



Heritage Statement

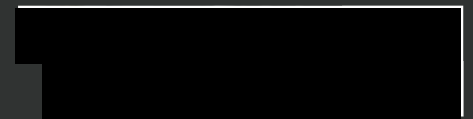
for

Low-rise Cladding Remediation

On behalf of

Barnet Homes

Block Addresses:



1st March 2024

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1.0 INTRODUCTION

1.1 Background & Exclusions

- 1.1.1 Capital PCC were engaged by Barnet Homes to undertake surveys to establish the nature and extent of combustible cladding on low-rise dwellings (up to three storeys) within the borough which are believed to be timber-framed. The action was prompted following a fire at a property with similar archetype which occurred on the 8th of June 2023 and resulted in severe damage to a terrace of four, two-storey houses, resulting in a recommendation for all four houses to be demolished. Although there were no fatalities or serious injuries one householder had to be rescued as they were unable to self-evacuate. As a result, Barnet Homes wished to assess properties which were at risk of a similar occurrence, with a review of potential preventative measures.
- 1.1.2 The Capital report into the fire at Moss Hall Grove highlighted that the most likely causes of the rapid fire-spread were via the combustible external cladding material which bridged across the compartment lines between houses, via the boxing-in of the roof eaves and potentially between the head of the compartment party wall and the underside of the roof covering.
- 1.1.3 Capital was therefore asked to prepare a project which seeks to remediate the inherent fire safety failures at these properties by designing a scheme to reclad the buildings. This has the added benefit of introducing insulation into previously uninsulated homes.
- 1.1.4 This report looks at the heritage value of the existing properties within the wider context of the Watling Estate Conservation Area and explains how the proposals of the cladding remediation scheme have been designed to be in harmony with the existing and/or original design intent.

1.2 Limitations

- 1.2.1 This document is confidential and for the exclusive use of Barnet Homes. It may not be assigned to or relied upon by a third party without written agreement of Capital Property & Construction Consultants Ltd. It is however accepted that the report will be disclosed to Barnet Council Planning Department and is likely to be disclosed to freeholders.
- 1.2.2 It should be noted that the recommendations as detailed within this report are subject to further review as the project moves into the full design stage.
- 1.2.3 Capital retains all copyright and other intellectual property rights in the document and its contents unless transferred by written agreement between Capital and the client.
- 1.2.4 The findings and opinions expressed are based on the conditions encountered and/or the information reasonably available at the date of issue of this document and shall be applicable only to the circumstances envisaged herein.

2.0 Site Location and Context

2.1 The Watling Estate Conservation Area

- 2.1.1 The Watling Estate is located at Burnt Oak between Edgware, Mill Hill and Colindale in the northwest part of the London Borough of Barnet.
- 2.1.2 The estate is located between the disused Mill Hill East to Edgware railway to the north, the Edgware Road to the west, Grahame Park Estate to the south, and the parallel lines of the M1 and St Pancras to Bedford railway to the east. The Edgware branch of London Underground's Northern Line runs through the south-west of the area with Burnt Oak station sited within the estate itself. The land undulates gently leading up and away from the Silk Stream, which runs north south through the middle of the area, and also rises to the north towards Edgware. The Watling Estate Conservation Area covers 158 hectares of land. The topography of the Watling Estate Conservation Area is a key characteristic and has been fundamental to the planned layout and inter-relationship appreciated today between the built form, roads, and open spaces.
- 2.1.3 Watling Estate Conservation Area has a diverse community, living in approximately 4,000 homes comprising around 3,600 houses and 400 flats. The overall density of the estate at the original point of development was 10.7 homes per acre and there are 41 acres of parks and playing fields. According to the 2001 Census, approximately 3,934 households live within the estate, served by schools, medical centres, churches, two shopping areas, a library, and sports centre also located within its boundary. The Census indicated that approximately 40% of the homes are rented out by the local authority and 4% by housing associations. Around 1% of residents rent their properties through a shared ownership scheme, 46% of homes are owner occupied, and 9% of dwellings are privately rented. The vast majority of the conservation area is therefore in residential use and tends to be quiet during both the day and night with patterns of movement and activity relating to those associated with daily personal routines.
- 2.1.4 Informal greens, grass verges, roundabouts, central traffic islands and street corners all work to create a green and open feel to the area, and the wider streets have wide green verges on the back edge of pavements. In the main the public green spaces and street trees are well maintained, although the maintenance of private gardens is patchy.
- 2.1.5 Properties within the Watling Estate include a variety of construction types, though all feature concrete or clay pantile roofs and modern uPVC windows. Traditional style brick and concrete dwellings are the most numerous, however timber frame, timber clad properties are also abundant along with the non-traditional 'Atholl' houses, constructed of steel panels rivetted to prefabricated steel frames. The development is typically laid out in short terraces or clusters and the building line staggered to break up the appearance of frontages. Properties also have relatively spacious plots with front and rear gardens, the former typically now changed to hardstanding for off-street parking.

