London Borough of Tower Hamlets

Medway Conservation Area Character Appraisal and Management Guidelines

Adopted 27 June 2017

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TOWER HAMLETS

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1.0 Introduction

Conservation Areas are parts of our local environment with special architectural or historic qualities. They are created by the Council, in consultation with the local community, to preserve and enhance the specific character of these areas for everybody. The Medway Conservation Area (hereafter referred to as the Conservation Area) was designated in September 1989. The Conservation Area was designated to protect the overall character of the Victorian terraces, which are of collective townscape merit.

This guide has been prepared for the following purposes:

- To comply with the Planning (Listed Buildings and Conservation Areas) Act 1990. Section 69(1) states that a conservation area is 'an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.'
- To provide a detailed appraisal of the area's architectural and historic character.
- To provide an overview of planning policy and propose management guidelines on how this character should be preserved and enhanced in the context of appropriate ongoing change.

The Character Appraisal (Section 2) aims to define the qualities and features that make the Conservation Area special. This includes an understanding of the historical development of the place and its buildings, as well as an analysis of its current appearance and character — including description of the architectural characteristics, details and materials. It also records qualities such as important open spaces and views into and within the Conservation Area. Any damage or pressures to the Conservation Area is also recorded.

Section 71 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended) which places a duty on local planning authorities to draw up and publish proposals for the preservation and enhancement of Conservation Areas in their districts. Therefore, the Management Guidelines (Section 3) set out ways to conserve the special architectural and historic character of the Conservation Area, as well as help to manage sensitive new development and refurbishment. It takes into account planning policy context and responds to the problems and pressures identified in Section 2.

This document should be read in conjunction with the detailed guidance for facade enhancements adopted by Cabinet on 27 June 2017.

Aerial view showing Conservation Area boundary (in red) © Google Earth

2.0 Character Appraisal

2.1 Location and setting

The Conservation Area is bounded by Cherrywood Close and the railway line to the south, Strahan and Medway Roads to the west, Roman Road to the north and St Stephen's Road to the east.

The Conservation Area is centred around Medway and Lyal Roads, which run parallel to one another stretching between Roman Road and Antill Road. Antill Road and Roman Road are longest roads running in a west-east orientation through the Conservation Area. Roman Road provides a lively northern boundary to the Conservation Area with its streetscape of small retail units. Antill Road, on the other hand, provides a quieter residential southern boundary to the Area.

The Conservation Area includes one small area of public green space to the east: Selwyn Green.

There are two other Conservation Areas in the immediate vicinity: Tredegar Square Conservation Area lies on the south side of the railway line, and Driffield Road Conservation Area lies on the north side of Roman Road.

MEDWAY CONSERVATION AREA

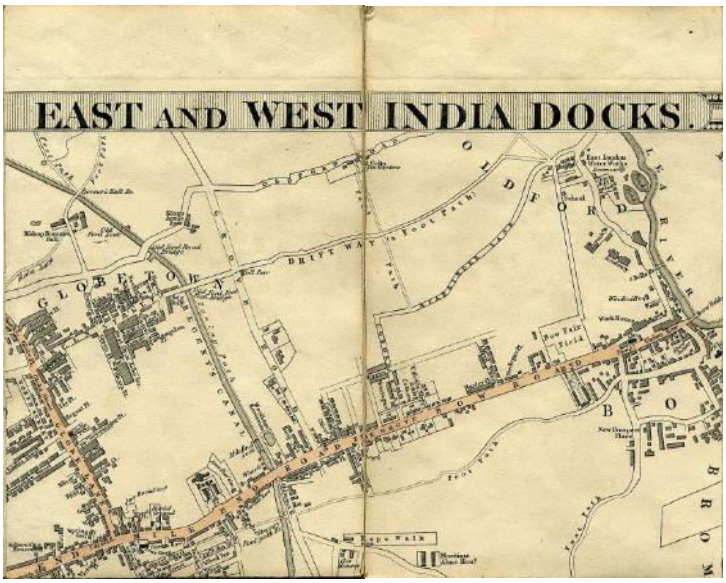
This map is indicative only and is not a planning document. For further information please contact the Council.

2.2 Historical development

This area lies within what was then known as Mile End Old Town. Evidence of this remains today, in the boundary plaques, such as the one situated on the upper floor of no. 422 Roman Road.

Boundary plaque

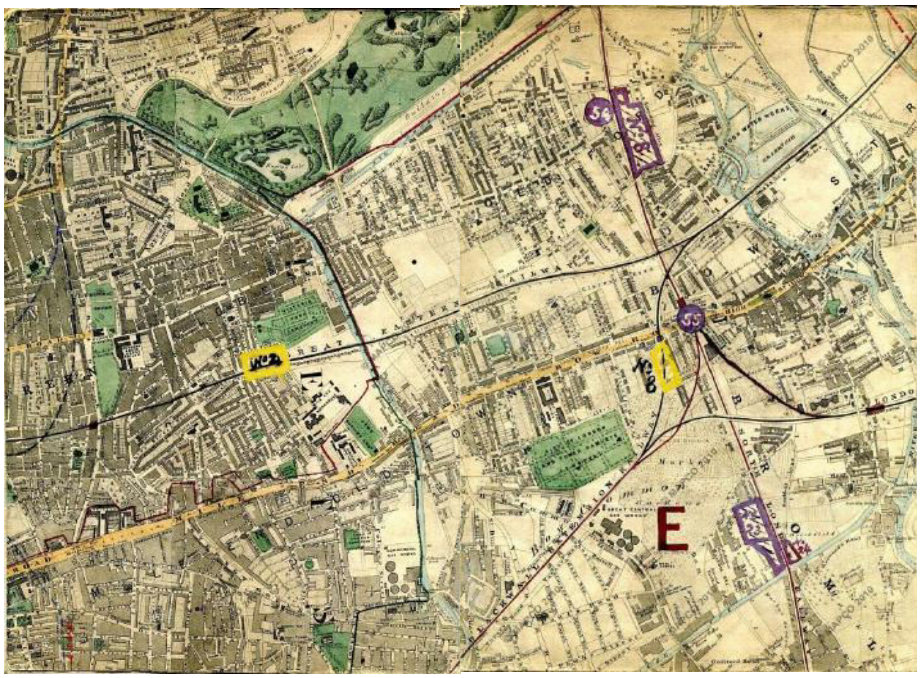
Until the mid-nineteenth century, most of Bow was primarily rural, with the exception of late Georgian ribbon development on the main roads out of town, for example along Mile End Road.



Cruchley's New Plan of London, 1827. © Mapco.net

Historic maps reveal that the area once consisted of fields, lying east of Grove Road and south of Roman Road (shown on the maps as Drift Way footpath), which was a meandering trackway for much of its length. Cross's New Plan of London of 1847/1850 shows that the area around Tredegar Square — part of land owned by one of the largest landowners in the area, the Morgan family of Tredegar, in Monmouthshire — were starting to be laid out, during a previous but less explosive building boom. Victoria Park to the north opened in 1845. However, the space that makes up the Conservation Area was still undeveloped. This all changed when the city expanded in size around the 1860s.

