



Case Study: Grange Farm - Specialist Parapet Repair and Refurbishment



Project Overview

A specialist parapet repair project was undertaken to restore the structural integrity and appearance of an existing parapet system. The works required a tailored approach to ensure compliance with industry standards while maintaining continuity with the existing structure.

Special Considerations

The bridge on which the works were completed serviced an equestrian centre which was active at the time of the repairs. This meant that careful communication and consideration was needed to ensure minimal disruption was made to the works and safe passage was allowed for riders and horses alike.



Initial Assessment & Survey

A comprehensive site survey was conducted to:

- Assess the extent of deterioration and corrosion
- Identify structural deficiencies
- Determine the most appropriate repair methodology

This initial phase ensured that all works were carefully planned, risk-assessed, and aligned with project requirements.

Access & Safety Measures

To ensure safe working at height, Combisafe edge protection was installed across the work area. This provided:

- A compliant and secure working platform
- Fall prevention for operatives
- Minimal disruption to surrounding operations

Fabrication & Installation

Replacement parapet panels were:

- Custom-manufactured to match the existing design and dimensions
- Finished with a galvanised coating to provide long-term corrosion resistance

The new panels were then:

- Welded into position with precision
- Installed with allowance for thermal expansion, ensuring durability and preventing stress-related damage over time

Surface Preparation & Protective Coating

Existing parapet posts showing signs of deterioration underwent a full refurbishment process:

1. Removal of existing paint and corrosion back to a sound substrate
2. Surface preparation to ensure optimal coating adhesion
3. Application of a 3-coat highways moisture cure paint system, providing:
 - High durability in exposed environments
 - Excellent corrosion protection
 - Long service life



Quality Assurance & Compliance

To ensure compliance with industry standards:

- Paint thickness testing was carried out in accordance with NHSS 19A requirements
- All coatings were verified to meet specified tolerances and performance criteria

Outcome

The project successfully delivered:

- Restored structural integrity of the parapet system
- Enhanced corrosion resistance and lifespan
- Seamless integration with existing infrastructure
- Full compliance with safety and quality standards

Key Benefits

- Improved safety for users and maintenance teams
- Reduced future maintenance requirements
- High-quality finish consistent with existing structure
- Long-term protection against environmental exposure