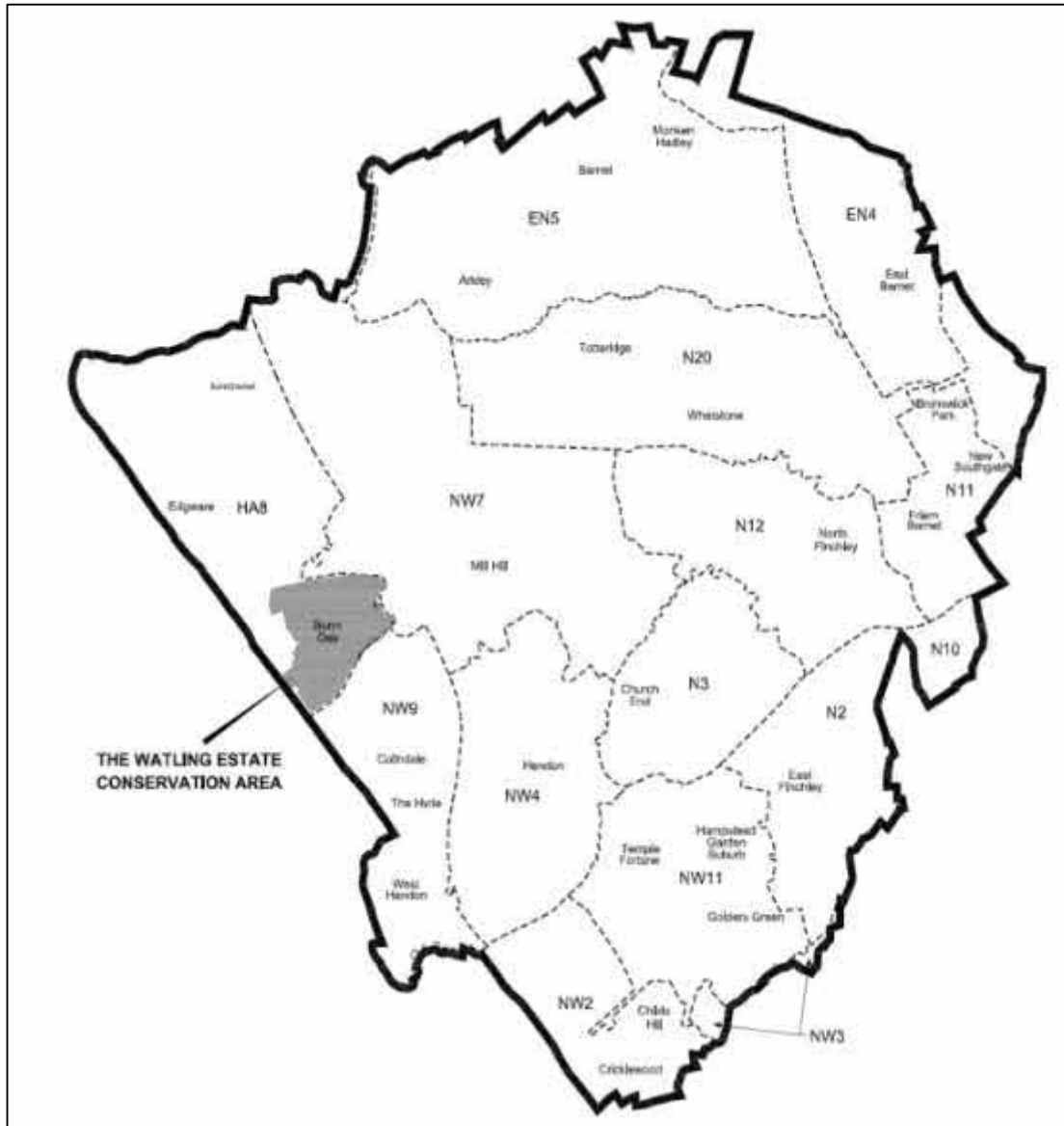


Fig.1: The Watling Estate, shown by the arrow, relative to the Borough of Barnet, outlined. Source: Barnet London Borough Council.