Cross's New Plan of London, 1850. © Mapco.net

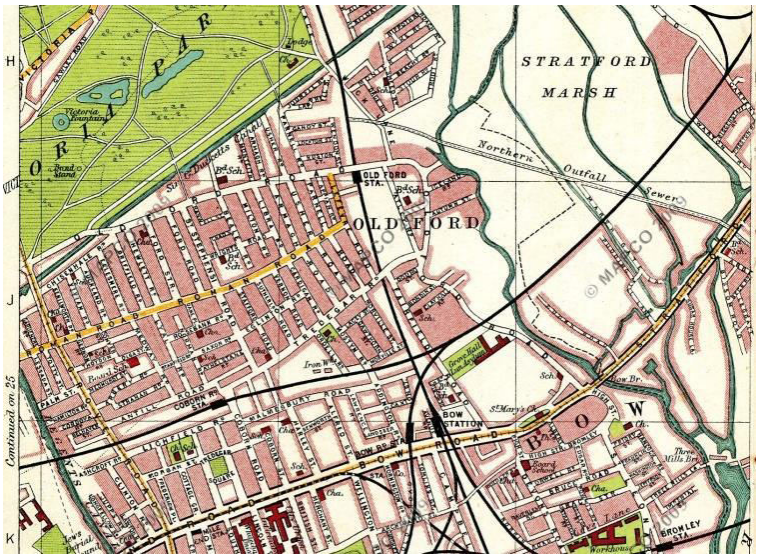


Stanford's Library Map of London and its suburbs, 1864. © Mapco.net

Leases were purchased by local builders, and the lands north of the Eastern Counties Railway Line were rapidly developed from the 1860s onwards, to coincide with the Great Eastern Railway station opening at Coborn Road (closed 1948). One such developer was Thomas Antill Palmer, of Trinity Terrace on Tredegar Road, and his partner William John Wade, of 33 Lichfield Road. In 1865, they bought various leases and went on to develop Antill Road. From the 1860s onwards, the area was rapidly developed for artisans and shopkeepers, for whom the norm was to work from home. This area of traditional housing survived.

Although principally residential, the area historically included a number of small businesses operating either from home or within small industrial buildings, such as those between Medway and Lyal Roads. The area also supported a number of local shops along Medway Road.

Edward Weller Map, 1868. © Mapco.net



Bartholomew's Handy Reference Atlas of London and Suburbs, 1908. ©Mapco.net

The area was fully developed by the twentieth century. In addition to terrace houses, a school was opened in 1874 between Olga Street and Arbery Street. After WWII it was briefly renamed John Bartlett Primary, but returned to Olga Primary School in the 1950s. The School has since been relocated to a modern building next to its original site and the original school building has been converted to houses.

OS map, 1948 © www.old-maps.co.uk

Selwyn Green was created on the site of WWII bomb-damaged terrace houses facing onto Selwyn Road, between the 1950s and 60s. At that time Victorian terraces were perceived as old fashioned, and unhealthy with few modern facilities, and the area was considered to be slums. Subsequently, large clearance programmes begun and new estates were built, consisting of flats with modern amenities and plenty of open space, such as Lanfranc Estate (immediately adjacent to the Conservation Area).

2.3 Character analysis

This section analyses the character and appearance of the Conservation Area, and identifies architectural and spatial features that positively contribute to it.

2.3.1 Spatial analysis

The Medway Conservation Area is characterised by the regular layout of small scale streets, containing rows of terraces, with a horizontal emphasis because of their relatively low height and unbroken length. The Conservation Area features a number of long streets (Antill Road, Medway Road and Lyal Road) as well as smaller streets that have a more intimate feel (Athelstane Grove and Norman Grove).

In contrast, the northern boundary of the Conservation Area is defined by the lively Roman Road, which extends further to the east and west. The former Olga School building and surrounding buildings on the corner of Arbery and Medway Roads provide a break in the homogenous street layout of the Conservation Area. These properties are for the most part walled off from the road.

Scale

Roman Road is flanked by buildings generally of two storeys, with a taller three storey scale at corner sites. Throughout the rest of the Conservation Area, the existing building scale is predominantly low, with terrace housing along the residential streets at two–three storeys in scale (see sheet no.5 of Appendix 3).

Two storey houses along Roman Road

Two storey houses along Lyal Road

Land use

The land use character of the Medway Conservation Area is predominantly residential, with the largest part of the Conservation Area made up of terraced houses from the 1870s. The former public house on the corner of Antill and Selwyn Roads closed in 2002. Along the dynamic Roman Road other land uses include small retail premises on the ground floor with street frontage, with residential flats above. The ground floor shopfronts provide a colourful backdrop to the vibrant market scene along Roman Road, and contrasting the domestic street scale behind.

Former public house on the corner of Antill and Selwyn Roads. This building features rope mouldings around the windows similar to a former pub in the Driffield Road Conservation Area.

Shops along Roman Road

Green spaces

The Medway Conservation Area contains the small pocket of public green space in Selwyn Green which was built as part of the post-war reconstruction and provides an attractive, spacious setting to the terrace houses around it.

View across Selwyn Green to Selwyn Road

All the terraced houses in this Conservation Area feature private gardens (of varying size) which provide a verdant backdrop to views into and within the Conservation Area. This verdant backdrop to the area is reinforced by street trees.

Mature street trees on Arbery Road

Furthermore the Conservation Area is surrounded by the substantial open space of Mile End Park to its west, across Grove Road.

2.3.2 Views

The clear definition of the streets and the character of the nineteenth-century terrace create many high quality views:

- Long views exist along streets, including views south from Roman Road. The clear definition of streets and the character of the nineteenth century terraces create many high quality views. Within the residential streets of Strahan, Antill, Medway and Lyal Roads, each terrace contributes to the repetitive and rhythmic character of the streetscape. The long views of uniform terraces are a distinctive characteristic of the Conservation Area.
- Views through Stanfield Road reveal a short row of ground floor shopfronts on this section of Medway Road. These shopfronts have slate finished roofs and their upper level residential floors are setback from the building frontage.
- The intersection at Stanfield Road, Viking Close and Lyal Road, in addition to the open space of Selwyn Green provide opportunities for shorter oblique views of the rear of houses.

Map showing key long and dynamic views (blue) and gap views (orange).

Photographs of these views follow on subsequent pages.

Gap view off Antill Road showing London Roofs of houses along Athelstane Road .

Glimpsed view from Antill Road showing London Roofs belonging to houses along Strahan Road.

View up Coburn Road, terminating with the former public house on Antill Road

View along Saxon Road.

Long view eastward along Antill Road.

Long view from Antill Road up Medway Road.

View along Stanfield Road terminating in three-storey houses with shop fronts.

