



September 27, 2022

To: City of San Antonio, Office of Historic Preservation

Subject: 836 Laredo Street Structural Evaluation

On September 21, 2022, I inspected the building at 836 South Laredo Street in San Antonio, TX. The following is based on that site inspection.

### Building Description

The interior and exterior walls, except for a small portion of the southwest corner of the building, were framed of two vertical layers of brick masonry with a small air gap between the layers, and it appeared as though all of the walls were constructed as load bearing walls. The addition at the southwest corner of the building was framed with wood. The roof was framed with wood and clad with standing seam metal roofing. The building was supported on a series of continuous footings constructed of brick masonry. Between the footings and walls above, there were two courses of stone. For the purposes of this report, Laredo Street is west of the building and Guadalupe Street is south of the building. See Photos 1 through 5 in Appendix A for aerial and elevation views of the building.

### Observations and Analysis

There was missing mortar, cascading and/or sagging masonry, cracked and misaligned door and window lintels, and localized out-of-plane buckling observed in the exposed masonry of the perimeter walls (Photos 6 and 7). This indicated that the masonry had reached the end of its serviceable and effective life. It further indicated that the outer layer of masonry was no longer functioning in a load bearing capacity and only the inner layer of the perimeter walls was carrying the vertical loads of the building.

There were rods with bearing plates spanning from wall to wall, across entire rooms, observed at several corners of the building (Photos 8 and 9). This was not uncommon with aged masonry walls, but it indicated that the structural deficiencies had been suspected, or identified, in the masonry walls at some point in the past and the walls required additional support to continue carrying the intended loads.

There were numerous and widespread vertical and diagonal cracks and separations in the walls of the building (Photos 10 and 11). It also appeared as though the top of the foundation footings dipped down at the corners of the building (Photo 12). When combined, these two observations indicated that the foundation experienced movement at some point in the past. This contributed or resulted in further structural deficiencies in the masonry walls.

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On the south side of the house, it appeared that the lower half of an interior load bearing masonry wall had been removed and was then supported with wood stud framing (Photos 13 and 14). Additionally, there was sagging in both the remaining (upper) half of the masonry wall and the wood framing supporting it. This indicated that the wood framing, thus the wall, was insufficient to function as originally intended.

On the roof, I observed sagging in several locations (Photo 15). In the attic, I observed that there was widespread rotting and possible biological growth (Photo 16). Further, on the first floor, approximately 40% of the flooring was rotted or missing entirely (Photo 17). This was especially notable at the southwest corner of the building where an addition had been constructed at some point in the past. As rot and possible biological growth spread across wood framing members, the strength of those structural elements was reduced, resulting in sagging. This indicated that the wood roof framing and floor framing on the first floor was no longer functioning as intended.

### **Conclusion**

Based on my inspection of the structural elements of the building, the building is not safe for entry or repair. While the building appeared stable at the time of my inspection, there were extensive structural instabilities in the masonry and wood framing elements. Further, at the time of our site visit, the stability of the exterior (perimeter) walls was almost entirely dependent on the inner layer of masonry and additional bracing elements. As such, it is probable that any activity to brace or repair the structure would result in localized collapse and possibly lead to the collapse of other areas in a cascading manner.

