

SUPPORTIVE STATEMENT

To form part of Listed Building Application
For Harmony, Gosford Road, Longniddry



Prepared
By

MILL ARCHITECTS

March 2024

CONTENTS

Chapter One	Introduction & background
1.0	Background information
1.1	Property Details
1.2	History and significance of site
1.3	Previous Works
Chapter Two	Existing Photos & Conditional Survey
2.0	Existing Window Condition
Chapter Three	Proposed Scope of Works
3.0	Proposed Scope of Works
3.1	Conservation replacement options
	3.1.1 Crittall style window replacement
	3.1.2 timber frame window replacement
3.2	Justification of the works
Appendix One: Existing Photos & reference plans	

Chapter One Introduction & Background

1.0 Background Information:

The owner of Harmony, has appointed Jo Parry-Geddes (RIAS Conservation Accredited Architect) from Mill Architects to act as Conservation Architect for the proposed window alterations to this listed property. The property is a two storey Arts and Crafts villa in Longniddry. The proposal encompasses replacing all existing windows (a mixture of steel Crittall, Upvc and timber) with new 'visually identical' aluminium Crittall style windows to improve the buildings uniformity, functionality and its thermal efficiency.

The purpose of this statement is to support the Listed Building application and to provide additional information regarding the property and the proposed scope of works.

1.1 Property Details:

Property: Harmony, Gosford Road, Longniddry
Listed: Category 'B' Listed
Period: Thought to be built in 1933

1.2 History and significance of site:

The property is category 'B' listed and sits on Gosford Road, a primarily residential area in Longniddry. The building itself is set back from the public road and is not visual from Gosford Road due to gardening screening the house from the road.

Extract from Historic Environment Scotland listed building description as follows:

Tarbolton and Ochterlony, dated 1933. Asymmetrical Arts and Crafts villa; 2-storey, 5 bays, harled with ashlar cills. S ELEVATION: 3 bays to left under U-gable, bridged at centre above doorway; roll-moulded ashlar surround to door with semi-circular pediment broken by abstract relief, dated 1933; boarded door. 4-light windows flanking at ground, tripartite window to each gable at 1st floor. 2 bays to left; 4-light window at ground, slate hung swept dormer above to attic, garage opening to outer left.

N ELEVATION: gable to centre with stair window, advanced piended single storey and attic wing to left, bow window at ground to right. 2 slate-hung swept dormers to attic. Steel-framed, multi-pane casements. Silver-grey (Westmorland ?) slates to steep piended roof, swept eaves. Harled, ashlar coped stacks tieh original cans.

1.3 Previous Works:

The building has had previous alterations carried out to the existing windows over the years. There is now a mixture of 3 different window materials to the property totalling 27 windows. The majority of the original steel Crittall windows remain to the front, whilst the previous Crittall windows to the rear have been replaced in Upvc (by the previous owner). Original timber windows remain to the North West corner of the house.

Although work has been carried out previously there is no planning history associated with the property however as we are aware the majority of the windows have been altered over the years and therefore are not original.

Chapter Two Existing Photos & Conditional Survey

Refer to Appendix 01 for existing photos/annotations of windows.

2.0 Existing windows condition:

As noted above there are 3 window types to this property. Following a fairly in depth conditional survey it has been determined that all of these window types both internally and externally are in extremely poor condition with many having damages such as cracked glass panes, water ingress causing rotting and mould as well as painted frames restricting windows to open causing lack of ventilation. There is ongoing deterioration that is now becoming detrimental to the significance of the property.