View south along Lyal Road, terminating with houses of Antill Road.

View eastward along Viking Close: the London Roofs of houses of Selwyn Grove are visible.

View from Roman Road down Lyal Road.

View of corner of Roman Road and Medway Road.

2.3.3 Architectural characteristics

The overriding impression of this Conservation Area is the consistency of the architectural form. There is a consistent rhythm and scale to the terraces with a fairly uniform parapet line to the front elevation, concealing a series of uniform London Roofs. The late-nineteenth century houses are primarily two storeys high with the typical embellishments of the period, including bay windows and plenty of painted stucco decoration. However, the terraces do vary in their ornamental detail; the types of doors, windows, decorative plasterwork and front boundary treatment differ, which give each street a slightly different quality. For example, the houses along Arbery and Strahan Roads are more ornately decorated than elsewhere. They were built slightly later. Please also refer to sheet no. 3 of Appendix 3.

Strahan Road (with original cornice intact).

On five roads in this Conservation Area — Antill, Lyal, Medway, Saxon and St Stephen's Roads— the line of the front elevation of these houses steps back on alternate bays. This is a discreet architectural design feature that adds a subtle rhythm to the street as a whole.

Antill Road. This photograph shows the alternating recess to the front elevations, some of which have been painted, and all in this image are missing their original cornices.

When built, the houses were considered of a good size, as housing in the area was for the artisan class and are a change from the plain brick, flat fronted terraces of 20 years earlier. Most of the houses within the Conservation Area were built with long rear extensions (sometimes referred to as back additions, 'outriggers' or 'closet wings') as part of the original building.

As the Victorian era progressed the need for plentiful cheap housing saw a move away from the provision of a costly basement and the services originally housed here were increasingly accommodated within the back extension at ground level, as is the case in this Conservation Area. The form of the Victorian terrace house had its origins in the grander houses of an earlier era. Space was ordered according to a structural hierarchy, with the more public spaces such as the parlour located at the front of the house, whilst the more private spaces were located to the rear of the house and in the back extension.

Economy continued to play a role in the evolution of the back extension with the early single storey single unit extensions with three independent walls housing a scullery being replaced by paired extensions under one roof. Over time, what had been the very small single-storey scullery extension increased in size to include a kitchen with a bedroom above, and the scullery was pushed into a smaller lean-to section beyond this. Paired two-storey extensions can be seen in the following photograph.

Rear extensions viewed from Arbery Road

There are some variations to the consistent character. One is Saxon Hall: this building is locally listed and situated adjacent to Selwyn Green, with its frontage to Saxon Road. It is nineteenth century “Tudorbethan” in style and is constructed from a range of red brick. It is characterised by contrasting stone dressed and mullioned windows. The two halls are supplemented by an attached house. The entrance hall and rear storeroom/ office were built of a piece, around 1894. The site is bounded by iron railings, not dissimilar from those used further along Saxon Road.

The institutional buildings of the former Olga School (a London Board School) offers a further variance to the quiet, residential character of this Conservation Area.

The former Olga School viewed from Arbery Road

There are two roads where the scale and character of the houses differs. The first is Norman Grove, which lies to the north of Saxon Hall. Properties along this short road are slightly older than elsewhere in the Conservation Area; they are a mixture of mid-nineteenth century cottages with hipped roofs and London Roofs behind parapets.

Norman Grove.

Norman Grove.

Meanwhile, the houses on the south side of Tredegar Road are taller than those in the rest of the Conservation Area. The houses have steps up to the front door and have double pitched roofs and gabled dormer windows.

South side of Tredegar Road.

Roofs

The significance of the historic roof-scape within the Conservation Area is derived from a number of factors including its shape or form, structure, covering materials, and associated features.

The vast majority of the terraces within the Conservation Area feature London (or Butterfly) roofs; these are an inverted 'V' in form with a central valley and ridges on the party walls between the individual houses of the terrace. These roofs are of low pitch and are concealed from the street (i.e. the front) behind parapets producing a hard, straight edged appearance to the house, with a strong silhouette. This lack of visible roof is an important architectural characteristic. The continuity of the parapet line and moulded cornice line is another significant feature in the Conservation Area streetscene and ties groups of terraces together. At the rear of these terraces with London roofs, the row of gently pitched gables with the valleys and party walls between is clearly evident. Chimney stacks are located along the party walls between houses (often in pairs); they are often the only feature visible above the cornice line, forming part of the silhouette of the roofscape. They also form part of the special character of the area.

There are several small groups of simple pitched roofs within the area. Two terraces between Anthill and Tredegar Roads have simple mono-pitch main roofs. They are the result of a partial rebuilding around forty years ago.

Roof top features such as chimney stacks, chimney pots and raised party walls are important Conservation Area characteristics. The design and detail of features such as chimney stacks varies and was the subject of changing architectural styles and differing builders.

Some roofs have existing Mansard roof extensions; mainly these are along Roman Road and Norman Grove. Along Roman Road the existing roofs vary in form some being flat, some modern flat topped Mansards and some more traditional in character.

The map in Appendix 1 of this document, forms an audit of the existing types of main roof.

London Roofs visible along Medway Road.

Glimpsed view of butterfly roofs of houses on Strahan Road.

Views of the rear elevations from Viking Close

Existing mansard roof extensions on Norman Grove.

Rear extensions

Mid-nineteenth century terraces, such those within the Conservation Area, were often built with returns, which had their origins in the grander houses of an earlier era. Most of the houses within the Conservation Area were built with rear returns (sometimes referred to as 'back additions', 'outriggers' or 'closet wings') as part of the original building. Space was ordered according to a structural hierarchy, with the more public spaces such as the parlour located at the front of the house, whilst the more private spaces were located to the rear of the house in the back extension.

As the Victorian era progressed the need for cheap housing saw a move away from the provision of a costly basement and the services originally housed here were increasingly accommodated within the back extension at ground level.

Economy continued to play a role in the evolution of the back return with the early single-storey single-unit returns with three independent walls housing a scullery being replaced by paired returns under one roof. Returns varied in width, height and length according to the builder but tended to increase in scale as the century progressed. A second storey was increasingly added to accommodate a third bedroom, and it is this form of return which predominates within the Driffield Road Conservation Area. In some cases the kitchen was not big enough and a small lean to scullery was added to the rear of the return.

The map in Appendix 2 of this document forms an audit of the existing types of rear projection which are located within the Medway Conservation Area.

Rear extension along Medway Road.

2.3.4 Details and materials

The houses in this Conservation Area are variants on the basic terrace house design brought about by different builders (and subsequent changes) and the presence or absence of architectural features. Architectural features that positively contribute to the character and appearance of the Conservation Area, and deserve retention are:

- Canted bay windows with decorative cornice and console;
- Tripartite round-headed first floor window openings;
- Round-headed paired window openings with stucco surrounds and foliate embellishment;
- Wooden sash windows;
- Vermiculated or reticulated stucco and cornice and consoles to front door openings; and
- Stucco cornices to the parapet on the front elevations.

