

STRUCTURAL INSPECTIONREPORT

**“Harold Fisher & Sons” Abandoned Building
200 Ash Street
Delanco, New Jersey 08075**

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1.0 Executive Summary

As requested by Delanco Township, Environmental Resolutions, Inc. (ERI) performed a structural evaluation of the industrial building located at 200 Ash Street, Delanco NJ. The purpose of the evaluation is to determine if any structural deficiencies are present in the building that should be addressed prior to occupancy of the building. In addition, an investigation was conducted to determine if the structure is in danger of collapse or is an eminent danger to the public and adjoining residences.. Cosmetic and minor construction deficiencies are not addressed in this report. Our findings are based upon a visual assessment of accessible areas. No destructive inspections were performed. All opinions are based upon sound engineering judgment and industry standards. Structural inspections were performed on July 16th and August 6th by Harry Fox and Alex Haffner. Measurements and pictures were taken during both of these inspections, with any relevant information being included in this report.

The building is a three story brick structure with wood columns, beams and joists. The main portion of the roof is constructed with wood trusses and planks with a asphalt shingle covering. The two staircase areas and freight elevator shaft areas are covered with built up roofing. There is a basement with a concrete floor.

We have determined that there are four (4) main areas of concern with regard to the structural integrity of the building. The roof planks and joists in the Northwest corner of the building have been damaged by past water intrusion from a leaking roofing system, the support columns located in the center of the structure on the first and second floors are questionable, certain beams show signs of damage and failure, and the brick columns, arches and exterior walls are suspect at certain locations.. This report will address these four (4) areas of concern.

2.0 Roof Planks and Joists

There is roof damage at the Northwest corner which caused some damage and rot of the wood planking, and rafters. It appears that the damage is concentrated in the northwest corner and was previously repaired and supported. Should the building be repaired for permanent occupancy, further analysis of the repairs should be performed. The current condition of the roof would not be of concern with respect to an immediate hazard.



Rotted roof planks and rafters

3.0 Support Columns

The building contains one (1) row of 12"x12" support columns down the center which supports the first and second floors. The columns show signs of failure probably caused by live loads (material storage) placed on the respective floors. The damaged columns should be repaired or replaced if permanent occupancy is considered.



Center wood columns with cracks



Center wood columns with cracks

4.0 Brick Columns, Arches and Exterior Walls

The structure has 12"x12" wood beams spaced at 10 intervals that are supported by the center columns and brick columns located on the exterior walls. Certain brick columns show signs of failure mostly caused by rotted beam supports at each floor. The brick columns should be repaired if the structure is to remain standing.

The brick window arches show signs of failing at numerous locations. The probable causes of the failures are poor construction techniques and the failing columns. The arches should be repaired if the structure is to remain standing.

The exterior walls have significant settlement cracks caused by poor construction techniques and failing beams and columns. The exterior walls show no sign of bowing, therefore, at this time, there is no indication that an immediate collapse is pending. The exterior brick walls should be repaired if the structure is to remain standing.



