From: Frnc Sinc
Sent: 30 July 2019 22:34
To: Mark Hill; Ailsa Teasdale; Building
Subject: Attn Suzanne Lilley-Buildling Conservation Team -10 South End Osmotherley- NYM/2017/0722/LB-Window, Insulation & roof pantile details.

10 South End Osmotherley- NYM/2017/0722/LB-Window, Insulation & roof pantile details.
Attn:
Suzanne Lilley-Buildling Conservation Team
Mark Hill Head of Planning
Ailsa Teasdale - Senior Planning Officer

Please find information as discussed with Mark Hill and requested to be sent to Building Conservation Team in connection with the above planning application for:

Heritage slimline double glazing replacement windows etc

* Sections
* Text & photos of condition

Internal Insulation to external surfaces

* Internal Insulation to external surfaces & Roof Pantiles as required

K. Livingston

The installation of internal insulation to external surfaces is proposed to address the issues associated with heating the property and providing a breathable environment more suited to the original construction to reduce internal damp arising from the differences in temperature between the internal and external surfaces.

The original dwelling is formed from external solid loadbearing walls and roofs that have been subject to a number of treatments over the years.
Major renovation works were carried out in 1985 including internal plastering and roof replacement but without adopting measures suited to the nature of the original construction. The lack of insulation has caused internal condensation and difficulties in heating the original building and it is proposed to address these problems by the provision of breathable internal insulation and remedial measure to interfaces with the external environment. All plasterwork surfaces are basic with no special moulding, cornices or architraves. Some of the plastering appears to be a mix of plaster patching and types, some of it crumbling, some damp and some in reasonable condition.

The proposals will require removal of some areas of plasterwork to the internal faces of external walls where the plaster is non permeable and its replacement with lime plaster.
The supply and fixing of internal breathable insulation panels using insulated fixings and finishing coats of lime plaster prior to painting with permeable paint. The proposed wood fibre board is a rigid natural insulation material manufactured in accordance with EN13171. It not only has good thermal conductivity properties in the range of 0.039 to 0.044 W.K but also its breathability helps regulate the internal climate of a building. It has frequent use on heritage and listed properties.
The repointing where appropriate of the external stonework with lime based pointing as opposed to cement based pointing.
The replacement, amendment and repair of rainwater goods with spacer fixings in cast iron, painted black, to minimise damp impact on adjoining stone wall faces.

Following some detail investigation it is proposed to use Lime Green based products or similar breathable insulation measures:

• Manufacturer: Lime Green Products Ltd

- Address: Coates Kilns, Stretton Road, Much Wenlock, Shropshire, TF13 6DG

• Product reference: Lime Green IWI System

• Substrate: Existing / New / brickwork / stonework
  - Preparation: Not required / Beecks Fungicide to existing wall / re-point with lime/ remove existing impervious coatings
  - Levelling coat: Not required - existing lime plaster / Lime Green Duro Natural >10mm

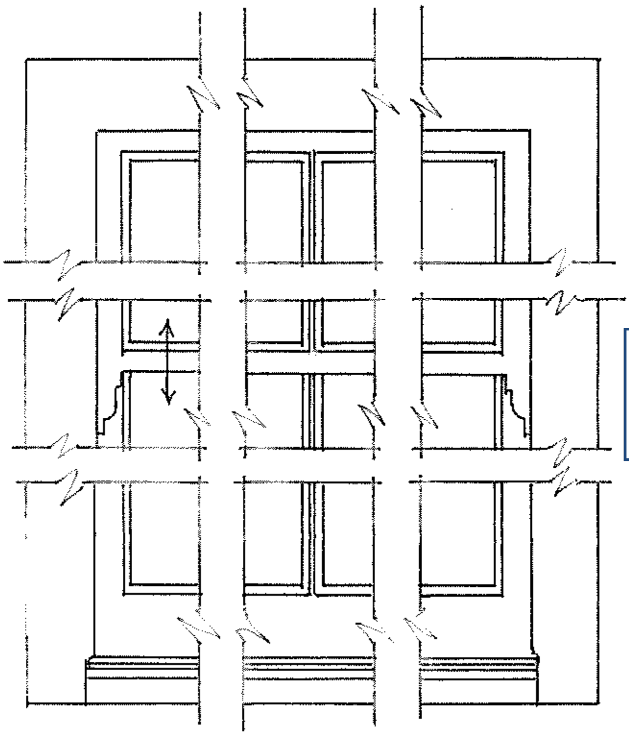
• Woodfibre Insulation – natural breathable
  - Product Thickness: 20 / 40 / 60 / 80 / 100mm Square Edge board
  - Fixing: WT or WTS

• Plaster
  - Plaster re-enforcement mesh: Lime Green 454 mesh
  - Plaster 10-12mm thick apply in two passes with mesh between passes.
    - On Woodfibre boards: Lime Green Solo wood float finish / sponge & steel trowel.

