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PHASE 1 IMMEDIATE ACTION REPORT

Report by:

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Report for:

City of Jonesboro
300 Church Street
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Building Location: 100 W. Washington Ave., Jonesboro, AR



Building Located at 100 W. Washington in Jonesboro, Arkansas
(Previously the Citizens Bank Building)

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Introduction

This report will address the building located at 100 W. Washington which is commonly known as the old Citizens Bank. The building is a 7-story structure with a basement and penthouse which is located at the northeast corner of the building. Per the available historic information of the building, the original 4-story building was constructed in 1954 and then 3 more levels plus the penthouse were added on top of the original 4-story building. The lower 4-story building is understood to be constructed out of concrete columns and a concrete floor slab with some masonry veneer. The 3-story addition (floors 5 through 7) are constructed using steel columns and a steel floor structure that supports a concrete slab.

On September 25, 2024, North Delta Engineering did a brief visual inspection of the building due to concern of the east wall structure deflecting outward toward Main Street. At that time, it was decided to close Main Street to traffic due to a structural concern of the east side wall structure. A more thorough structural inspection was made on October 1, 2024 to determine the immediate risk of the east side wall structure and to provide recommendations related to the wall structure. A more thorough inspection of the building structure and other wall structures can be made in the future after the immediate concerns have been addressed.

Discussion and Recommendations

Immediate Risk of Structural Elements

There are two areas where the exterior wall structure appears to have lost lateral support, and the wall structure has moved away from the building and is deflecting out to the east towards Main Street. See figure 1 and figure 2 below and photo 1 showing these areas. The wall structure area furthest north (between the stairwell and elevator structure) has moved the most and is the most concerning at this time. The area of concern for wall area N-1 is located between the 5th and 7th floor of the building between the stair structure and elevator structure. The area of concern for the wall area N-2 is more isolated and occurs above and below the 6th floor level.

The wall area around area N-1 (reference figures below) consists of vertical architectural precast concrete elements between porcelain enamel panels. The vertical architectural precast elements are considered non-load bearing elements and are primarily only carrying their own self-weight. The building structure is supported by steel columns and steel floor members that supports the concrete floor slab. The wall areas around area N-2 consists of vertical architectural precast elements between glass wall panels.

Wall area N-1 is deflecting outward (towards the east) several inches and appears to be at risk of collapse. The lateral ties from the steel beams to the vertical precast elements at area N-1 have been compromised and appears to have lost support for at least a twenty foot vertical length near the 6th floor level. Area N-2 is also deflecting outward (towards the east) several inches but does not appear to be as concerning as wall area N-1 at this time.