There is a limited range of materials used throughout the Conservation Area, reinforcing its consistent appearance. Principally the materials are: stock brick and stucco on the elevations with timber sash windows and slate roofs.

Reinstatement of missing features, if carefully added to match the original, may enhance the character and appearance of the Conservation Area.

Terrace on Selwyn Road; the houses have canted bay windows but only three houses retain their cornice.

St Stephen’s Road: note the tri-partite round-headed windows on the first floor, canted bay windows, and architectural embellishment to the door surround.

Detail showing tripartite round-headed window openings with sash windows.

Detail of round-headed paired window openings with stucco surrounds and foliate embellishment and reticulated stucco around the door.

Detail showing reticulated rusticated stucco above the door.

Front boundary walls are not as consistent as other features. These include the traditional iron railings or low brick or concrete walls or timber fences. The metal railings are historically significant boundary treatments and add to the character and appearance of the Conservation Area. Most of the original railings were removed during the war. Where original railings have been lost, their careful reinstatement (to match the traditional railings) may enhance the character or appearance of the Conservation Area.

Traditional iron railings on Saxon Road

2.3.5 Problems and pressures

Although the character and appearance of the Conservation Area is appreciably consistent, changes have been made to some properties which chip away at this consistency. Further uncontrolled change could erode the special character of the Conservation Area.

Façade treatment

Terraces such as these are designed to be uniform and regular in appearance, relying on the repetition of simple elements and a consistency of materials and details for the overall effect. Much of the terracing remains little altered, but those of which that have been unsympathetically altered, are embellished with the application of pebble dash and stone cladding. The complete pebble-dashing of a façade, for example, completely destroys the careful balance and consistency across the terrace as a whole. The result has created discord and fragmentation to the entire elevation of the terrace, to the detriment of the character of the Conservation Area.

The painting of the front elevation creates greater colour divergence throughout the Conservation Are which can detract from its consistent character and appearance.

The original pointing and mortar would have been lime putty based without cement. Modern cementitious mortars are not appropriate because this mortar is actually harder than the brickwork, whereas mortar should be softer than the brickwork.

Boundary treatments

The properties in this Conservation Area have lost their original iron railings, and many have been replaced with unsympathetically designed walls or fencing. This can detract from the overall design and consistency of the terrace, especially apparent in long views.

Gap sites

There are gaps in the rows of terraced housing, particularly at the eastern half of the Medway Conservation Area, they can expose unsympathetic rear extensions that would otherwise not be seen. The houses within the Conservation Area are characteristically small and two storeys in scale, which traditionally may have had single storey, one room extensions.

Sensitivity of end of terrace plots

The design of end of terrace houses has more potential to impact the appearance of the Conservation Area than mid-terrace houses. Similarly as with gap site, where houses have suffered badly from inappropriate design, large, over-scaled, or even multiple extensions, these are highly visible at end of terrace plots.

Existing roof extensions

Modest Victorian properties were two storey houses with butterfly roofs hidden behind the parapet. Currently, there are isolated existing Mansard roof extensions on Selwyn Road and Lyal Road, and a more consistent run along Roman Road and Norman Grove.

Rear extensions

Rear elevations can suffer badly from inappropriate design and large rear extensions. Where visible, these inappropriately designed extensions harm the character and appearance of the Conservation Area. Over-development of rear extensions has occurred particularly in the deep plots along Roman Road.

2.4 Summary of special interest

This is an area of particular special architectural and historic interest, illustrated by its history and significant architecture dating from the nineteenth century, in summary the specific features of special interest are:

- surviving nineteenth-century artisan and shopkeepers' houses;
- high level of consistency across the streets and their terraces;
- uniformity both of form and materials; and
- high rate of survival of architectural features and enrichments which make positive contributions to the character and appearance of the Conservation Area, these include:
    - chimney pots;
    - continuous line of parapet wall to conceal London roof behind;
    - party walls with brick-on-edge detailing and stepped lead flashings;
    - stucco cornices to the parapet on the front elevation;
    - decorative mouldings or brick borders to first-floor windows;
    - tripartite round-headed windows at first-floor level;
    - canted bay windows with decorative cornice and console;
    - round-headed paired windows with stucco surrounds and foliate embellishments;
    - timber sash windows with delicate glazing bars;
    - embellished architrave, often featuring vermiculated or reticulated stucco, to recessed front doors; and
    - iron railings to front boundary (even where not original, the traditional replacement railings contribute the character).

All of the above elements make a positive contribution to the character and appearance of the Conservation Area; please refer also to sheet no. 1 of Appendix 3.

Whilst there are no listed buildings within the area, the Conservation Area was designated to protect the overall character of the Victorian terraces, which are of collective townscape merit. And it is the cohesive character of the area rather than individual buildings which the Conservation Area status seeks to preserve and enhance.

3.0 Management guidelines

3.1 Introduction

This Management Plan for Medway Conservation Area has been prepared in consultation with the community, to set out the Borough's commitment to high quality management of Conservation Areas and their settings. The Placeshaping Team operate within the context of the Development and Renewal Directorate of the Council, alongside Planmaking, Development Management, and Building Control.

Conservation Areas are as much about history, people, activities and places as they are about buildings and spaces. Preserving and enhancing the Borough's architectural and historic built heritage —a finite resource — over the next decades is of vital importance in understanding the past and allowing it to inform our present and future.

Whilst the Council has a duty to ensure that change preserves or enhances a Conservation Area, it is aware of the space pressures facing families and the need to accommodate changing residential needs within its Conservation Areas.

Conservation Areas also promote sustainability in its widest sense. The Council is committed to this in its Local Plan. The re-use of historic buildings and places is environmentally responsible as it protects the energy and resources embodied in them and combats climate change.

Consideration of appropriate amendments to the boundary of the Conservation Area, and recommendations for additions to the register of listed buildings, either the statutory or local list, will be considered by the Council.

3.2 Who is this document for?

This document is aimed at the residents, businesses, developers and others living and working in the area. The Conservation Area belongs to its residents, as well as the whole community, and their priorities are reflected in these documents. It will depend on the support of the community to achieve its objectives.

The guidelines provide a single point of reference for the management of the area. It represents our shared commitment to conserve the special architectural and historic character, and to help manage sensitive new development and refurbishment where appropriate to successfully preserve and enhance the quality and character of the area. This guidance is intended to help home owners in understanding the character and significance of the Conservation Area and in submitting planning applications within this Conservation Area.

In addition to managing change and conservation in the Conservation Area, guidance is provided to support residents who would like to make a planning application to extend their home. Specifically, it contains guidance covering extensions to the roof and to the rear of residential properties.

In order to further assist residents with the planning application process, the Council has also prepared a Mansard roof Guidance Note. This borough-wide guidance contains information on the most relevant planning policies that the Council must consider when making decision on planning applications; further information on the historic roofs in Tower Hamlets; the elements of Mansard roofs and best practice advice on how you should approach the design of a new Mansard roof.

