



STRUCTURAL INSPECTION REPORT

INSPECTION CONDUCTED BY DEVIN SPARKS, PE (LICENSE #37868)

INSPECTED ON OCTOBER 16TH, 2025

*585 S Upper St, Lexington, KY 40508
South Hill Station*



Prepared by:
S & W Engineering LLC
4865 Todds Road, Lexington, KY 40509
(606) 471-8017 — (405) 482-9680
bwest@swengineering.us — dsparks@swengineering.us
October 24, 2025

Contents

Project Scope	2
Inspection Findings	2
Recommendations	2
Engineer Certification	3
Exhibits	4

Project Scope

The purpose of this inspection was to evaluate the structural condition of the roof members, beams, and exterior awning system for the South Hill Station building located at 585 S Upper Street in Lexington, Kentucky. The inspection covered approximately 37,000 square feet of roof area divided into three sections, as well as an approximately 2,000-square-foot awning structure attached separately to the building. The inspection aimed to identify any visible signs of structural distress, deterioration, or deficiencies that may affect the integrity or performance of the roof and awning systems.

Inspection Findings

Access to the roof beams, framing members, and roof decking was limited to certain interior areas within the building. Observations were made from accessible vantage points where feasible.

1. Roof Beam and Framing Condition

The roof beams and primary framing members were accessible in limited areas. Within these locations, the beams appeared structurally sound with no visible signs of distress, deflection, or cracking. All observed framing members (Exhibit 1) appeared to be in satisfactory condition at the time of the inspection.

2. Roof Decking Condition

The underside of the roof decking was visible from certain interior locations, seen in Exhibit 2, though direct access to it was limited. From these vantage points, the decking appeared dark and damp in color, suggesting prolonged moisture exposure. Additionally, several soft spots were noted on the roof surface during the inspection. Based on these observations, it is likely that portions of the roof decking have been negatively impacted by roof leaks and moisture intrusion. The decking should be replaced in areas where it is determined to be water damaged.

3. Surface Rust on Steel Posts

Minor surface rust was noted on the vertical steel I-beam posts, seen in Exhibit 3. The corrosion appears superficial and has not compromised the structural capacity of the members at this time.

4. Moisture at Roof/Canopy Transition

Moisture was observed along the brick wall, seen in Exhibit 4, where the canopy meets the roof transition. This moisture intrusion may continue to deteriorate the brick and potentially impact the foundation if not addressed.

5. Altered Steel Beams

Five (5) out of the eight (8) steel I-beams at the ceiling level have undergone significant modifications, shown in Exhibit 5. A portion of each beam—up to approximately six (6) feet—has been removed and replaced with one to two steel angles. These alterations significantly reduce the original load-carrying capacity of the members.

6. Out-of-Level Beam at Awning End

The beam located at the end of the awning was observed to be out of level and shows signs of movement, as shown in Exhibit 6. The beam does not appear to be adequately connected to the adjacent structure.

7. Rust and Moisture on Decking

The majority of the metal decking associated with the awning system shows moderate to significant rusting. Rust and moisture were also observed near beam connections, seen in Exhibit 7, which may accelerate deterioration if left untreated.

Recommendations

Based on the observations made during the inspection, the following actions are recommended:

1. Replace roof decking in all areas where water damage or deterioration is present. Address any active roof leaks contributing to the observed soft spots to prevent future structural degradation.

2. During replacement of the surrounding roof decking, the roof beams and framing members should be further inspected once exposed. If any beams are found to be damp, corroded, or show signs of degradation, we recommend replacing the affected beams to ensure continued structural integrity.
3. Sand and repaint the steel I-beam posts to prevent further corrosion.
4. Properly seal the roof-to-canopy transition area to prevent water from flowing down the brick wall and contributing to long-term moisture damage to the wall or foundation.
5. Replace all modified steel I-beams (five total) with new beams of equivalent or greater structural capacity to restore integrity to the awning system.
6. Reconnect and properly level the end beam of the awning to ensure continuous load transfer and lateral stability.
7. Replace or repair the sections of decking showing significant rust. Inspect and seal all beam penetrations and connections to prevent further moisture intrusion.

Engineer Certification

This inspection was conducted to assess existing structural conditions based on visual observation of accessible areas. No destructive testing or invasive evaluation was performed. The conclusions and recommendations presented herein are based on conditions observed at the time of inspection.

If additional issues are discovered during repairs or renovations, S & W Engineering LLC should be contacted for further review to ensure continued structural integrity.

Exhibits

The following exhibits are included with this report:



Exhibit 1: Roof Beam and Post



Exhibit 2: Roof Decking



Exhibit 3: Rust on Steel Posts



Exhibit 4: Moisture of Brick Wall



Exhibit 5: Altered Steel Beams



Exhibit 6: Out-of-Level Beam



Exhibit 7: Rusty Awning Decking and Beams