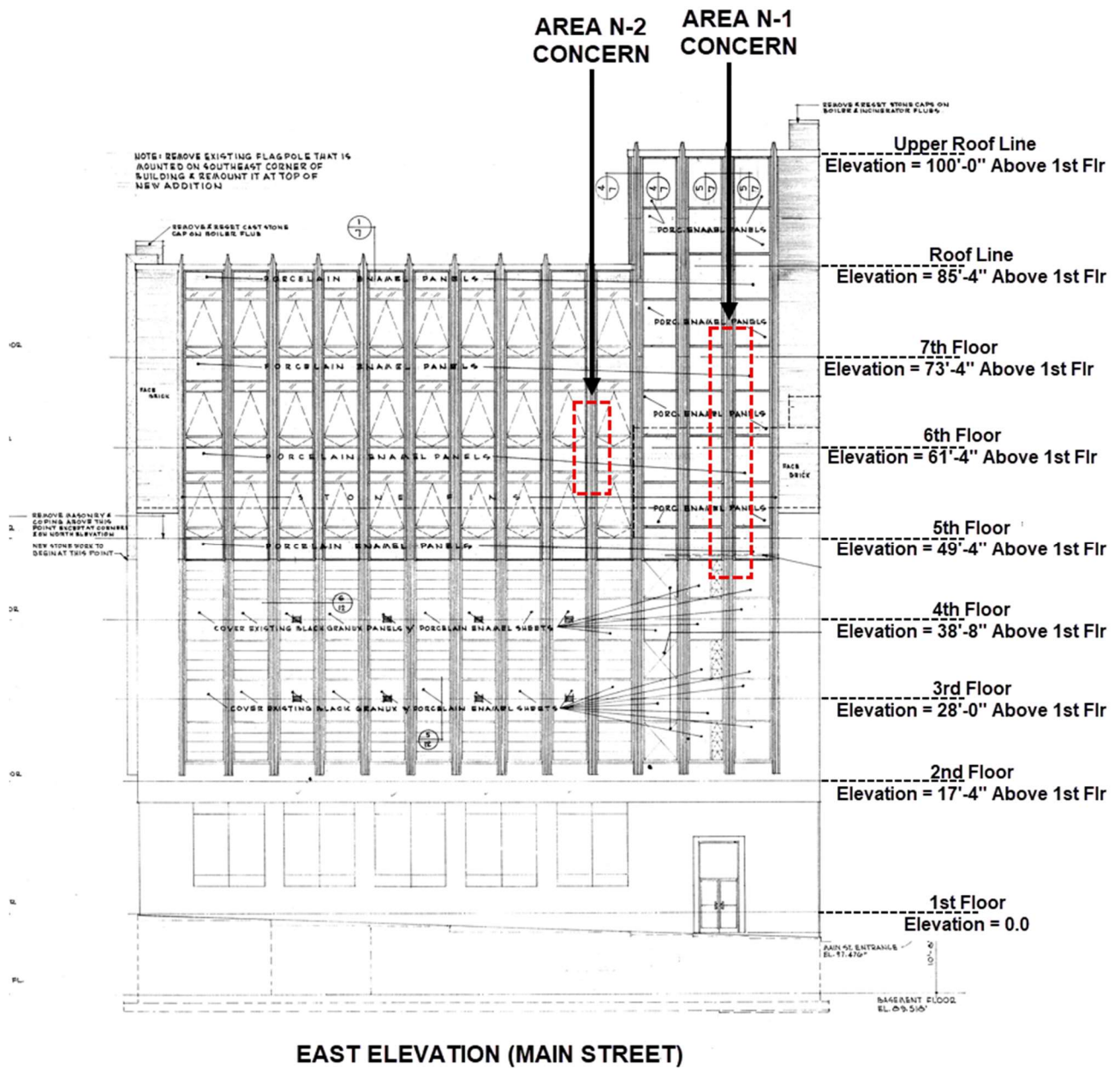


Figure 1: Elevation Showing Wall Areas That Have Lost Substantial Lateral Support