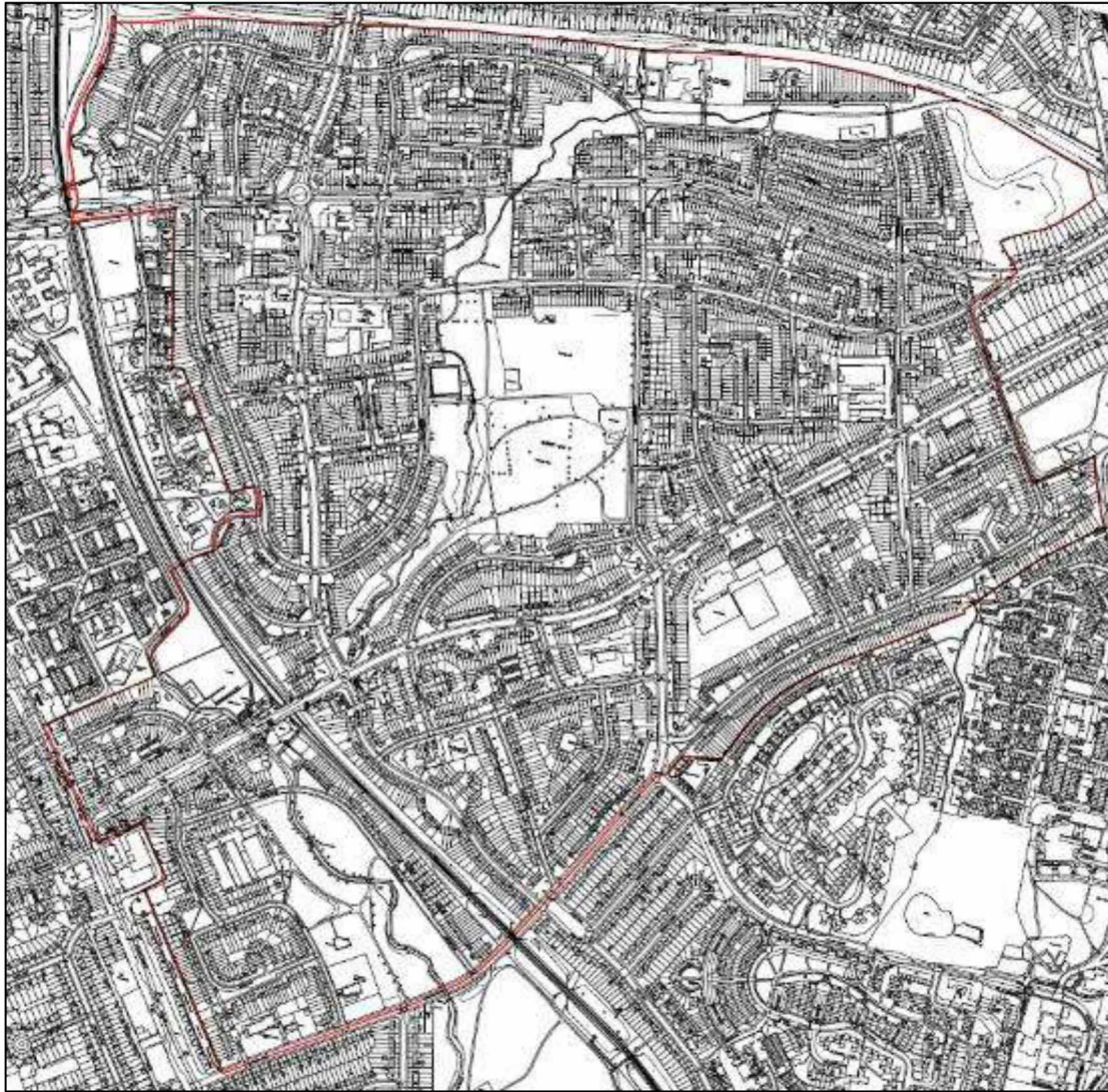


Fig.2: The Watling Estate, outlined in red. Source: Barnet London Borough Council.



Fig.3: An example of a terrace of timber construction houses, with feather edge boards applied over a timber frame



Fig.4: An example of more conventional brick construction properties.