Guidance specific to mansard roofs in the Medway Conservation Area is provided in Appendix 3 of this document.

3.3 Policies relevant to the Conservation Area and how they are implemented

Any new development should have regard to national, regional and local planning policy.

- At the national level, the Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended)places a duty on Tower Hamlets to designate Conservation Areas in "areas of special architectural or historic interest", and to formulate and publish proposals for the preservation and enhancement of its Conservation Areas. National planning policy for conserving and enhancing the historic environment is set out in National Planning Policy Framework (NPPF) Chapter 12 (paras 126–141) and guidance is provided in the National Planning Practice Guidance for conserving and enhancing the historic environment.
- At the regional level, Policy 7.8, Heritage assets and archaeology, of the London Plan (2016) states that, at a strategic level, 'London's heritage assets and historic environment, including … conservation areas … should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account'. And that 'Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.'
- At the local level, the Local Plan of Tower Hamlets states that 'the Council will protect and enhance the historic environment of the borough'. This is described in detail in Policy CP49 of the Core Strategy. In addition, applicants should note Policy CP46 to ensure that access issues are properly addressed in work carried out in a Conservation Area.

There are no statutorily listed buildings in the Conservation Area, but there is one locally listed building: Saxon Hall, 10 Saxon Road.

3.4 Opportunities for enhancement

It is the character of the area, rather than individual buildings, which the Conservation Area designation seeks to preserve and enhance.

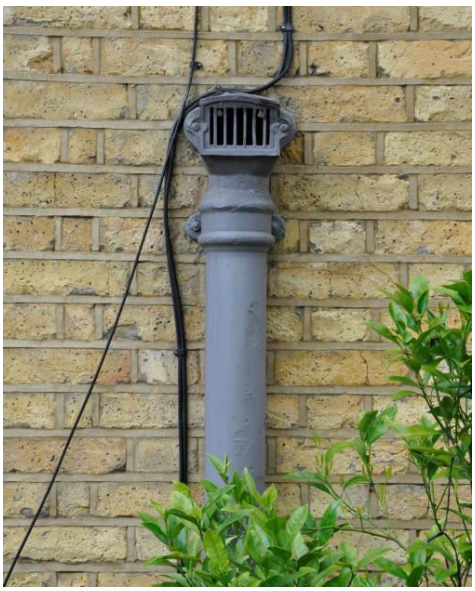
However, there are minor improvements that could be made to the existing terraces within the residential part of this Conservation Area. While the structures themselves are intact, the terraces require some attention and renovation. The Council supports the retention and reinstatement of architectural features of the area.

This section provides guidance on opportunities for enhancement of the character and appearance of the Conservation Area which residents may consider. Furthermore, section 2.4 summarises the positive contributors to the character and appearance of the Conservation Area; the repair or reinstatement of which would represent public benefits as defined by the NPPF.

3.4.1 Façade brickwork

Measures should be taken to ensure that further damage to the façade brickwork is avoided and to ensure that further application of the pebble-dash is not allowed (see section 2.3.5). Although cladding and rendering may seem quick solutions to maintenance and structural problems, they can create new problems, disguising what could later emerge to be major building defects. These are all irreversible steps. By hiding original details, such as window arches and string courses, a house can be completely altered, losing its traditional appearance.

The original pointing and mortar would have been lime putty based without cement. Modern cementitious mortars are not appropriate because this mortar is actually harder than the brickwork, whereas mortar should be softer than the brickwork. Projecting 'weather struck' pointing would not be original and should be avoided; the pointing should be flush with or slightly indented from the brickwork. It is important to use mortar to match the original and not any later replacements.



Examples of cementitious mortar.

3.4.2 Railings

During the war metal was in short supply and railings were removed. Some properties have had railings reinstated but they do not all follow the traditional details. Reinstatement of traditional railings is encouraged by the Council. Railings should be of cast iron, painted black and leaded into a stone plinth. Low railings are appropriate: higher than 2m would detract from the character and appearance of the Conservation Area. In saying this, some houses appear never to have had railings and in these cases, it may not be appropriate to introduce them.

3.4.3 Cornices

Where parapet level cornices are damaged or have been removed, efforts should be made to restore or reinstate them, to match the original. This would improve the rhythm and character of the terrace and therefore be considered a positive intervention to the Conservation Area.

3.4.4 Public realm

Other opportunities for enhancement exist in the rationalisation of the street clutter, the encouragement of the street market, and community uses which allow people to meet. Care to ensure the appropriate maintenance will need to be considered.

3.5 Potential development

The Council recognises that residents may wish to extend their houses to provide more accommodation; this section provides guidance on how best to manage the potential change (sheet no. 4 of Appendix 3 illustrates some of the roof extensions carried out in the Medway Conservation Area). It is important that any development is carried out with due regard for preserving or enhancing the character or appearance of the Conservation Area.

Historic England, in their guidance regarding alterations to the London terraced house 1660–1860, note the need to retain the structure, character and appearance of a building, and that proposals should not impair or destroy the overall shape and proportion of a house or detract from its historic character

3.5.1 Roofs

Appendix 1 is an Audit of the existing types of main roof (excluding the rear extension) which are located within the Medway Conservation Area. The Audit clearly illustrates that in most cases, the basic historic forms of the main roofs of the various terraces have survived, even where roof covering materials have been subject to change and/or other small scale changes have occurred.

Historic England's advice summarised above relates to a number of features but is particularly relevant when considering alterations to the roof form.

When assessing an application for a roof extension the following matters are taken into account:

- visibility and impact on the public realm;
- historical integrity (degree of change);
- the historical and architectural interest of the buildings concerned;
- the completeness of the group or terrace of houses concerned;
- the consistency and uniformity of the existing roofscape and its contribution to the character of the Conservation Area; and
- significance in terms of the Conservation Area.

Please refer to the illustrated guidance for roof extensions in Appendix 3. As shown in the drawings, there is no 'one size fits all' approach.

There is no precedent for flat-top Mansard roofs in traditional properties in the Conservation Area, but flat-top Mansards have been used on some modern properties. In cases where a proposed Mansard roof extensions is next to an existing flat-top Mansard it will usually be preferred that the proposed follow guidance for a traditional Mansard.

Appendix 3 provides guidance aimed at minimising harm and maximising public benefit from proposals for roof extensions.

3.5.2 Rear extensions

The scope for rear extensions to be altered is often greater than for roof extensions. There are large parts of the Conservation Area where rear elevations have less impact to the character and appearance of the Conservation Area. Where new extensions are not visible from the public realm their impact on the overall character and appearance of the Conservation Area is reduced.

However, the variety of rear extensions means that there is no standard solution and when putting an application together it will be important to consider, the consistency and rhythm of neighbouring properties, the existing rear building line and the particular character of the house. Appendix 2 is an audit of the existing types of rear extension which are located within the Medway Conservation Area.

