Building Defects Inspection Report

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**Building Defects Inspection Report
Property Address:** 123 Maple Avenue, Riverside
**Date of Inspection:** November 5, 2024
**Inspector:** Mark Thompson, Certified Building Inspector
**Client:** XYZ Development Corporation

### 1. Introduction

* **Purpose of the Inspection:** To identify visible defects and provide recommendations for remediation.
* **Scope of Inspection:** Comprehensive evaluation focusing on structural integrity, systems functionality, and safety compliance.

### 2. Inspection Methodology

* **Inspection Methods:** Detailed visual examination, supplemented with diagnostic tools.
* **Tools Used:** Thermal imaging, moisture meter, and structural scanner.

### 3. Executive Summary

* **Overall Condition:** Multiple significant defects identified that require urgent attention to prevent further deterioration and ensure safety.

### 4. Detailed Findings

#### 4.1 Structural Issues

* **Foundation Cracks:** Large cracks observed in the southeast corner of the foundation, suggesting possible subsidence.
* **Roof Sagging:** Evidence of sagging roof trusses indicating potential structural failure.

#### 4.2 Water Damage

* **Basement:** Signs of ongoing water penetration and damage evidenced by mold growth and weakened floor joists.
* **Bathrooms:** Water leakage around toilet bases causing floor damage.

#### 4.3 Electrical Defects

* **Outdated Wiring:** Cloth-insulated wiring found in several areas, posing fire hazards.
* **Circuit Breaker Issues:** Several circuit breakers in the panel are faulty and do not trip under test conditions.

#### 4.4 Plumbing Issues

* **Corrosion:** Visible corrosion on pipes in the basement plumbing system, risk of leakage.
* **Hot Water System:** Inefficient water heater with signs of corrosion and leakage.

#### 4.5 HVAC Concerns

* **Inefficient System:** The HVAC system is over 20 years old, inefficient, and does not distribute air evenly throughout the building.

#### 4.6 Safety and Compliance

* **Fire Safety Violations:** Missing smoke detectors in key areas; existing detectors are out of date.
* **Staircase Compliance:** Non-compliant with current building codes due to inadequate railing height.

### 5. Photographic Evidence

* **Photos Included:** Detailed images of the major defects noted during the inspection.

### 6. Recommendations

* **Immediate Repairs:** Address foundation and roof structural concerns immediately to prevent catastrophic failure.
* **System Upgrades:** Replace the entire HVAC system and update electrical wiring to meet current safety standards.
* **Water Damage Remediation:** Undertake comprehensive moisture remediation and replace damaged structural components in the basement and bathrooms.
* **Safety Upgrades:** Install new smoke detectors and bring stair railings up to code.

### 7. Conclusion

* **Summary of Inspection:** The building exhibits several critical defects that require urgent attention to avert potential dangers and ensure functionality.
* **Inspector's Comments:** Given the age and condition of the building, a significant investment in repairs and upgrades is necessary to bring it up to code and ensure long-term usability.