Fig.5: Timber properties and steel properties positioned next to each other on a corner with grass verges, a typical layout style for the area.

3.0 IDENTIFIED HERITAGE ASSETS

3.1 Rationale

3.1.1 The National Planning Policy Framework (NPPF) requires that all heritage assets affected by the proposed development are identified and their significance, which includes setting, are described. The level of 'harm' the proposed works will have to the identified heritage assets also needs to be determined within the context of a Heritage Statement.

3.1.2 This section of the document identifies the principal heritage asset – Watling Estate Conservation Area

3.2 Watling Estate Conservation Area

3.2.1 The Watling Estate Conservation Area was designated on 8th April 1998, and the current conservation area appraisal was adopted in 2007.

3.2.2 Burnt Oak Broadway runs directly to the west of the Watling Estate. It follows the route of the pre-Roman part of Watling Street, which crossed the Thames around Lambeth and, by Roman the period, ran on to St Albans. Long distance roads such as this did not necessarily generate settlements except where there was a further localised reason for growth, such as a market. This was not the case at Burnt Oak and little development was attracted to the area until the last century. The Hyde, to the south of Watling Estate, was first recorded in 1281 but appears to have been the only settlement along the Edgware Road between Cricklewood and Edgware for around 600 years.

3.2.3 The Watling Estate itself did not exist before the 1920s. Prior to its development, the land was purely agricultural, with a handful of privately owned farms, the largest being Goldbeaters Farm, a few scattered Edwardian villas, fields, hedgerows, and trees. Significant development did not really start until 1924, spurred on by the arrival of the northern line. Today the built environment in and around Edgware epitomises 1930s suburbia.

3.2.4 In 1890, the Housing of the Working Classes Act was passed by Parliament, paving the way for a government programme of inner-city slum clearance and replacement house building on the periphery. Following the First World War, with soldiers returning home in need of houses and jobs, and a precarious post war economy, the government made a promise of 'Homes for Heroes'. This resulted in pressure to accelerate and expand the house-building programme and in 1919, a new Housing and Town Planning Bill was presented to Parliament, establishing the provision of working-class housing as a statutory duty of local authorities.

3.2.5 The historic context of the Watling Estate is also contributed by the Addison Act (Housing Act 1919) which required councils to provide housing, helping them to do so through the provision of subsidies. This was, in effect, the birth of council housing, and developments carried out by the Council were to be built to the Tudor Walters standards.

3.2.6 The Tudor Walters Report – named after the author – recommended a set of standards for council house design and location for the next 90 years. The committee sort to profoundly influence the general standard of housing in this country and to encourage the building of houses of such quality that they would remain above the acceptable minimum standards for at least sixty years. The committee regarded it essential that each house should contain a minimum of three rooms on the ground floor (living-room, parlour, scullery) and three bedrooms above, two of these capable of containing two beds. A larder and a bathroom were also essential.

3.2.7 Housing was to be in short terraces, spaced at 70 feet (21m), at a density of 12 per acre (30/ha) in town or 8 per acre (20/ha) in the country. This was to allow the penetration of sunlight even in winter. There was to be secondary access to the sides of semi-detached houses and by ground floor passages through larger terraces. These terraces should be a maximum of eight houses long.

The advantages of cul-de-sacs were noted as cheap method of providing services and preventing through traffic. The Committee noted the advantages of a varied provision of housing types and not restricting an estate to one social class.