When assessing an application for a rear extension the following matters are taken into account:

- visibility from street and impact on the public realm;
- historical integrity (degree of change);
- the historical and architectural interest of the buildings concerned;
- the consistency and uniformity of the existing group or terrace of houses concerned; and
- significance in terms of the character and appearance of the Conservation Area.

The impact of the proposals upon the amenity of neighbouring properties, the design, scale and materials are always important considerations when assessing proposals for a rear extension. An extension should always be subordinate to the main building.

Generally an extension to infill the side return will be acceptable. Ideally this should be a lighter weight structure, its features should respect the scale of those features on the existing building and ideally it will be set back from the rear wall of the existing extension so that the prominence of the historic building envelope is preserved.

A common form of extension requested is a wrap-around extension. This might also be acceptable, where the garden is of a suitable size, and where it is not visible from the public realm.

It is very important to note that all general planning policies apply as elsewhere in the Borough.

3.5.3 Shopfronts

Roman Road is lined with shop fronts; this street is a lively component of the Conservation Area and there exists the opportunity to refurbish and upgrade the shopfronts along this thoroughfare. Insensitively designed shopfronts can harm the character and appearance of the Conservation Area, whereas a well-designed shopfront has the potential to increase the attractiveness of the building to which it is attached and the area as a whole, and potentially increase the commercial success of the shop and the area by increasing the appeal to shoppers. Alterations to original shopfronts should respect the design, detailing, material and architectural features of the traditional shopfront, and also the building itself.

3.6 Highways and transportation issues

The quality of the streetscape, the surface materials, street furniture and other features can all be integral parts of the character of Conservation Areas. Any work carried out should respect this historic character. Anyone involved in development which impacts on public spaces should refer to the Council's Street Design Guide, Transport for London's Streetscape Guidance and Historic England's 'Streets for All' document. The ongoing cost of maintenance should also be considered carefully.

Due to the evolved nature of the area which is predominantly residential in character, it should be investigated whether any design strategies can be introduced to meet both residential and commercial parking needs. It is necessary to curtail the amount of on-street carparking, particularly the off-spill of Roman Road activity, along the surrounding residential streets. Cars parked on both sides of the local streetscapes have narrowed the road widths for moving

vehicular traffic. Options to reduce the traffic and to relocate commercial parking should be sought, in order to preserve and restore the residential character of the Medway Conservation Area.

Despite road markings and raised traffic islands/ kerbs, further measures to calm the traffic are required, through the introduction of speed humps at regular intervals. These are necessary along the longer roadways in the area, such as east-west running Antill Road and the north-south running Medway and Lyal Roads, to minimise the speeding traffic. Currently the oversized road markings on Medway Road and Antill Road, indicating a 20km speed limit, do not act as a deterrent for over-zealous drivers. Road markings and other highway infrastructure needs to be reapplied in a more sensitive and subtle way to significantly enhance the setting of the Medway Conservation Area.

Works by statutory services (gas, electricity, water etc.) have the potential to damage historic ground surfaces or ancient underground structures. Early consultation with the conservation team is encouraged for any works.

3.7 Trees, parks and open spaces

There are no major parks or open spaces in the Medway Conservation Area, although there is a small pocket park, namely Selwyn Green, adjacent to Saxon Hall.

All trees in Conservation Areas are protected, and some trees are also covered by individual Tree Preservation Orders (TPO's). Notice must be given to the Council before works are carried out to any tree in the Conservation Area, and some works require specific permission. More information can be found in the Council's Guide to Trees, and on the Tower Hamlets website. Carrying out works to trees without the necessary approval can be a criminal offence, and the Council welcomes early requests for advice.

3.8 Equalities

Valuing diversity is one of the Council's core values, and we take pride in being one of the most culturally rich and diverse boroughs in the UK. This core value has driven the preparation of this document and will continue to inform changes to this document in the future. These values will also inform changes to buildings and places where this document provides guidance to ensure inclusivity for all sections of the community.

This Character Appraisal and Management Guidelines will support the Council's aims:

- a strong spirit of community and good race relations in Tower Hamlets;
- to get rid of prejudice, discrimination and victimisation within the communities we serve and our workforce; and
- to make sure that the borough's communities and our workforce are not discriminated against or bullied for any reason, including reasons associated with their gender, age, ethnicity, disability, sexuality or religious belief.

Please contact us if you feel that this document could do more to promote equality and further the interests of the whole community.

3.9 Publicity

The existence of the Conservation Area will be promoted locally to raise awareness of current conservation issues and to invite contributions from the community.

3.10 Consideration of resources needed to conserve the historic environment

The most effective way to secure the historic environment is to ensure that buildings can continue to contribute to the life of the local community, preferably funding their own maintenance and refurbishment. Commercial value can be generated directly from the building, through its use as a dwelling or office, or through its role in increasing the attractiveness of the area to tourists and visitors. However, it should be noted that economic reasons alone will not in themselves justify the demolition or alteration of a building in a Conservation Area. The Council will consider grant aid to historic buildings and places.

In order to meet today's needs without damaging the historic or architectural value of a building, a degree of flexibility, innovation and creative estate management may be required.

3.11 Ongoing management and monitoring change

To keep a record of changes within the area, dated photographic surveys of street frontages and significant buildings and views will be made every five years. Also, public meetings will be held every five years to maintain communications between all stakeholders and identify new opportunities and threats to the Conservation Area as they arise.

The Council recognises the contribution of the local community in managing Conservation Areas, and will welcome proposals to work collaboratively to monitor and manage the area.

In addition, the Borough's Annual Monitoring Report, prepared for the emerging Local Plan, will assess progress on the implementation of the whole Local Development Scheme, including policies relevant to conservation.

3.12 Enforcement strategy

Appropriate enforcement, with the support of the community, is essential to protect the area's character. The Council will take prompt action against those who carry out unauthorised works to listed buildings, or substantial or complete demolition of buildings within a Conservation Area. Unauthorised work to a listed building is a criminal offence and could result in a fine and/or imprisonment. Likewise, unauthorised substantial or complete demolition of a building within a Conservation Area is also illegal. It is therefore essential to obtain Conservation Area or Listed Building Consent before works begin.

Planning applications for alterations that would not preserve or enhance the character or appearance of the Conservation Area will normally be recommended for refusal.

3.12.1 Article 4 Directions

Article 4 Directions are a process through which change within the Conservation Area can be positively managed.

The Council will enforce conservation law wherever necessary, and will consider the introduction of Article 4 Directions. An Article 4 Direction is a direction under Article 4 of the General Permitted Development Order which enables the local planning authority to withdraw specified permitted development rights across a defined area. (Permitted development rights are a national grant of planning permission which allow certain building works and changes of use to be carried out without having to make a planning application.) This would bring these types of development within the control of the planning process.

