

Lansing Old Stone School Renovation and Site Development



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Project background and location

First built in 1864, the Old Stone School served as the longest running school west of the Mississippi until closing in 1973. Located in Allamakee county, IA, the landmark is recognized on the National Register of Historic Places.



Figure 1. Project location

Building uses

The renovated building will be constructed as a mixed-use development. The first floor features a community center, city hall, city council chambers, and police station.

The second floor will be residential rental units, ranging in size from studio to two bedrooms. Square footage ranges from 600 to 900 per unit.

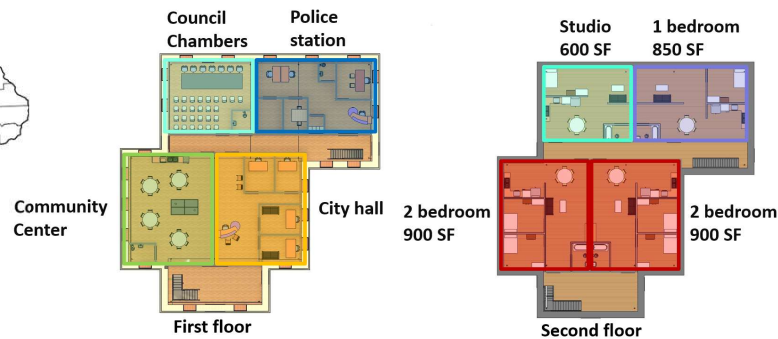


Figure 4. Architectural Layout

Site Improvements

The proposed plan provides 12 additional parking spots with 3 additional ADA accessible spots. A limestone retaining wall is added to add space for parking spots along the easterly property line.

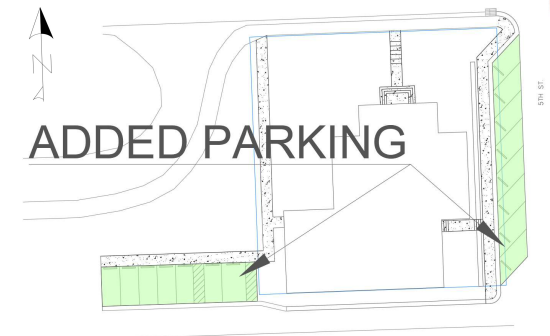


Figure 7. Site layout

Structural Rehabilitation

To support long term occupation of the building, the interior will be fully gutted and replaced with a structural steel skeleton. This option will allow the limestone exterior to remain and be refurbished. The foundation will be replaced by cast-in-place concrete.



Figure 2. Steel Skeleton

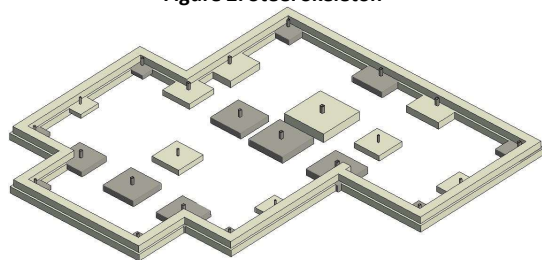


Figure 3. Cast-in-place concrete foundation

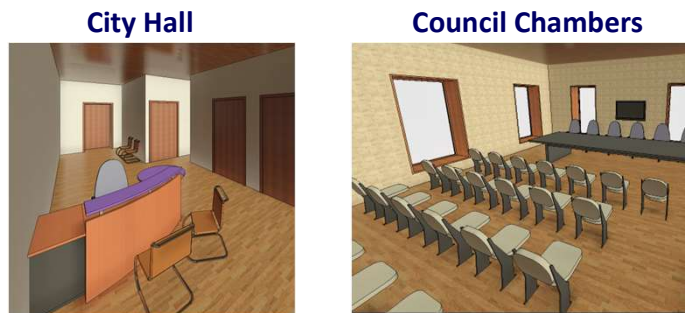


Figure 5. Interior renderings

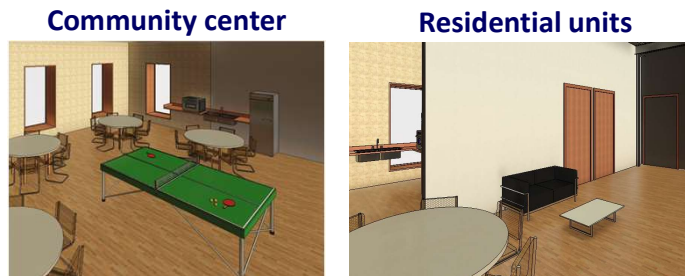


Figure 6. Interior renderings

Construction Cost

Total Cost Estimate	
Prepare building for construction	\$63,000.00
Critical building improvements	\$373,000.00
Steel skeleton	\$743,000.00
Architectural improvements	\$1,253,000.00
Site improvements	\$130,000.00
Contingency	\$300,000.00
Total	\$2,862,000.00

Figure 8. Construction cost

References

Iowa Statewide Urban Design and Specifications (SUDAS), ASCE 7-16 Minimum for Design Loads, IBC International Building Code, 2021, ACI 318 19 Building Code Requirements and Commentary for Structural Concrete, AISC Steel Construction Manual, 15th edition, Iowa Stormwater Management Manual (ISWMM), National Construction Estimator, 2022.