- 3.2.8 Deep, narrow-fronted byelaw terraced houses were to be avoided as the rear projection reduced air flow and light to the back of the house (the middle-room problem). Wider frontages were preferred. A Tudor Walters house had an average frontage of 22 feet 6 inches (6.86 m). The living room should be a light room and ideally a through room. The house-building programme received substantial State funding and was seen as a means of stimulating the post-war economy. When the bill was passed, it was accompanied by a design manual, which emphasised the need for ‘good houses, adequate in size, equipment and amenity to afford satisfactory dwellings for the working man’s family.’
- 3.2.9 The first London County Council (LCC) estates were initially within the then-existing London metropolis. However, a combination of land prices and space restrictions soon resulted in these areas not being viable for the low density, relatively self-contained, estates that were being encouraged by the planning and design ethos of the time. The LCC therefore looked to out of town sites that were located along the new underground lines, making them accessible. Watling Estate was one of the largest of these estates, along with the Beacontree, Bellingham, and St Helier estates.
- 3.2.10 The decision to build at Watling Estate, to the designs of the architect George Forrest, was taken in 1924. By April 1927, the first residents moved in and within 12 months, 2,100 families lived on the estate. By 1930 all 4000 dwellings were finished. Although great consideration went into the design of the houses and the layout of streets, the estate was not intended to be a self-contained community. Tenants moved in before schools, roads, churches, shops, or any community facilities were provided. Initially, children travelled by train to Golders Green and Hendon to go to school and most people commuted to their former jobs on the underground. Although many local facilities were eventually provided, the estate was designed as a garden suburb and was never meant to be isolated from the rest of London.
- 3.2.11 The LCC’s allocation policy provided homes only for people living within the existing conurbation of Greater London. This meant that local people, and those growing up on the estate, could not get houses of their own. By 1936 each home housed an average of 4.7 people, but as the first estate children grew up and married, and had to share houses with their parents, overcrowding became an issue. Over time as older family members passed away, and new housing was built nearby, the problem diminished.
- 3.2.12 In 1980, with the demise of the Greater London Council (GLC) the estate became the responsibility of the London Borough of Barnet. The “Right to Buy” policies of the 1980s meant that tenants could buy their council houses and the 1991 census showed that approximately half the houses had been bought by residents.
- 3.2.13 Much of the design and aesthetic thinking of the late 19th and early 20th centuries was a reaction to the harsh environment of industrial towns which were a product of 19th century booms. Both the Arts and Crafts and Garden City movements sought to retain or recreate what they saw as the best elements of the rural styles and life, which were seen as lost in the new industrial age. The architecture and layout of the Watling Estate was modelled on these principles, with a vernacular architectural style adapted to suit the needs of a large, low-cost housing estate.
- 3.2.14 The character of Watling Estate is distinctive in terms of its layout, form, scale and building designs and fairly typical of Garden City planning in terms of layout. Raymond Unwin, often described as the founder of modern town planning, put forward two fundamental principles; that beauty was indispensable, and that planning could play a role in the creation of communities and profoundly affect their lives thereafter. Unwin developed many patterns and ideas for estate layouts based upon these principles and his book *Town Planning in Practice* (1909) includes sketches and layouts almost identical to parts of the Watling Estate. For example, one of the most notable features of

the estate is the treatment of corners. Various layouts were used but, in general, a grassed area was left at the actual corner with buildings turned, angled, or staggered. In places, this opens up views down side streets, whilst such layouts also allow glimpses of views behind buildings or deflected views around corners.

- 3.2.15 The undulating topography has been used to deliberately create a distinctive and memorable layout and to capture a number of interesting views, giving the same attention to both long and short-range views. Since the land also rises quite significantly to the north towards Edgware, the elevated position allows southerly long-range views onto the suburban landscape beyond. Short range views are created by a thoughtful layout based on Garden City principles.
- 3.2.16 The care shown in layout design is mirrored in the buildings themselves. The houses are all similar in scale and form, and the main materials and architectural details adopted are based on the specific vernacular architectural style of the Arts and Crafts movement. There are notable unique features such as the inclusion of non-traditional construction prefabricated steel 'Atholl' houses, nicknamed 'Battleship Houses' for their prominent external steel plates and rivets.



Fig.6: 1926 LCC Watling Estate Layout Plan. Source: London Metropolitan Archives.





Fig.9: Timber type properties during development on the estate in the late 1920s. Source: London Metropolitan Archives.

4.0 SIGNIFICANCE OF WATLING ESTATE CONSERVATION AREA

4.1 Background

4.1.1 Historic England's Good Practice Advice 3, The Setting of Heritage Assets (2017), notes a staged approach to proportionate decision-taking, with relevant NPPF paragraphs along with guidance contained in the National Planning Practice Guidance (PPG) for their implementation, providing the framework for the consideration of changes affecting the setting of heritage assets which should be assessed proportionately and based on the nature, extent, and level of the heritage asset's significance.

4.1.2 The Guidance recommends a five-step approach to the assessment of the effect of development on the setting of heritage assets as follows:

Step 1: identify which heritage assets and their settings are affected;

Step 2: assess whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s);

Step 3: assess the effects of the proposed development whether beneficial or harmful, on that significance;

Step 4: explore ways of maximising enhancement and avoiding or minimizing harm;

Step 5: make and document the decision and monitor outcomes.