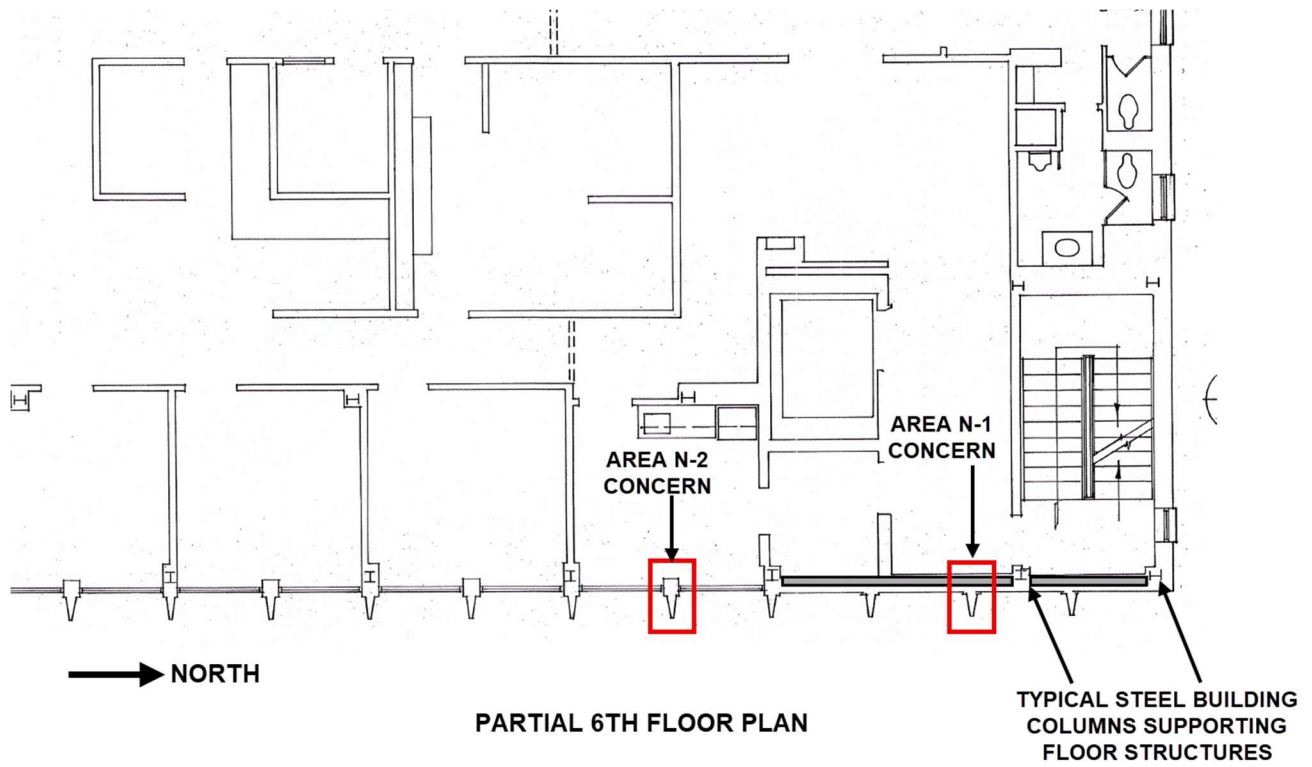


Figure 2: Floor Plan Showing Wall Areas That Have Lost Substantial Lateral Support



Photo 1: East Wall Elevation Showing Deflecting Wall

Access to the Building

Due to the potential risk of falling precast concrete elements over the Main Street entrance, it is recommended to no longer use the Main Street entrance and only use the Washington Avenue entrance to the building on the south side of the building.

Protection Wall in Front of First Horizon

Due to the risk of the vertical architectural precast concrete elements collapsing and falling away from the old Citizens Bank building, a protection wall is recommended to be constructed on the west side of the First Horizon building (located at 420 S Main Street) and on the west side of the Mutual of Omaha building (located at 408 S Main Street). The wall is recommended to be approximately 64 feet long and 16 feet tall to potentially protect any falling debris from entering or damaging the occupied these

two buildings. See figure 3 below for the recommended wall layout. The wall can be constructed approximately 32 feet north and 32 feet south of the unstable vertical precast at area N-1.

The wall is recommended to be constructed using steel scaffolding with 2x6 wood studs at 16-inches on center and attached to the scaffolding structure. The 2x6 wood stud wall should have 1 layer of 3/4-inch plywood nailed to each face of the wood studs. A lower diagonal 2x6 wood stud brace at 32-inches on center can be added at the bottom of the wall for additional lateral strength. A typical detail of the scaffolding and wood stud wall can be provided as needed.