• Paint
  - Aglaia wall paint / Beeck Insil

Accessories as appropriate: Fischer Thermax , Ejot Spiral anchor.

Roofs being replaced or repaired will reuse their existing tiles from the reroofing work carried out in 1985, following the replacement of appropriate sound structural timber sections.
The main roof to the original dwelling was not reroofed at this time and although some of the old pantiles may be able to be reused when its repair is undertaken, some may require to be replaced where beyond their useful life. New replacement tiles proposed are to match existing or similar thought to be 'Barco Natural Red' manufactured by William Blyth.

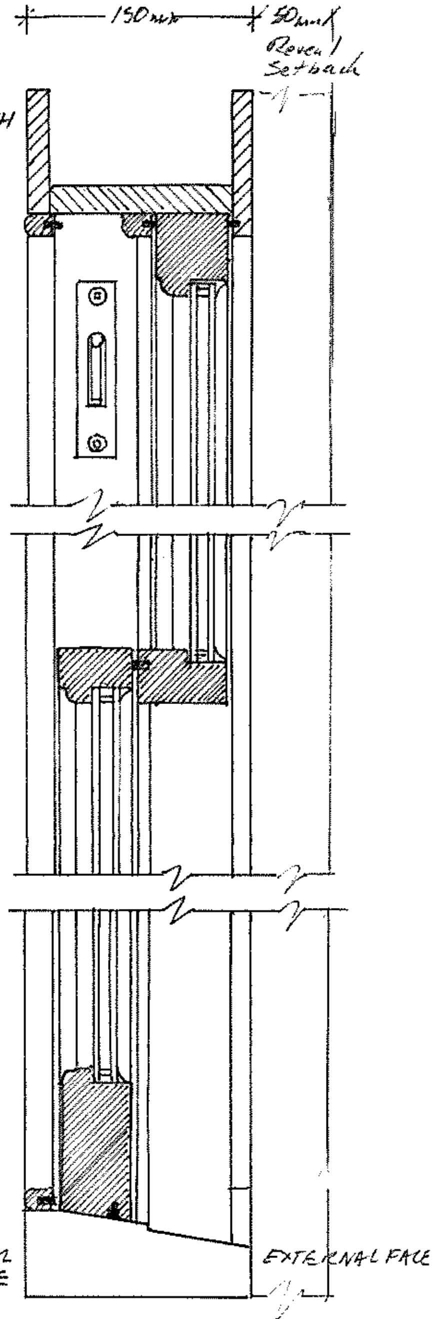


EXTERNAL ELEVATION – REAR SASH WINDOWS
2 PANES OVER 2 PANES 1:10@A4

Windows to replace windows previously replaced in 1985
Existing openings for vertical sash windows to be used with same glazing pane proportions.
Glazing bars to be Ovolo pattern as current.
Windows to be timber framed set back 50mm from face.
Glazing to be slimline with low E gas filled double glazing
Timbers to be Accoya with hardwood cills.
(Window replacements in 1985 used softwood and joints are now coming apart with elements suffering from rot and loss of adhesion)

Any new windows to be in similar material but normal double glazed casement windows without glazing bars. (This applies where no previous glazing [illegible] making use of previous openings [illegible] of smaller dimensions. Style to be in keeping with existing heritage [illegible] frame proportions and set back 50mm from building facade.

VERTICAL SECTION – TOP & BTM SASH 1:5 @ A4.