4.2 Significance of The Watling Estate Conservation Area

4.2.1 The significance of the conservation area is derived primarily from its historical development of 1920s Garden City style housing estates that were the product of State-led housing programmes, overseen by the London County Council (LCC). The Watling Estate has a close connection with leading figures of this era of development including architect George Forrest and so-called father of modern town planning, Raymond Unwin. The layout and design of development are particularly notable as the Watling Estate is an example of early, influential, and well-preserved large scale suburban development outside of the London metropolis. Since the 'Right to Buy' policies, many properties came into private ownership and subsequent alteration which has detracted from their originality and individual significance, and therefore also to the character and appearance of the conservation area. The Watling Estate Conservation Area is a heritage asset considered to be of low-medium significance.

5.0 PROPOSED WORKS AND ASSESSMENT

5.1 Current Context

- 5.1.1 Upon opening-up it was found that the timber construction properties do not have any wall insulation, constructed only with a 125mm deep void between the exterior boarding and interior hardboard affixed to the vertical posts of the frame. This results in unacceptably poor thermal efficiency which fails to meet both the needs of residents and the environmental targets of Barnet Homes, Barnet Council, and wider Government.
- 5.1.2 The masonry dwarf walls that the timber frame walls sit on are solid construction and therefore have a very low thermal performance and U-value. [REDACTED], the dwarf wall is exposed red facing-bricks and at [REDACTED] the wall is rendered and painted white.
- 5.1.3 For occupants, the real-life consequences of the thermal inefficiency are poor living standards resulting from extremes of temperature from seasonal and weather variations and increased energy bills.
- 5.1.4 As outlined above, the existing configuration means that combustible timber cladding and bituminous sheathing felt run across the party wall between the properties. In addition, the eaves are open between units allowing. This is not in accordance with current building regulations and allows fire to spread from one unit to another.

5.2 Proposals

- 5.2.1 The proposed remediation solution needs to comply with the current Building Regulations. To achieve this the following requirements have been considered during the design development phase to achieve compliance:

Approved Document A (Structure)

A compatible wall-build up specification and set of design drawings has been produced for review and approval by Building Control. There is little visual impact of this on the proposals.

Approved Document B (Fire Safety)

The Classification of the new cladding is A2 for external surface spread of flame and fire spread, the proposed cladding material is Cedral Fibre Cement Cladding which is A2 rated. This fire-rated board was selected as it is available in a woodgrain finish, to reproduce the effect of the existing timber, and as it is available in 'lap' which replicates the existing weatherboard style of fixing.

The existing white timber corner detail will be replicated in white with a fire rated fibre cement board.

Cavity barriers and fire stopping will achieve an A1 rating in terms of the materials. These are concealed within the wall build-up and are not visible from the exterior.

The insulation is A1 rated mineral wool. To both the solid dwarf wall and the timber frame parts of the wall, the insulation will be fully concealed behind the cladding materials.

Approved Document L (Conservation of fuel and power)

The wall build-up has been designed to achieve the required u-value of 0.30 W/m²K, in accordance with Table 2. To achieve this, it is necessary to extend the building line by 50mm to insulate over the timber studs so that a continuous thermal envelope is created which reduces the risk of thermal bridging. The existing eaves depth is deep and can easily accommodate this increase without diminishing from the traditional appearance of the deep soffit/exposed rafter feet.

The dwarf walls that the timber frame walls sit on are solid masonry which act as thermal bridge, the effects of which will be worsened once the timber walls are insulated and the temperature difference between the two is greater, creating a risk of condensation and mould growth. The proposal therefore is to insulate the dwarf wall with a slim layer of stone wool insulation and face with real brick slips to match existing at nos. [REDACTED] and with a smooth render painted white at [REDACTED].

The new windows to [REDACTED] will be triple glazed and will achieve a U-value of 0.8 W/m²K. The selected windows are aluminium powder coated, which was requested by the Local Planning Authority, and will have astragal glazing bars. The systems are Technal Dualslide (sash) and Technal Soleal Next (casement). The casement windows will be 'flush', as traditional casement windows are, meaning that the opening sashes will not be identifiable as in the current arrangement. At present, the front elevation ground floor window to no. 43 is a uPVC sliding sash and is a uPVC casement window with a cruciform mullion and transom to no.45. The proposal is for both properties to have sliding sash windows to the ground floor front elevation to harmonise the pair of semis whilst replicating the original design intent (timber box sashes).