Timber windows



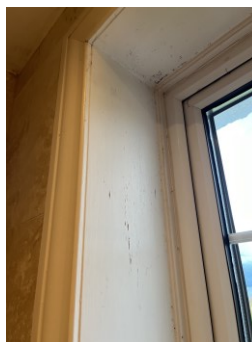
Upvc windows



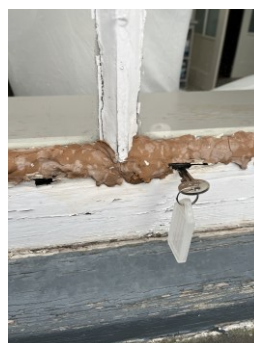
Steel crittall windows

All windows are now proposed to be replaced due to the following defects:

- Timber frames & astragals: Are rotten beyond repair, causing water ingress and damage to internal finishes.
- Steel Crittall: Have been beyond repair for a number of years. The frames and original fabric are now eroding and rusting. None of these windows are functional as they do not open due to their age/being painted shut/ironmongery no longer working.
- Double glazed Upvc: Was installed by a previous owner, the false astragals are positioned within the double glazing units. Many of these units have now failed and the double glazing has 'blown' with internal condensation being noticeable from the outside.



Water ingress: Is noted throughout the property around all window types due to the failure of the window fabric and surrounding sealant.



Rotten timbers: to the NW corner of the building are beyond repair and require to be replaced in their entirety. Their position (open front to the sea) makes them vulnerable to the weather and sea air. The timbers are all very soft. Note these windows are fixed with no function of opening.

2.0 Existing windows condition (cont):

Cracked Glass Panels: Some windows have cracked glass panes due to the ageing and weathering of the windows. Replacement of the glass is difficult due to the poor condition of the steel/frames.



Steel rust/deterioration: The steel Crittall windows are of an age now that they are deteriorating and rusting beyond repair. The ironmongery no longer functions and is stuck in place with rust, paint and mould. The refurbishment of these windows is simply not possible due to their current condition and demise.



Lack of ventilation throughout the house: Throughout the property the windows have been painted shut and are unable to open. The current owner has a problem with correct ventilation throughout the property (and often has to open the front door to get some air in as the majority of windows do not open). As there is poor ventilation mould growth and poor air quality are ongoing problems.

Natural ventilation needs to be restored to provide a healthy environment for the occupiers.



Failed double glazing: A number of the previously replaced Upvc double glazed units have now failed. Causing internal condensation in between the glass panes. The owner is aware that the Upvc is not in keeping with the traditional aesthetic of the property and whilst it is noted these windows are failing and enabling water ingress there is a strong desire to replace these with new Aluminium 'visually identical' Crittall glazing.



Chapter Three Proposed Scope of Works

3.0 Proposed Scope of Works:

The proposed works includes replacing all 27 windows to create a uniform appearance to the building. It should be noted that it is proposed that the existing single glazed Steel Crittall style and double glazed Upvc windows are to be replaced with new double glazed aluminium framed Crittall style matching the same window arrangements as the existing windows. However, the timber windows (3 windows) to the NW corner are proposed to be replaced in timber and new FINEO vacuum glazing.

The use of FINEO glazing is advantageous within heritage buildings. It provides excellent thermal performance with U-Values of 0.7W/m²K compared to narrow profile double glazing 1.4W/m²K and aesthetically is 'one' pane of glass allowing original 'thin' astragals sizes to be replicated when replacing timbers with new. The glass is sustainable and thermally efficient, perfect for the positioning of this corner which is exposed to the more extreme weather.

The existing Upvc and Steel Crittall style windows are proposed to be replaced with double glazed aluminium Crittall windows with the replacement windows to be 'like for like' aesthetically with the existing window layout.

