



May 17, 2023

Mr. Adam Bartlett
The Life Church
650 Houston Hill Road
Eads, TN 38028

Re: Preliminary Building Evaluation of 424 Main Street, Fitchburg, Mass.

Dear Adam:

As requested, we have visited the above-referenced building to provide a cursory visual review of the building structure. Observations were from the ground, with a small flashlight and did not include any exploratory demolition and/or removal of finishes. This review was intended to determine the general condition of the building, including mechanical and structural systems to begin to have an understanding of its suitability to house an assembly type use for a church. This was not a comprehensive evaluation of the building. The following is a list of the observations and preliminary opinions from Green Leaf Construction and structural engineer Tom Lamb of T.F. Moran, Inc.

OVERALL IMPRESSION

The existing building is a structural steel framed building with precast concrete floor/roof deck. Roof framing at the long spans over the former retail area consists of steel beams spaced evenly between 6- to 8-foot-deep steel roof trusses supported on steel beams and columns. The existing membrane roof is in fair condition, with a few soft spots observed. Roof framing over other areas was not observed but are likely steel beams and girders supporting a similar concrete plank system. The floor framing is framed similar to the roof with concrete plank on steel beams supported on steel columns. The foundation walls appear to be a mix of concrete and brick masonry. Exterior walls above the first floor, between the columns, are comprised of a terracotta tile system. A freight elevator was observed in the rear of the building and is assumed to be non-operational. This elevator serviced only the basement and first floor levels. Street access is available at the front of the building on the first floor, and at the rear of the building in the basement. Existing rooftop units were not running and appear to be beyond their usable lifespan. The electrical service to the building was shut off at the time of our visit.

If the building is to be used for assembly gatherings for more than 300 people then the renovation would be considered a change in occupancy (mercantile to assembly).

POTENTIAL STRUCTURAL UPGRADE REQUIREMENTS

Structural Risk Category

The change in occupancy would also mandate a change to the structural risk category (II to III). This would result in the requirement to determine if the structure can support the latest code required roof snow loads and wind loads. A full analysis of the building roof and lateral frame system is required. Given the age of the building and it is very likely that the building lateral frame system and the roof framing system do not meet the current building code wind and snow load requirements. Removing the ceilings and a



newer lighter roofing system may help to remediate the requirement for snow load upgrades but wind load upgrades are still likely. Upgrade requirements of the building's lateral frame system should be anticipated and more investigation into the roof capacity should be made.

Framing

In general, the small amount of framing that was observed appeared to be in good condition with the exception of a door lintel in the basement.

Earthquake Loads

Based upon the level of renovation of the building, upgrades will be required for bracing of masonry roof parapets and attachment of floor and roof deck to exterior masonry walls. These are driven by general requirements for structural integrity and lateral load resistance. However, the building is in a moderate to low seismic region and more extensive upgrades beyond this, for earthquake loads, are not anticipated unless more than 30% of the building structure is modified.

Live(occupant) Loads

From a vertical live load standpoint, the first floor will change from first floor retail to assembly use/occupancy. The live load for both these uses is 100psf so floor framing upgrades for live loads are not anticipated at the first floor. The second-floor space is anticipated to be office, which is the same as the original use/occupancy. No upgrades are expected at the second-floor framing for live loads.

Dead(materials) Loads

If new finishes are applied and are substantially heavier than existing framing and finish weights (by more than 3%) then framing will need to be reviewed for the additional load and reinforced accordingly.

POTENTIAL ENVIRONMENTAL REQUIREMENTS

Visual observations of surface conditions in the building suggest the presence of both asbestos and lead throughout the interior. We would recommend further material testing be performed to fully evaluate the extent of abatement that would be required for The Life Church's proposed use.

ARCHITECTURAL BUILDING UPGRADES & ANTICIPATED ACCESSIBILITY REQUIREMENTS

Change in Occupancy

As mentioned above, the proposed use for assembly gatherings of more than 300 people would require a change of occupancy from mercantile to assembly. Unless variances are put into place, this would require that the building be brought up to current code for all building systems and accessibility. Further evaluation should be done to determine whether the City of Fitchburg will require an elevator be installed.

Roofing & Building Envelope

The current membrane roof appears to be in fair condition, and approximately 10 years old. Several soft spots were observed during our site visit. A full roof evaluation is recommended to fully determine the condition, insulation value and life expectancy of the roof.



The exterior siding is an EIFS/stucco finish that has numerous patches and repairs that have been made over the years. Some gaps were observed in the siding along with several areas of water infiltration inside the basement and the connection to the adjacent parking structure. We would recommend that these areas be evaluated and sealed to maintain weather protection.

Glass Storefront & Exterior Doors

Exterior entrances at both the Main Street, side ramp and Boulder Drive elevations are dated and will likely require replacement. We did not evaluate the condition or slope of the exterior side ramp. The storefront glass at the Main Street entrance were observed to be damaged and in need of replacement. We would recommend replacing the entire glass storefront and windows on second floor.

BUILDING SYSTEMS

Fire Protection

Architect Tom Peterman, who was present at the site visit indicated that the fire protection system had been evaluated for another prospective buyer. He reported that the system was in good condition with minimal upgrades required. We have confirmed with the building's fire protection servicer, Charles Moran, had developed the following list of items during the preliminary design period for the previous prospective buyers: Re-zone sprinkler system per Fire Department request, replace all heads throughout, added coverage for attic/dead space, upgrade for new backflow (none existing) and added coverage for kitchen (also proposed with previous design).

HVAC

The current HVAC system will require a complete replacement. The existing boiler will need to be removed from the basement.

Plumbing

Plumbing systems within the building were not evaluated during our visit. It is anticipated that significant upgrades will need to be made to support new mechanical system, increased occupancy and meet current building codes.

Electrical

The electrical system appears to be older and will require further review. It is likely that panels and switchgear will need to be replaced. A further evaluation would be needed to determine whether the existing service can support the proposed use by The Life Church.

RECOMMENDATION SUMMARY

Based on the items detailed above, we would recommend the following evaluations be considered:

- Further structural evaluation
- Architectural code analysis based on change in occupancy
- Discussion with City of Fitchburg on change in occupancy requirements
- Roof evaluation
- Hazardous materials testing



GREEN LEAF
CONSTRUCTION

- Fire protection evaluation
- Plumbing evaluation
- Electrical service evaluation

We thank you for the opportunity to provide this report. Please do not hesitate to reach out with questions, or if you need any additional recommendations for resources to complete further evaluations of the building.

Sincerely,

Liz Mason, Director of Client Services
Green Leaf Construction

lmason@greenleafcm.com

Office: (978) 401-2058

Mobile: (978) 793-2732