The Council will investigate an Article 4 Direction to protect against:

i. changes to door surrounds;

ii. changes to existing sash windows with wooden frames;

iii. changes to existing canted bay windows;

iv. changes to window stucco surrounds;

v. removal of stucco cornice on the front elevation;

vi. change to roof coverings and demolition of or alteration to chimneys;

vii. the addition of a porch on the front elevation;

viii. demolition of existing iron railings to the front boundary;

ix. the painting or covering of previously unpainted and uncovered brickwork of a dwelling house or a building within the curtilage.

Where proposed works *will repair or reinstate* features that have been identified as positive contributors to the character or appearance of the Conservation Area, they will be considered to contribute to the 'public benefits' (as identified by the NPPF) of a scheme, subject to appropriate detailing, materials and methodology.

3.13 Outline guidance on applications

Before carrying out any work in this area, you may need to apply for planning permission even for minor work such as replacing railings, as well as others for work such as felling trees.

When planning applications in a Conservation Area are decided, the local planning authority has a duty under the Planning (Listed Buildings and Conservation Areas) Act 1990 Section 72 to pay special attention to the desirability of preserving or enhancing the character or appearance of the Conservation Area. The character of Medway Conservation Area is described in detail in the Appraisal in the first part of this document.

In the Medway, as in other Conservation Areas, planning controls are more extensive than normal. Consent is required to demolish any building, and a higher standard of detail and information is required for many applications.

The exact information required will vary with each application, but in general applications must include:

- A clear design statement explaining the reasons behind the design decisions;
- Contextual plans, sections and elevations of existing buildings;

- Drawings, including construction details, produced at larger scale (eg. 1:50 or 1:20) clearly indicating the nature of the work proposed;
- Additional detail regarding materials and construction; and
- Photos of the condition of existing building (including details where appropriate).

More details are available on the Tower Hamlets website. If in any doubt, the Council welcomes and encourages early requests for advice or information.

It is advisable to speak to the Council's Duty Planner before submitting an application. The Council runs a pre-application service which you may wish to use. Details are available on the Council's website.

3.15 Further reading

The Buildings of England (London 5: East). Cherry, O'Brien and Pevsner.

3.16 Contact information

The Council encourages and welcomes discussions with the community about the historic environment and the contents of this document. Further guidance on all aspects of this document can be obtained on our website at www.towerhamlets.gov.uk or by contacting:

Tel: 020 7364 5009

Email: placeshaping@towerhamlets.gov.uk

This document is also available in Libraries, Council Offices and Idea Stores in the Borough.

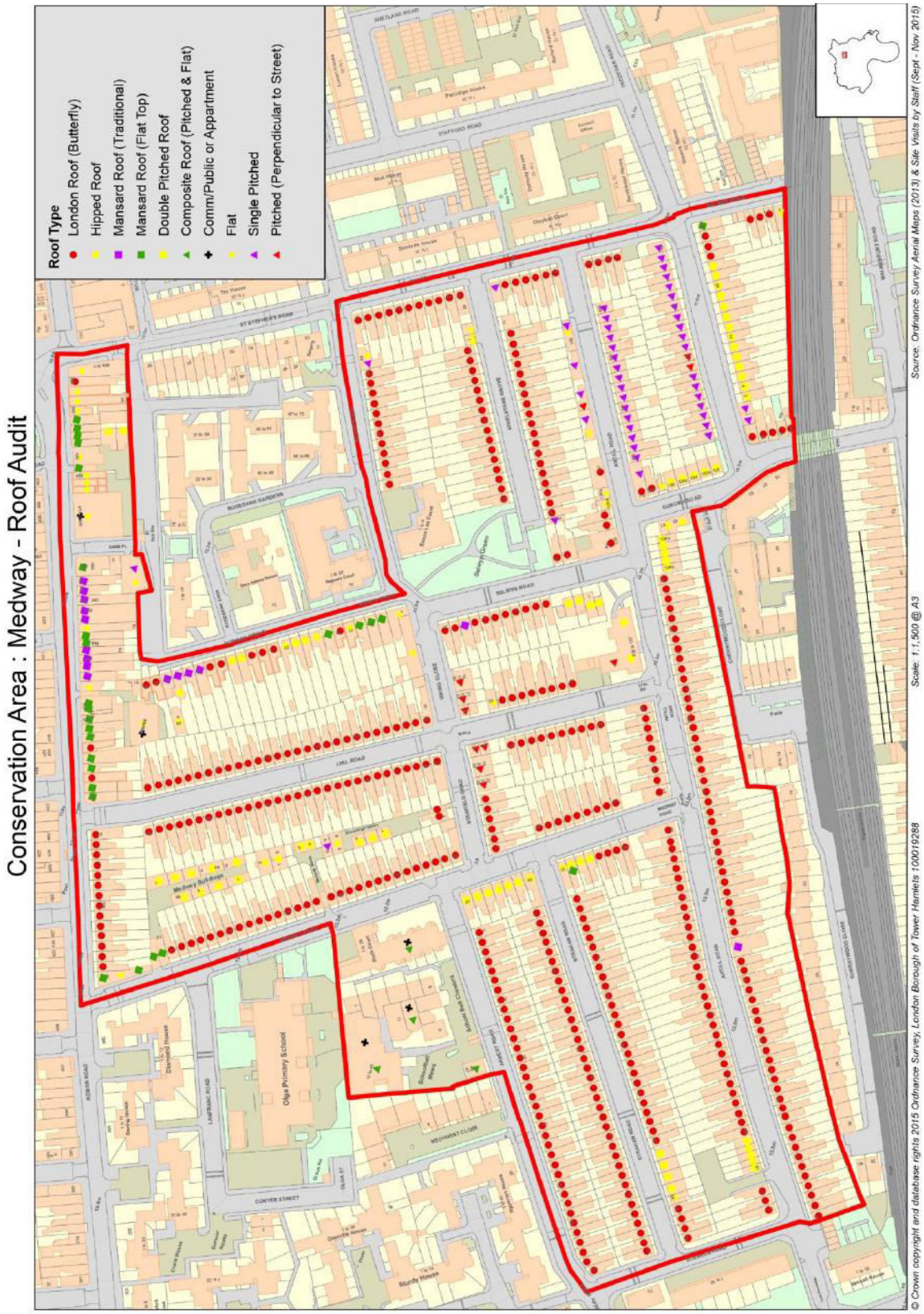
For a translation, or large print, audio or braille version of this document, please telephone 0800 376 5454. Also, if you require any further help with this document, please telephone 020 7364 5372.