5.3 Images



Fig.10: Prominent woodgrain of existing timber weatherboarded cladding



Fig.11: Prominent woodgrain of existing timber weatherboard cladding



Fig.12: Proposed Cedral Lap cladding in woodgrain to match existing boards



Fig.13: Proposed Cedral Lap cladding in woodgrain to match existing boards

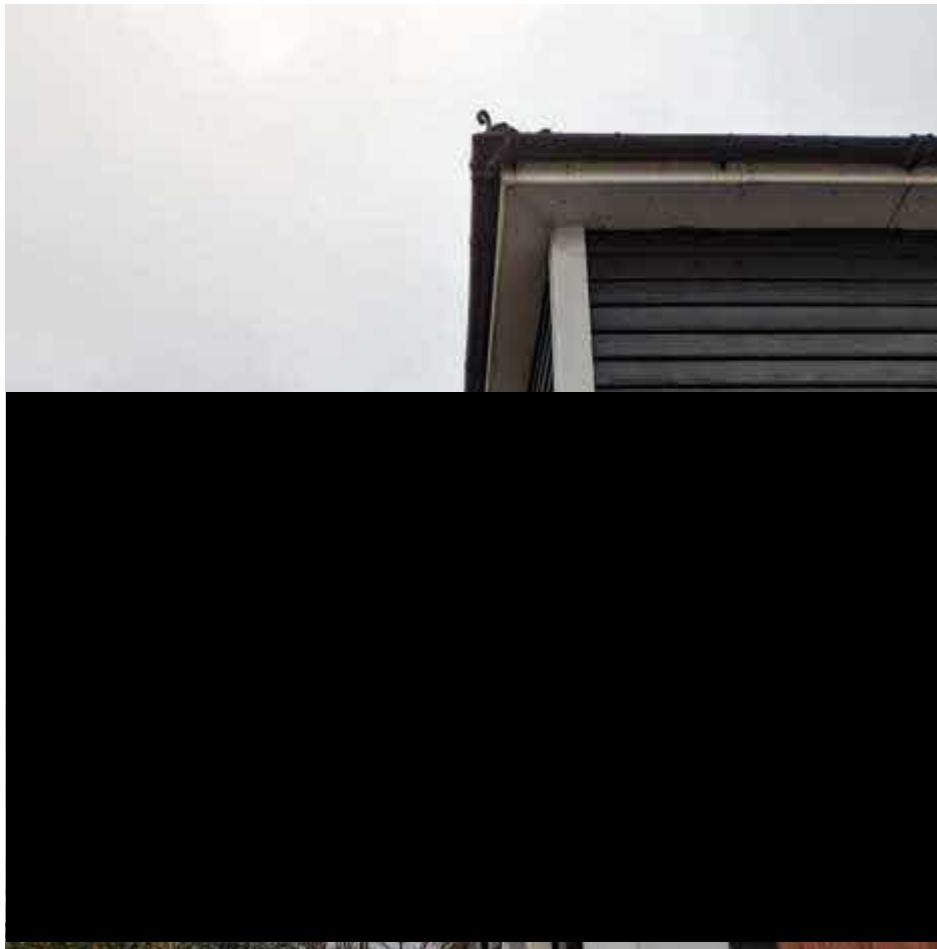


Fig.14: Deep eaves overhang allows the building line to be extend by 50mm without compromising the traditional appearance.

