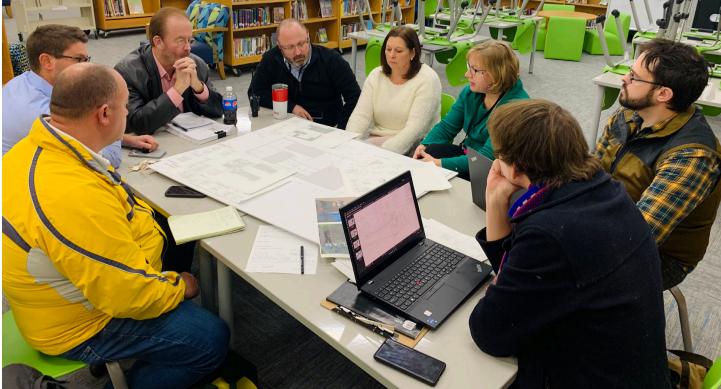


The design process was a true collaboration between the design team, CM at risk, the County Planners and principal. In order to achieve maximum results with the given constraints, the design process was participatory and inclusive. The design team facilitated many meetings with the teachers, staff and principals to develop a shared list of goals through a transparent process.

There were many choices involved with reusing a building and working with existing conditions and it was important that all users of the project were enrolled in the decision-making process so everyone understood why we made design choices.

The design team made presentations and received feedback from the teachers, staff, planners and the school PTA so that good ideas could be heard from all stakeholders of the project.





# 3 | SCHOOL & COMMUNITY RESEARCH AND / OR ENGAGEMENT

The collaborative process extended through construction administration with weekly meetings that often included the principal and planners to describe process and the next steps. They could ask questions or provide insights throughout the accelerated construction time-frame.

This image articulates the main construction palette available to our team given the code path restrictions. The design insertions all consisted of metal studs, sheetrock and paint to create new moments within the existing walls of the building.



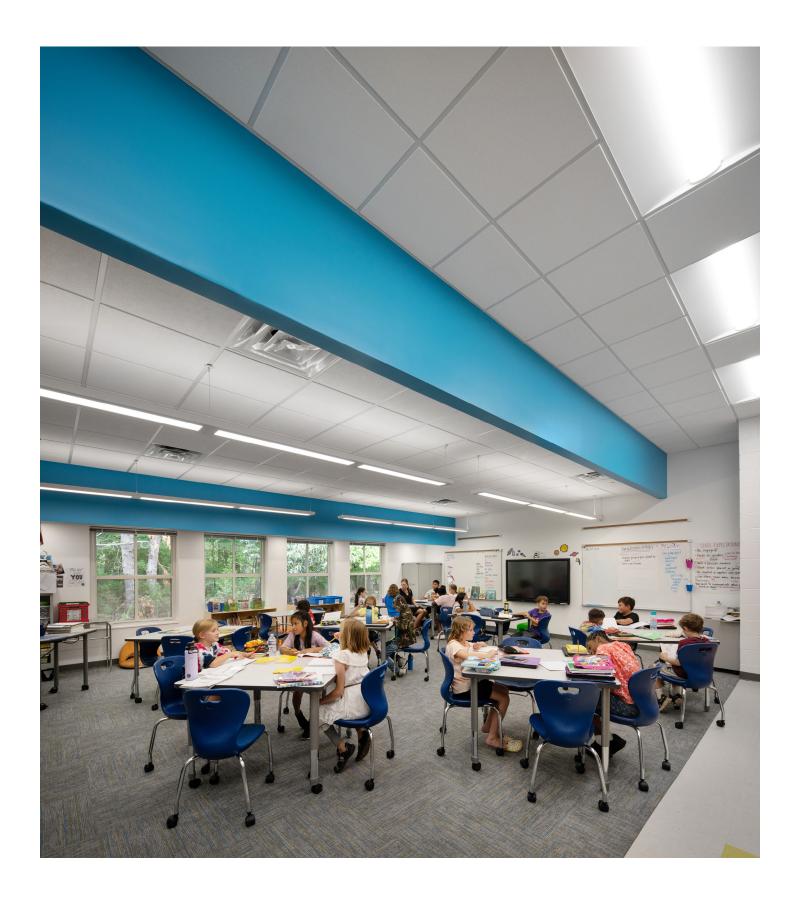
# 4 | EDUCATIONAL ENVIRONMENT DESIGN

The design focused on enhancing the natural light in the building and classrooms and improving the overall feel and identity of the school. New finishes and furniture were added to the classrooms and colors were added to give each classroom a clear identity while also being bright and fun for the elementary aged students. All teaching walls were upgraded with new technology and teaching walls to meet the County standards.























