

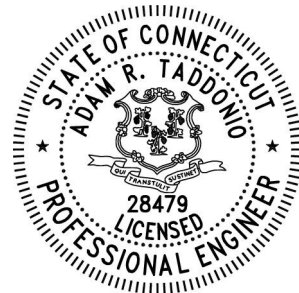
# STRUCTURAL INSPECTION REPORT

24 Roxbury Road  
New Britain, CT 06053



Inspecting Firm: Taddonio Engineering, LLC

Date of Inspection: January 11, 2024



*Adam R. Taddonio*

**Scope:**

The scope of this inspection was to conduct a general structural assessment of the house and then report on any findings. The conclusions shown in the report are based on the visual inspection and engineer's professional opinion.

**History:**

The single family house was originally built in 1854 with an addition to the rear side. The foundation consists of concrete walls and a slab floor. For orientation purposes, the house is considered to have front, rear, left and right sides when facing from street.

**Inspection Findings and Conclusions:**

The inspection findings and conclusions are listed below.

-There are several settlement cracks in the walls of the foundation visible from the exterior and interior sides. There are also cracks in the floor slab of the basement.

-The right wall of the foundation has a noticeable outward tilt when viewing from inside the basement. The tilt appears minor at the current time but it is unclear when the movement started.

The area around the house has a well documented history of severe flooding during heavy rain events. The pictures provided by homeowner, show that the water channels from behind that house and travels to the retention pond area across the street in front of the house. The channel connecting the areas behind and in front of the house travels through the driveway area, along the right side of house. There is also flooding in the area to the left of the house as well. The movement of water in and around the foundation can cause erosion of the supporting soil near the foundation. When enough soil is eroded away, the foundation will settle and shift. The defects and movement seen in the foundation is believed to be the direct result of this flowing flood water. There are no other obvious causes for the defects seen. The fact that the right wall has the tilting and other walls do not, coincide with the flowing water along the right wall. The surface flood water needs to be controlled in order to stop the further progression of movement in the foundation. The long term effects can be structurally compromising to the foundation and structure above.



View of flood water traveling through the driveway from behind the house.



View of water travelling over street to retention area in front.



View of standing water flooding basement.



View of right foundation wall.



View of settlement crack in right wall.



View of left side of house.



View of basement floor slab with cracking and dampness.



View of inside face of right wall with outward tilt.



View of tilt in right foundation wall.