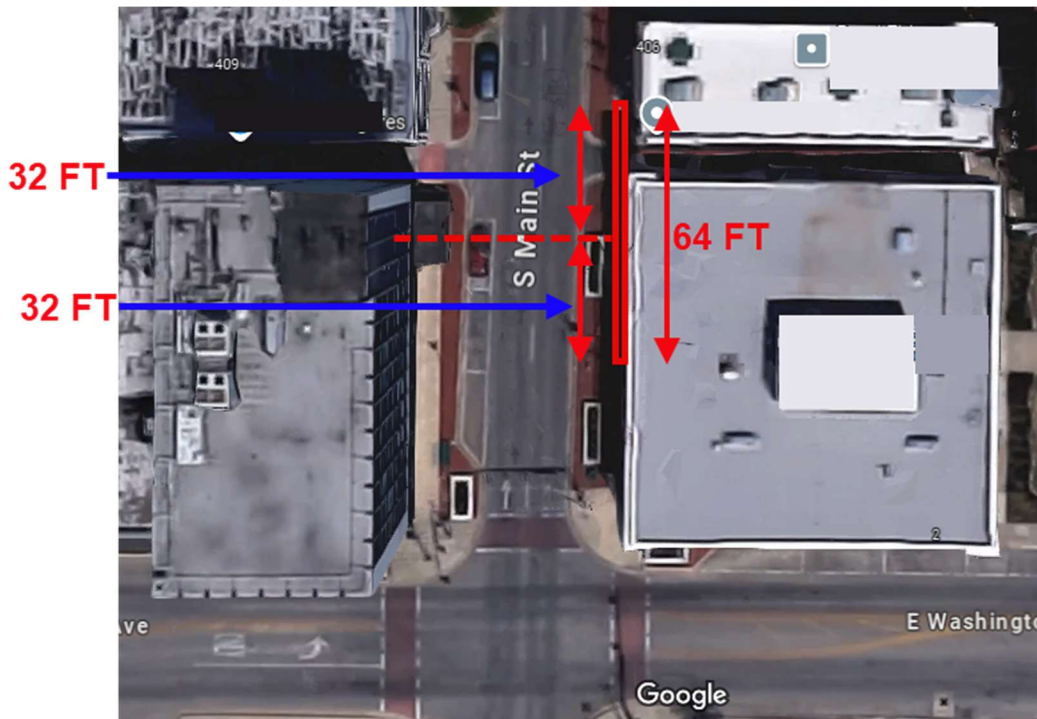


Figure 3: Aerial View Showing Recommended 2x6 Wood Protection Wall Location

Adding Lateral Bracing to Concrete Precast Columns

After the scaffolding and wood protection wall is constructed, it is recommended to add lateral bracing to the vertical precast concrete elements at area N-1 and N-2. This should be done before any other work or demolition begins on the structure. The lateral bracing should be made to area N-1 near the 5th and 6th and 7th floor levels and can be extended into the building and anchored to the concrete floor slab or some other solid structure. The lateral brace can be in the form of steel angles to grab the vertical precast concrete elements and stabilize them and possibly even pull them back into the building slightly. A licensed contractor should be engaged to add the lateral bracing to areas N-1 and N-2 before any façade removal begins.

Partial Façade Removal

After the lateral bracing is added to areas N-1 and N-2, it is recommended that portions of the east wall façade be demolished down to the 5th floor level (or the original roof elevation). The amount of façade that is to be removed can be a short term or a long term solution and should be discussed with the team. After portions of the façade are removed down to the 5th floor level, this will provide the opportunity to examine the east wall façade at this level and verify the structural integrity of the remaining wall structure below the 5th floor level. This will also provide an opportunity to inspect and discuss the brick veneer at the northeast and north side of the building.

In order to prevent wind loads from getting in the upper floors of the building after the existing façade has been removed, additional wall structure may need to be added to the east wall structure. Or consideration of the entire upper wall structures to be removed can be made.

Conclusion for Preliminary Findings

The recommendations made in this report are to address the immediate concerns of the unstable east wall structure. The recommendations may need to be modified based on whether the city officials want to provide a short term solution or a longer term or permanent solution. Additional details and design can be provided for the recommendations made in this report.

Additional investigation and structural evaluation are recommended as the project progresses. One area of interest for the long term stability and condition of the building is the connection of the three story steel structure that was added to the original four-story structure, and this has not been investigated yet. As existing information and construction details are gathered by the team, additional investigation and evaluation of other wall areas should be made (such as the south and west walls and other portions of the east wall).

Until the unstable elements on the east wall of the old Citizens Bank building are secured or removed, it is not possible to predict the risk of damage to the adjacent structures and their occupants from potential falling debris.

I appreciate the opportunity to provide this letter. Please contact me with any questions or concerns.

Sincerely,



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