

Additional Essential Works at Pentland House, Penicuik.**Report by: Kevin Anderson, Head of Customer and Housing Services.****1 Purpose of Report**

This report is to inform Council of unforeseen essential works required to be carried out as part of the current refurbishment project at Pentland House, Penicuik. The report advises on the technical and financial implications of the proposed works including additional resources and materials required and details the anticipated time scales.

2 Background

2.1 Following Cabinet approval on 18 November, 2014 for the reuse of former care home at Pentland House for temporary accommodation to accommodate homeless households, the partial refurbishment works are currently being undertaken to convert the building to a fully compliant House of Multiple Occupation (HMO) to reduce the number of homeless households currently residing in bed and breakfast establishments.

2.2 Current project status

The works carried out so far match the initial programme and have progressed well over the past few weeks. The project scope of works required includes;

- Full electrical refurbishment of existing small power and lighting.
- Upgrading of all External escape doors, internal pass doors and fire doors.
- Upgrading of existing lounges to communal kitchen areas.
- Upgrading of existing bathrooms and shower rooms.
- Creation of a small number of self contained flats.
- Re – commissioning of existing boilers and hot water system.

2.3 Specialist works

Prior to any works being carried out to Pentland House an Asbestos Survey was carried out to the entire building by a specialist contractor. The results from the survey highlighted that all ceilings throughout the building were served with an Artex coating and that insulated Asbestos panelling served the service runs to the corridors.

The initial plan was to have the specialist contractor remove the insulated asbestos panelling under fully controlled conditions; remove completely all existing light fittings, smoke detectors and the like and to have them install MDF pads in their location.

2.4 Unforeseen essential works required

On removal of the insulated asbestos panelling it was found that the underside of the concrete floors within the building were served with a 50mm thick layer of polystyrene, to lessen heat dispersal from the electric heating elements within the concrete floor slabs, for the under-floor heating.

2.5 Refurbishment compliance

To comply with current Building Standards requirements each bedroom, kitchen, lounge and corridor in the building must provide a certain period of resistance against fire. All the partition walls within Pentland House are brick built and therefore provide enough resistance against fire between neighbouring apartments and common areas.

2.6 Issues with in situ polystyrene

Since the inclusion of the polystyrene at time of construction complied with statutory legislation, subsequent construction research over the years has proven that polystyrene of this type will expel dangerous gasses such as Styrene and Benzene when exposed to heat and fire. In these circumstances there is a high probability that residents and staff may be exposed to toxic gasses during the 'safety' fire resistance period.

2.7 In situ polystyrene and Building Standards compliance

There is no requirement within the Building Standards legislation to remove polystyrene insulation as part of refurbishment works, however, Council's Building Standards service agreed that 'best practise' should be followed in these circumstances, where the polystyrene is removed in its entirety.

2.8 Options available

There are 3 options proposed to address the issue;

2.8.1 Option 1

As there is no requirement under Building Standards legislation to remove polystyrene during refurbishment works, the Council could leave the polystyrene in place along with the Artex ceilings and revert to the initial plan of installing MDF pads at existing fitment locations.

2.8.2 Option 2

Again, given that there is no requirement under Building Standards legislation to remove polystyrene during refurbishment works, the Council would have to engage a specialist contractor to encapsulate the existing polystyrene and Artex ceiling by over sheeting all affected ceilings with fire retardant plasterboard.

This would negate the requirement for MDF pads to new fitments however, further fire stopping measures would need to be adopted to seal all edges, abutments and the like of the over sheeting. The pipe boxing to all rooms would need to be fire rated also at time of works.

2.8.3 Option 3

Under 'best practise' the Council would engage the specialist contractor remove the Artex ceilings along with all existing timber framework and polystyrene complete and dispose from site. Midlothian Council operatives would re-frame the ceilings; install new efficient (fire retardant) insulation to the underside of the concrete floors then re-plasterboard. Again, this would negate the need for MDF pads for new fitments. As with option 2, the pipe boxing to all rooms would need to be fire rated also at time of works.

3 Report Implications

3.1 Resource

3.1.1 The associated costs for each option detailed above are;

- Option 1: £3,783
- Option 2: £60, 735
- Option 3: £138,065

The separate cost plan appendix provides the detailed breakdown for each option. There is sufficient provision in the HRA Capital reserves to meet the respective cost options.

3.2 Risk

3.2.1 Risk involved with Option 1

The risk involved with leaving the ceiling void make-up as is, is that in the event of a break out of fire the polystyrene will become exposed to heat and fire rapidly due to the lack of existing fire resistance between the apartments, communal areas and their ceiling voids. The main risk being exposure to toxic gasses during the 'safe' fire resistance period.

3.2.2. Risk involved with Option 2

Risk involved with encapsulating the existing ceiling voids is that the Council cannot guarantee that all gaps and voids will be filled sufficiently with Intumescent materials to stop heat or fire from reaching the polystyrene.

In addition, the Council would need structural calculations carried out to recommend retro – fit anchors required to the existing timber framing to carry the additional weight of fire retardant plasterboard.

3.2.3 Risk involved with Option 3: The risk involved with option 3 is measured as negligible. All reasonable steps will have been taken to eliminate all practicable risk of fire spreading.

4 Summary

- 4.1** This report has identified the project particulars; its current status in terms of works completed to date; findings after removal of asbestos containing materials; options available including any associated risk and the financial implications regards resources for each option.

5 Recommendations

Council is recommended to approve Option 3 as the most effective and best safeguard to address the issues detailed in the report.

Date: 19 August 2016

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Appendix: Option cost estimates