3.1 Conservation replacement Options:

3.1.1 Aluminium Crittall Style Windows Replacement:

Alitherm Heritage Crittall style (or equal and approved) aluminium windows provide an alternative window type to steel Crittall windows and have many advantages for historic listed buildings. Installation of Alitherm Heritage (or equal and approved) would provide advantages such as:

- Improved thermal efficiency with a U-Value of 1.5W/m²K
- Ease of maintenance compared to traditional steel Crittall windows
- Functionality - As the current windows are unable to open replacing the windows will allow them to be openable improving ventilation within the building
- Using Alitherm Heritage (or equal and approved) will allow for the best match to the existing window layout.
- Cost effective compared to traditional steel Crittall windows

3.1.2 Timber Frame Window Replacement:

The existing timber framed windows are proposed to be replaced with new timber framed windows with FINEO vacuum glazing as FINEO glazing units have excellent advantages to listed buildings. FINEO units fit within timber framed windows and astragals meaning the windows can be replaced like for like to retain the historic features while also improving the thermal performance of the building. Both FINEO and narrow profile double glazing units were considered however FINEO was chosen for the following reasons:

	FINEO	Narrow Profile
U-Value (W/m ² K)	0.7	1.4
Thickness (mm)	7.7	11
Weight (kg/m ²)	20	20
Warranty/Life Span	15 Years	5 Years
Cost	££	£

- **Life Span:** As seen in the table above the warranty/life span of Narrow Profile is significantly shorter than FINEO. This is because narrow profile tends to fail after a few years due to the working with thin sized astragals that many historic buildings have such as Harmony House.

Chapter Three Proposed Scope of Works

3.1 Conservation replacement Options (Continued):

- **Efficiency/Performance:** As shown above Fineo has a better U-Value than narrow profile therefore is more energy efficient while retaining the same window layout and sizes. Although narrow profile double glazed units can fit within existing timber frame windows they require more depth than fineo and would increase the existing astragals sightline.
- **Aesthetic:** Fineo 'one' pane of glass allows for original 'thin' astragals sizes to be replicated when replacing timbers with new compared to narrow profile requiring wider overall sightlines to perform effectively therefore Fineo gives a more 'original' feel.

Fineo is manufactured in Europe reducing carbon emissions, it would result in reducing the buildings carbon footprint due to its high insulated properties as well as the glazing being 100% recyclable.

3.2 Justifications of the works:

The work proposed aims to restore and consolidate the buildings window fabric which is currently a mismatch of failing materials of different sorts. Double glazed Aluminium framed Crittall style windows is proposed due to the following benefits:

Thermal Efficiency: Aluminium windows can be designed with thermal breaks and insulated glazing to improve energy efficiency that offers excellent u-value which is an advantage over Steel Crittall windows that have poor insulation properties.

Longevity: While steel it corrosive and will age and weather over time requiring more maintenance and regular treatment, Aluminium is resistant to corrosion making them low maintenance as there is impact caused by UV light or rust of aluminium.

Strength: While steel is a strong material aluminium is also extremely strong however unlike steel it does not become brittle in cold temperatures.

Ease of installation: Aluminium is lightweight compared to steel and it very easy to be fitted.

Practicality: The owner is extremely keen to consolidate all the windows in his property to retain and enhance the "Arts and Crafts" style of the property. Having looked at the steel versus aluminium options it was clear that aluminium was not only the better material in terms of functionality and thermal efficiency but far more economically viable.

Aesthetics: The intention is to mimic the same dimensions of frames and astragal sizes as original and to that end there would be minimal aesthetic difference from the steel Crittall. With regards to the replacement of the Upvc, the aluminium Crittall if of course a much better fit for the a traditional property of this nature and would reinstate the previously intended design.

The proposed windows would enhance the fabric, the architectural style and uniformity of the whole house. The existing windows are deemed beyond repair threatening the existing fabric and to that end a solution must now be proposed that will fit in with the house both from an aesthetic, longevity and thermal point of view. Aluminium Crittall allows for all of these factors without being detrimental to the character or quality of the property. It should be noted that the proposed replacement Crittall solution have been given Listed Building consent widely throughout the UK and are an excellent solution to ongoing window failure issues.

In general the proposed use of Aluminium and timber Fineo as a framing material would not be harmful to the Listed building. The most consistent use of one material with only 3 windows to be timber would allow the building to maintain uniform appearance compared to the current mix of materials used at present.

APPENDIX ONE—EXISTING PHOTOS & REFERENCE PLANS