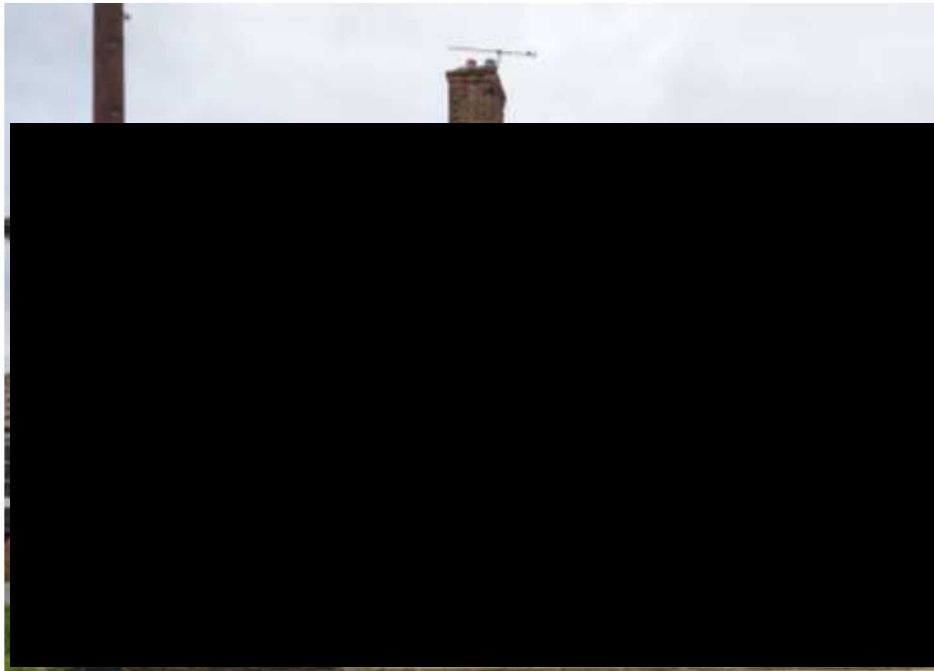


Fig. 15: Existing windows are uPVC with internal glazing bars and 'chunky' openers which do not enhance the properties. The ground floor windows to each house do not match in fenestration design.



Fig. 16: New flush casement and sliding sash metal windows will enhance the fenestration. The two, ground floor, front elevation windows will both be sliding sashes, as per the original design intent.



Fig. 17: Rear of [redacted] with rendered dwarf wall painted white which EWI will replicate.

6.0 CONCLUSION

6.1 Legislation

- 6.1.1 Paragraph 195 of the NPPF advises Local Planning Authorities that the particular significance, including setting, of any heritage asset is assessed. This document has concisely described the heritage asset affected by the proposed works and its significance.
- 6.1.2 It should be noted that according to the Tudor Walters Report's recommendations for social housing design, the properties were projected to meet standards for sixty years – which for housing developed in the 1920s means they have now been outdated and sub-standard for forty years. The resultant effect is that fire safety measures are not adequate to ensure safe evacuation of residents in the event of a fire and fire compartmentation between the two houses will allow for the spread of flame. Furthermore, the lack of insulation means that living standards for residents of the Watling Estate are poor, leading to extremes of temperature in hot and cold periods, a reduced ability for the properties to retain heat and increased energy demand to heat properties putting residents at risk of fuel poverty.
- 6.1.3 It is concluded that the proposed works to install fire safety measures and retrofit the properties with modern standards of insulation will cause no harm to the character and appearance of The Watling Estate Conservation Area. There will be very little visible change due to the proposed woodgrain fibre cement weatherboards matching the original timber boards in style and colour. The existing construction type means that the houses underperform significantly, failing to meet the thermal efficiency and living standards required in the modern day. Through informed design choices, it is considered that the proposed works to the properties with modern materials will cause no visual harm.
- 6.1.4 Regarding the proposals meeting the statutory test provided by 72(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, the minimum aim is for development to preserve the character or appearance of a conservation area. It is considered that the proposal satisfies this test and enhances the character and appearance by improving the fenestration design.
- 6.1.5 Sustainable development is defined as meeting the needs of the present without compromising the needs of the future. Paragraph 8 of the NPPF breaks down this definition into three objectives: economic, social, and environmental. Within the environmental objective, sustainable development needs to contribute to 'protecting and enhancing our natural, built and historic environment'.
- 6.1.6 With regards to NPPF paragraphs 199 to 202, as no harm will be caused to the designated asset, Watling Estate Conservation Area, no public benefit is required. Nevertheless, as identified above, public benefit is found through improvements to the safety of occupants from the fire safety upgrades and the quality of life of occupants by improving the thermal efficiency of the buildings, leading to a more comfortable climate within the properties and reduced energy bills.
- 6.1.7 Regarding local policies CS5, CS13, and HE1, as discussed above, the proposal preserves the character and appearance of the conservation area; the design and materials of the proposal recreate the visual characteristics of the original building as well as retaining scale and layout within the conservation area. Furthermore, it will not harm the important views through the Watling Estate and helps to achieve the Council's policies regarding sustainability and environmental impact.
- 6.1.8 In conclusion, the proposed development meets the requirements of the Planning (Listed Buildings and Conservation Area) Act 1990, the NPPF and local planning policies. It is therefore, requested that the proposed development be approved.

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