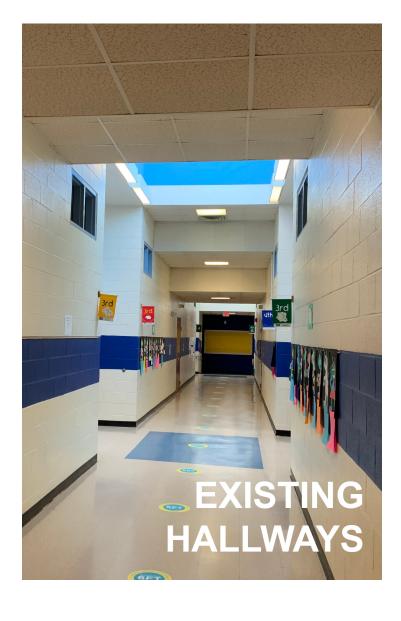


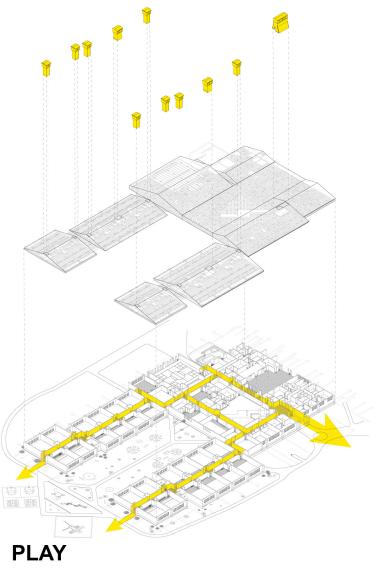


# 4 | EDUCATIONAL ENVIRONMENT DESIGN

The design focused on enhancing the natural light in the building and classrooms and improving the overall feel and identity of the school. The new ceiling interventions sculpted the natural light from the existing clerestory windows and introduced a unifying color strategy.

The design team used a unifying color for all of the hallways and created a celebratory moment of color and natural light at the entrance of all of the classrooms.









## 5 | RESULTS OF THE PROCESS & PROJECT

The design team met the goals of the schedule and the budget and the project was completed on time for the student to return to class. The project was complex and from the constraints came the design opportunities.

This project successfully completed the first prototype for this project type and set an example and a standard for renovating and renewing existing buildings in the County.

## 6 | PHYSICAL ENVIRONMENT DESIGN

The school is loacted in a suburban area of the county sourounded by residential communities and a few smaller farms. The benefit of renovating the existing building was to keep the same school population together and for the building to remain a consistan part of the community.

All playgrounds and landscaped areas were replaced or cleaned to enhance the naural environment for play surrounding the school,



#### 7 | SUSTAINABILITY AND WELLNESS

This project represents a sustainable path for maximizing re-use and minimizing waste, which creates a high-quality learning environment that supports the educational standards of the County. This project showcases that saving existing buildings in our community is possible. There are many design opportunities in saving an existing structure. Saving an existing structure is one of the most sustainable practices, and this provided an example of how this approach is viable for other buildings in the school system.

This renovation project upgraded an existing slab on grade and block building constructed in 1988. The project was generated by a slab settlement issue due to water infiltration. After the slabs were repaired, all finishes were upgraded to the County standards, all spaces were painted and refreshed, new lighting installed, and ductwork cleaned throughout the building to increase the overall Air Quality.

The Air-Quality upgrades and energy efficiency upgrades provides a healthier and safer environment for the students and teachers. The enhancement of natural light in the classrooms and the hallways provides a space that is better for learning and a place where the school community can be comfortable and feel school pride.





