

Harrison-Hamnett, P.C.

Consulting Structural Engineers

STRUCTURAL CONDITION REPORT

To: Ms. Christa Gaffigan
Farewell Mills Gatsch Architects, LLC

From: John N. Harrison, P.E.
Prepared by William J. Bocchieri, P.E.
Harrison-Hamnett, P.C.

Re: Structural Condition Survey Report
Darlington Schoolhouse
Darlington, N.J.

Date: April 26, 2005

As per your request, personnel from our office visited the site on April 13 to perform a walk-through structural condition survey of the referenced building. It is our understanding that your client, the New York / New Jersey Trail Conference, is considering purchasing the property primarily for office use, and our work is the structural due diligence portion of the process. The survey was mostly limited to visual effects since architectural finishes concealed most of the structural framing members.

Photographs were taken and are enclosed and referenced in this report to further clarify our determinations.

The building is a two-story, bearing wall structure with conventional wood floor and roof framing (see Photograph 01). It is our understanding that the building was originally constructed in 1891 for use as a schoolhouse. The first story has a stone facade, and the second story is finished with wood siding. There is a small, one story portion at the rear of the building which was inaccessible.

Throughout the entire building, the presence of architectural finishes prohibited our direct inspection of the structure, but there were no apparent signs of distress or failure. The front entrance of the building has a two story foyer with two symmetrical turned staircases leading up to a second floor landing. Most of the first floor space consists of a large, one story room with smaller rooms on each side, and the floors appear substantially strong and level.

There is a shallow crawl space beneath the first floor. It is visible through small vent openings in the exterior stone walls, but is inaccessible. Wood framing members are visible through the openings, but due to the small size of the openings and the lack of light, it was not possible to measure or inspect the framing (see Photograph 02).

The second floor space also primarily consists of one large, open room, flanked by smaller rooms on each side. There is a series of soffits in the first floor ceiling spaced at $\pm 10'-0"$ on center

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which likely conceal girders supporting the second floor above (see Photograph 03). Wood floor joists measuring 2" x 6" spanning perpendicular to the soffits were visible in a small hole in the ceiling. Also visible in this small hole appeared to be the web of a steel beam concealed in the soffit. It is likely that the second floor structure is supported by a series of steel beams that span between and are supported by the exterior stone walls. The second floor also appears substantially strong and level.

The roof framing consists of a series of exposed, heavy timber trusses spaced at $\pm 10'-0"$ on center (see Photograph 04). The trusses are supported by partially exposed, heavy timber posts in the exterior side walls. Continuous, partially exposed, heavy timber purlins are visible at the quarter points of the trusses. Wood roof rafters span between these purlins and run parallel to the slope of the roof. The roof rafters are mostly concealed by architectural finishes so their condition could not be assessed. A couple of the rafters were partially exposed by a small hole in the ceiling at the low edge of the roof near the back of the building. New plywood roof sheathing is visible in this area, indicating that at least some of the original roof sheathing has been replaced.

All of the exposed heavy timber framing appears to be in good condition and does not display any signs of rot or decay. There are some small gaps, on the order of a 1/4" or less, visible at some of the truss/post connections (see Photograph 05). This indicates that there has been some past movement in the building, the exact cause of which is beyond the scope of this report, but this is not necessarily a cause for concern. Any such gaps should be filled with hardwood shims and their condition should be monitored for any further movement.

There is a small, accessible, unfinished attic over the front foyer (see Photograph 06). The roof rafters and attic framing appear to be in good condition and there are no apparent signs of distress. Some of the original roof sheathing in this area has also been replaced with plywood sheathing. An "Oct-90" mill date was stamped on one sheet of plywood, indicating that this renovation work was likely performed during the early 1990's.

The exterior stone facade appears to be in good condition. There are no apparent signs of distress, and there are only a few minor cracks visible in some of the mortar joints. This is not unusual for a building of this age.

The soffit fascia boards on the underside of the roof overhang are damaged in a few locations (see Photograph 07). These areas should be repaired to prevent water infiltration into the building.

The exterior steel stair on the side of the building is in poor condition (see Photograph 08). The stringers and landings are uneven, and the framing members are severely rusted. This stair should be removed in its entirety and rebuilt if desired.

Conclusion

The overall structural system for the building is in good condition. The structure has adequately

resisted all applied loads in the past without sign of distress or failure. It is our opinion that with basic and timely building maintenance, the structural system will continue to adequately support anticipated office usage and anticipated external loads in the future. There will most likely not be any major structural conditions that will arise and need major attention during renovation work. It is our opinion that the overall structural condition of the building is adequate and there are no structural concerns that would prevent this purchase.

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