Appendix 1 – Progress of Sprinkler System Installation

1 INTRODUCTION

1.1 On 4th April 2018 Stockport Council (SMBC) presented an update on the work of Stockport Homes (SHG) to the Housing Commission to install sprinkler systems to twenty two high rise buildings

1.2 The report recommended that SHG employ a Mechanical and Electrical consultant with experience in this field to produce a detailed design and tender pack. Following survey work and consultation with Greater Manchester Fire and Rescue Service (GMFRS) and SMBC Building Control this report details those findings.

2 BACKGROUND

2.1 The Grenfell Tower fire was reported at the twenty four storey tower block in North Kensington at 23:54 GMT, leading to 40 fire engines and more than 200 firefighters tackling the blaze. It took until 00:14 GMT, over 24 hours later to get the fire under control, with the fire affecting most floors of the building and destroying 151 homes, both in the tower and surrounding areas.

2.2 London Fire Brigade (LFB) have confirmed that the fire originated in the kitchen caused by a fridge-freezer, the start of the fire was not deliberate.

2.3 Once the fire broke through the flat window it spread rapidly up the building, general opinion is that the major contributing factor to the speed in which the fire spread was due to the cladding and insulation. Since the fire Government has undertaken a number of tests through the Building Safety Programme to establish the role of the cladding and insulation material.

2.4 SHG manages six tower blocks that are cladded, all buildings have passed rigorous safety testing by the Building Research Establishment (BRE) and are certified to the required BR135 standard.

2.5 A joint decision by SHG and SMBC has been taken to retrofit sprinkler systems across its high rise stock. SHG Assets Team have carried out wide ranging consultation with SMBC, GMFRS, Fire Risk Assessors and KGA Partnership, a number of reports have been presented and endorsed by Board, SHMT and Leadership Forum supporting the proposals to date.

2.6 It is expected that changes to legislation will be recommended as part of the Grenfell Inquiry, a central discussion point has been around the requirement to install sprinklers. It is currently a requirement to install sprinkler systems to new build high rise buildings, it is currently unknown if this will be applied retrospectively.

2.7 SHG has a strong track record investing in fire prevention works. SHG has led Greater Manchester in implementing type four assessments and a subsequent five year remedial programme of works is due for completion in 2018/19.

3 BUILDING REGULATIONS

3.1 The current Building Regulations for England require sprinklers to be fitted to new domestic high-rise blocks over 30 metres high, currently there is no legal requirement to fit sprinklers to existing high-rise blocks.

3.2 As part of the response to Grenfell Tower the Governments Building Safety Programme has undertaken a review of the Building Regulations led by Dame Judith Hackitt. A number of recommendations have been made around process and management of buildings, these recommendations currently sit with Government, SHG have been proactive in understanding the recommendations and are in a strong position to implement any required changes.

4 MECHANICAL AND ELECTRICAL CONSULTANT SURVEYS

4.1 In April 2018 SHG appointed KGA Partnership, Chartered Building Services Consulting Engineers to issue a performance specification for the purpose of tendering fire suppression protection at twenty two high rise buildings. The properties were split into eight archetypes and are detailed in table one below;

Archetype	Scheme	Postcode	No. of Flats
Type 1	Beaver House	SK1 4ER	68
	Brecon Towers	SK5 8JW	68
	Conway Towers	SK5 8JN	68
	Dunton Towers	SK5 8NR	68
	Hollow End Towers	SK5 8NY	68
	Heaton Towers	SK4 1ST	68
	Lenham Towers	SK5 8NP	68
	Ludlow Towers	SK5 8JL	68
	Norris Towers	SK4 1SU	68
	Romney Towers	SK5 8ND	68
	Voewood House	SK1 4ES	68
Type 2	Lincoln Towers	SK1 3PG	121
	Millbrook Towers	SK1 3NL	121
	Mottram Towers	SK1 3NX	121
Type 3	Hollywood Towers	SK3 0HL	123
	Ratcliffe Towers	SK1 3PB	123
Type 4	Hanover Towers	SK1 3PG	99
	Pendlebury Towers	SK1 3NL	99
Type 5	Radnor House	SK3 9HW	46
Type 6	Bowden House	SK3 9HL	40
Type 7	Palatine House	SK3 9HT	40
Type 8	Lancaster House	SK3 9AF	40

4.2 As part of the preparation of the documents a number of meetings have been held with key partners including GMFRS and SMBC Building Control to determine requirements of the proposed systems. GMFRS and SMBC Building Control have advised they support the installation of the systems based on the below key principles;

- The systems are designed in accordance with BS9251:2014
- The systems are installed in flats and high risk communal rooms (such as bin rooms)
- Communal landings and reception areas are deemed sterile areas and therefore do not require sprinkler coverage
- The system includes an alarm panel so once activated it is known which floor in a particular building the system has discharged

4.3 Field surveys have been undertaken by KGA Partnership with support from SHG Mechanical Manager. Surveys of each building, including access to a number of flats has been carried out.

4.4 The surveys included assessment of incoming water mains and pressures. In the majority of cases the existing water supply and potable tanks can be utilised, however, Palatine and Lancaster House will require a dedicated external enclosure local to the building to house a new tank and sprinkler pump due insufficient internal space within the buildings.

4.5 Alternative systems have been considered by KGA Partnership, such as misting systems, however these have been deemed inappropriate for retrofitting in high rise buildings. GMFRS have advised their preference be a sprinkler system.

5 PROGRAMME

5.1 Consultation with GMFRS, KGA Partnership and Independent Fire Risk Assessors has been undertaken to outline the planned five year programme and understand the running order of works based on the buildings priority.

5.2 Advice from GMFRS is that Hanover and Pendlebury Towers, Lancashire Hill should be prioritised on programme due to the single staircase layout and the height of the building. This recommendation is supported by KGA Partnership and Independent Fire Risk Assessors.

5.3 It is currently expected that all twenty two tower blocks will be completed over a three to five year period, the consultant surveys have estimated works at £10million and SHG will budget from the HRA capital programme. A competitive tender exercise will provide SHG with costs to budget and programme the works accurately.

5.4 SHG will now undertake a detailed consultation exercise with customer to outline the benefits of the proposed works and undertake a tender exercise with a view to starting works onsite in 2019/2020 at Hanover and Pendlebury Towers, Lancashire Hill.

6 CONCLUSION

6.1 This report sets out the initial findings from KGA Partnership and outlines the consultation with GMFRS and SMBC to date. SHG now hold detailed specifications for the proposed installation works together with information that will allow the Assets Team to budget accurately.

7 RECOMMENDATION

7.1 It is recommended that;

- SHG undertakes customer consultation to outline the works presenting clear, concise and detailed information on sprinkler systems.
- SHG completes a competitive tender exercise utilising the joint procurement routes developed through the Greater Manchester High Rise Task Force
- SHG works with Greater Manchester Fire and Rescue Service, SMBC Building Control and Insurers to further develop and implement a scheme at Hanover and Pendlebury Towers, Lancashire Hill

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