Brick column with prior repairs



Brick column and rotted beam



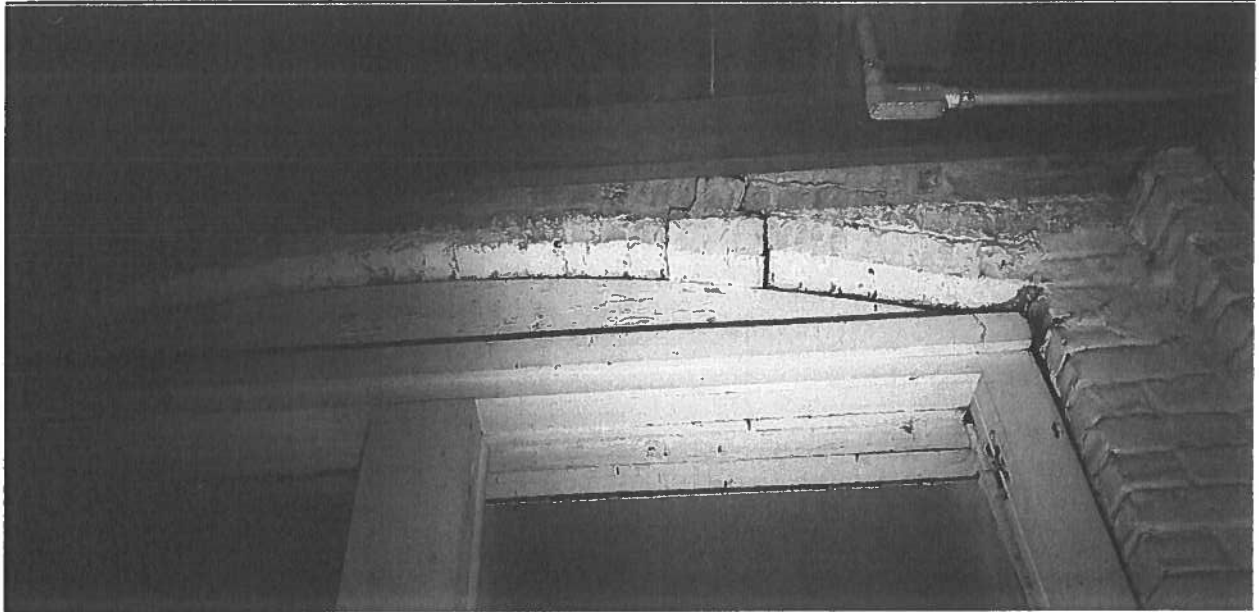
Brick column failing



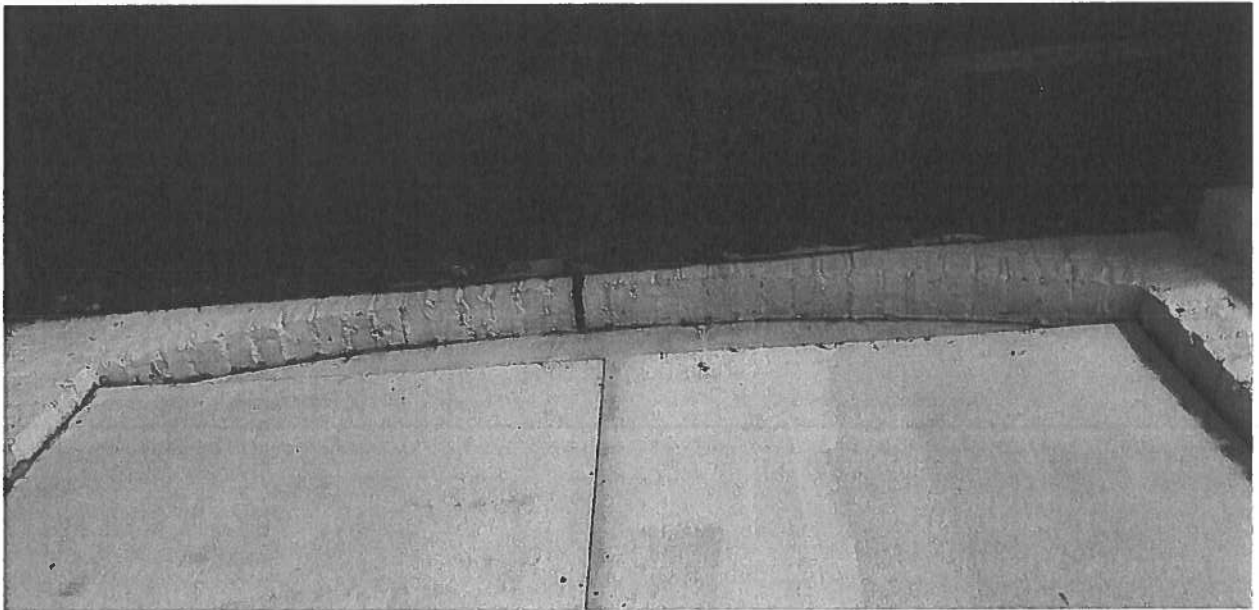
Brick column failing



Brick arch failing



Brick arch failing



Brick arch failing



Exterior brick wall failure



Exterior brick wall failure

5.0 General Conditions

There are several locations where repairs have been made to the structure over time. These repairs should be further analyzed for acceptance prior to permanent occupancy. All repairs should be made in accordance with standard building practices.



Previous repairs



Previous repairs



Previous repairs



Previous repairs



Previous repairs



Previous repairs



Previous repairs



Previous repairs

6.0 Conclusion and Estimates

There are three (3) options for this structure: Make the necessary repairs for permanent occupancy, make necessary repairs to make the building safe for an extended time but not for occupancy or completely demolish the structure.

The minimum structural repairs necessary to permanently occupy the building would include:

1. Further analysis of the previous repairs should be performed and addressed as necessary.
2. The damaged columns should be repaired or replaced.
3. The brick columns should be repaired.
4. The arches should be repaired.
5. The exterior brick walls should be repaired.
6. Repair all stairs.

Our estimated construction cost for the above structural work would be \$120,000.00- \$150,000.00
An additional \$130,000.00 would be needed for window replacement and miscellaneous repairs.

The minimum structural repairs necessary to make the building safe as a vacant structure:

1. The brick columns should be repaired.
2. The arches should be repaired.
3. The exterior brick walls should be repaired.
4. Repair all stairs.

Our estimated construction cost for the above structural work would be \$70,000.00- \$90,000.00

Demolish the structure

Our estimated construction cost for demolition of the structure would be \$85,000.00-105,000.00