NYMNPA
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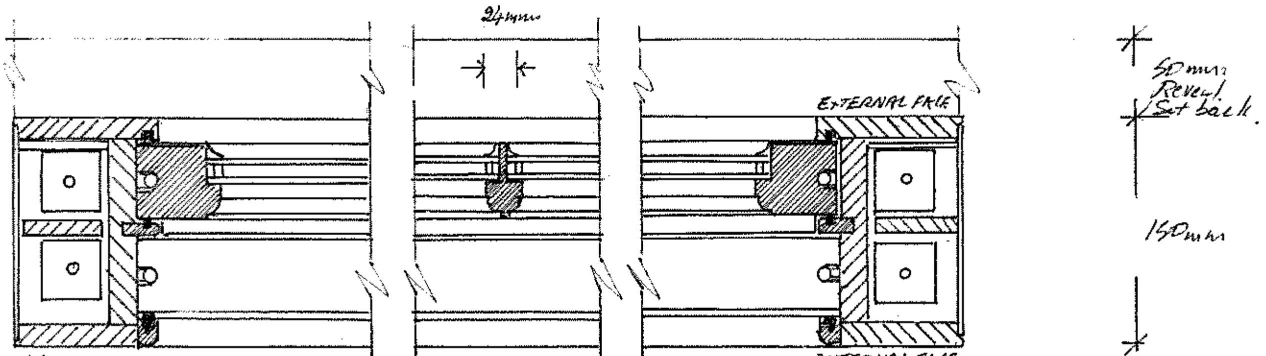

HORIZONTAL CROSS SECTION – TOP SASH
1:5 @ A4

ALL DIMENSIONS FOR FITTINGS TO BE CHECKED ON SITE.

No 10 SOUTH END OSMOTHERLEY
PROPOSED WORKS TO FORM ONE DWELLING AND REPAIR & MAINTAIN EXISTING FABRIC.
DRNG 4 PROPOSED REPLACEMENT OF NON HISTORIC FABRIC VERTICAL SLIDING SASHES NOW REQUIRING REPLACEMENT WITH SIMILAR PROPORTIONS BUT MORE RESILIENT

NYMNPA

31/07/2019

Proposed replacement of single glazed softwood, non heritage fabric, vertical sliding sash windows with resilient timber and hardwood heritage, slimline double glazing to meet requirement for replacement of existing vertical sliding sashes to rear of property.

All of the windows to the rear of the property were replaced in their entirety in 1985. The workmanship was basic and used softwood. The windows were due for external painting at the end of 2018 but this has been held back in the hope of being able to provide new units rather than paint over a dilapidating situation. The property is very exposed on this façade to the elements with extremes of harsh blizzards and baking hot sun. The level of condensation, rain and ice is such that the softwood frames are unable to withstand the extremes of temperature and this has caused the frames to lose their integrity with the expansion and contraction of elements causing movement and rot especially at the junctions. In some cases, minimal pressure on the rotting timber would create an opening between the outside and the inside.

In the context of the listed building it is proposed to replace the softwood windows with accoya timber frames and hardwood cills that have extended years guarantee against wood rot and distortion. The existing and proposed glazing bars are ovolo in profile varying between 23mm and 24mm in overall width. A number of joinery repairs have taken place to some of the more damaged external elements as part of cyclical maintenance and painting since 1985, with like for like replacement but these are unlikely to withstand the extremes of temperature for a reasonable period of time.

The current frames are disintegrating and although not obvious, the photo at No 4 shows apparently unpainted wood when in fact the bonding of the softwood timber bead glued to the surface has failed, dropping off the window and removing the protection previously afforded from the elements. Photos 1 to 3 show internal views of the varying degrees of rotting and movement of the vertical sliding sashes to the rear of the building. As the movement in the frames continues to cause gaps to occur, the integrity of the frame is lost and the glazing becomes less secure especially with the loosening and banging of frames, with the give and take, during high winds. The down draughts associated with single glazing impact on the internal environment making it difficult to keep the rooms warm and still retain an element of daylight whilst giving rise to a high level of condensation impacting on the current softwood frames.

The windows to the front of the dwelling, facing North on to the Highway also had major work undertaken in 1985, namely new cills, sashcords, fastners, frames and and casings in softwood which have had further subsequent like for like replacements. However the sliding sash windows themselves date back earlier than that with machine drawn glass and 24mm width lambs tongue profiled glazing bars. It is proposed that secondary internal glazing be used to address the problems of extreme condensation and improve the internal temperature. The better position would be to replace the whole of the windows frames etc with more resilient timber such as accoya and hardwood and whilst retaining the historical glazing. There are a number of bespoke firms who undertake this work providing slimline double glazing with the outer pane being historic glazing to match the exiting, however a suitable way forward to undertake this has yet to be confirmed and until that occurs it would be proposed to implement secondary glazing to the existing north facing windows to the front of the building facing on to the Highway.