Sincerely,

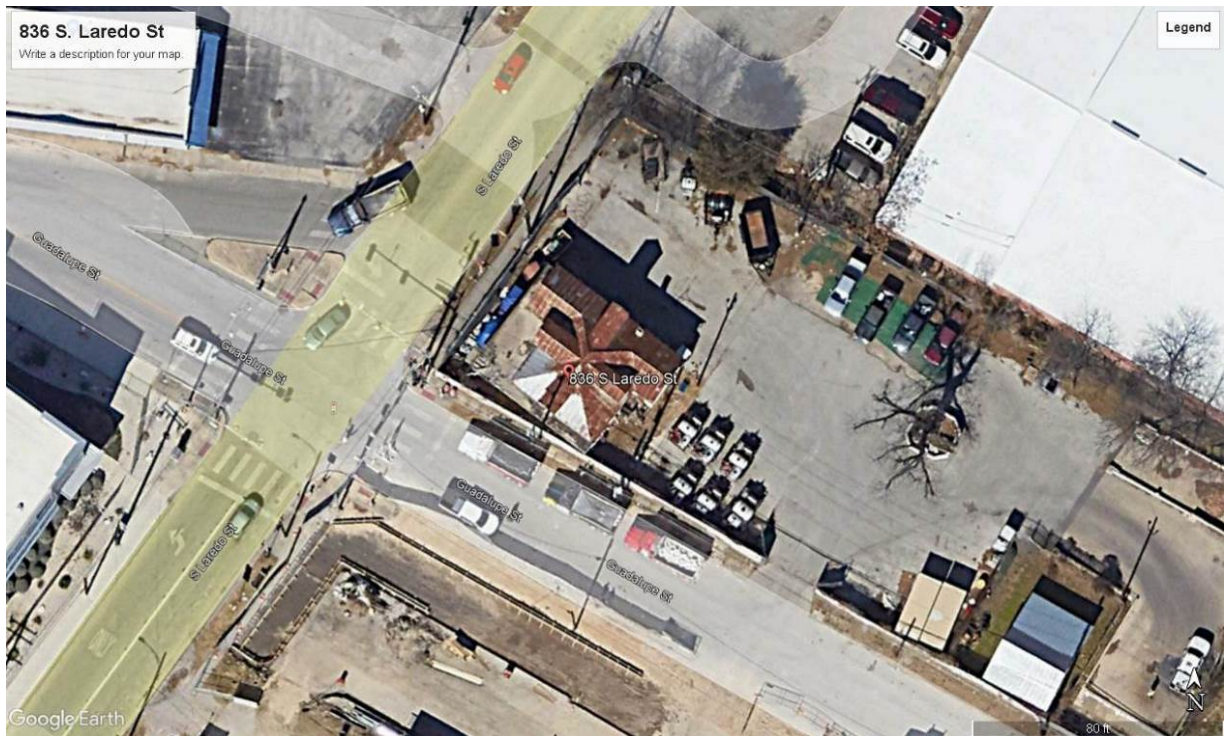


Pablo Arturo Garza, PE  
Structural/Civil Engineer – Engineering, Design, and Construction Department  
San Antonio River Authority

Attachment: Appendix A – Photos

## Appendix A - Photos

### 836 S. Laredo St. – Evaluation



**Photo No. 1:** Aerial view of the building.



**Photo No. 2:** East side of the building.



## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 3:** North side of the building.



**Photo No. 4:** West side of the building.

## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 5:** South side of the building.



**Photo No. 6:** There was missing mortar, cascading and/or sagging masonry, cracked and misaligned lintels, and localized out-of-plane buckling. (1 of 2)



## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 7:** There was missing mortar, cascading and/or sagging masonry, cracked and misaligned lintels, and localized out-of-plane buckling. (2 of 2)



**Photo No. 8:** There were rods with bearing plates spanning from wall to wall, across entire rooms, observed at several corners of the building. (1 of 2)

## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 9:** There were rods with bearing plates spanning from wall to wall, across entire rooms, observed at several corners of the building. (2 of 2)



**Photo No. 10:** There were numerous and widespread vertical and diagonal cracks and separations in the walls of the building. (1 of 2)



## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 11:** There were numerous and widespread vertical and diagonal cracks and separations in the walls of the building. (2 of 2)



**Photo No. 12:** It appeared as though the top of the foundation footings dipped down at the corners of the building.



## Appendix A - Photos

836 S. Laredo St. — Evaluation



**Photo No. 13:** On the south side of the house, it appeared that the lower half of an interior masonry wall had been removed, was supported with wood stud framing, and appeared to be sagging. (1 of 2)



**Photo No. 14:** On the south side of the house, it appeared that the lower half of an interior masonry wall had been removed, was supported with wood stud framing, and appeared to be sagging. (2 of 2)

## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 15:** There were areas of sagging roof.



**Photo No. 16:** There was widespread rot and possible biological growth on most of the roof framing and decking.



## Appendix A - Photos

836 S. Laredo St. – Evaluation



**Photo No. 17:** On the first floor, approximately 40% of the flooring was rotted or missing entirely