Also, you may wish to contact the following organisations for further information:

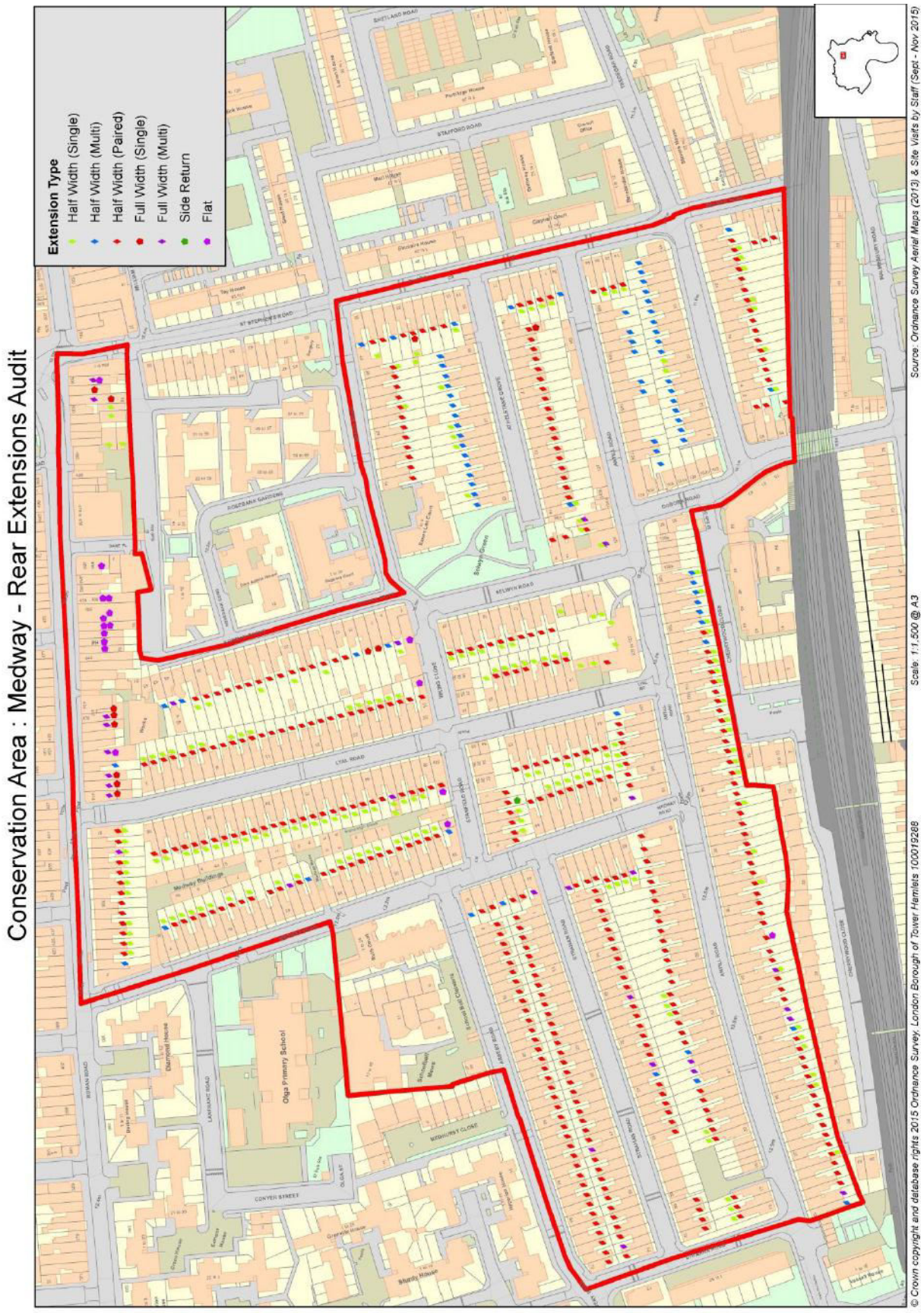
Mile End Old Town Residents Association

Historic England	www.historicengland.org.uk
The Georgian Group	www.georgiangroup.org.uk
Victorian Society	www.victorian-society.org.uk
20th Century Society	www.c20society.org.uk
Society for the Protection of Ancient Buildings	www.spab.org.uk

Appendix 1: Roof types map



Appendix 2: Rear extensions audit



Appendix 3: Design principles for roof extensions

Mansard Roof Guidance

Appendix 3 Introduction
Design Guidance for mansard roof extensions

In order to extend properties at roof level in the Conservation Area, it would be necessary to remove the original London Roofs. It is considered that the removal of original roofs and the addition of mansard roofs could have a potential harm on the character of the streetscape, particularly in the short-term, especially if mansards are implemented in an ad-hoc manner, but this could potentially be mitigated and balanced in the following ways:

- There is potential for householders to incorporate improvements to their property such as the reinstatement of lost architectural features, which if carried out to a high quality using materials and workmanship to match the original, could provide public benefit to enhance the terraces

- Adopting a consistency of design for mansard roof extensions could look cohesive and if adopted over a group of houses or a whole terrace this would change the character but would not necessarily harm it

The design guidance on the following sheets illustrates the steps that are considered to be necessary to provide a consistency of design for new mansard roofs in order to minimize impact and enhance the character of the streetscape as much as possible.

The guidance has been prepared in the form of illustrated sheets, starting with an assessment of the architectural characteristics of the houses and the character of the streetscape. The impact of installing mansard roofs within the Conservation Area has been assessed using three-dimensional computer aided design. The guidance provides a prototype design that is based on a typical mid-terrace house. Three options were prepared to compare the shape and form of mansard roofs and assess their impact on the streetscape. Option 1a was considered to have the least impact and was taken forward as the proposed prototoype design.

Guidance is given on the items that would be assessed by LBTH for a planning application for a mansard extension, including materials, dimensions and details. End-of-terrace, corners and the back of properties are also addressed. Guidance is also given on the opportunities for reinstatement of lost features that would be encouraged as potential mitigation of any perceived harm.

Outline guidance is also provided on structure, building regulations and construction in order to give some guidance on the main issues that would need to be addressed by designers and householders wishing to progress a mansard roof proposal. Every house would need to be assessed individually and the guidance is not exhaustive, but it is intended to provide background information and general information for key items that would need to be considered. The drawings included in this guidance document are diagrammatic only and are used to illustrate general principles. The guidance sheets and drawings are not intended to be used purposes of construction. Older buildings need to be evaluated individually to assess the most suitable form of construction based on a wide variety of possible variables. The London Borough of Tower Hamlets, Kennedy O'Callaghan Architects and Alan Baxter ltd. do not accept liability for loss or damage arising from the use of this information.

List of Design Guidance Sheets

01	Architectural characteristics of the Conservation Areas (Driffield Road and Medway)
02	Architectural features of the Conservation Areas (Driffield Road and Medway)
03	Streetscape in the Conservation Areas (Driffield Road and Medway)
04	Precedence for mansard roofs in Tower Hamlets
05	Typical house configuration
06	Option 1 Double-pitch mansard roof
07	Option 1a Double-pitch mansard roof (Revision A)
08	Option 2 Flat-top mansard
09	Comparison: Option 1, 1a and Option 2
10	Design Guidance - Mansard set back
11	Design Guidance - Integrity of the Conservation Area
12	Design Guidance - Chimney stacks
13	Design Guidance - Rainwater downipes
14	Design Guidance - Dormer windows
15	Design Guidance - Retain distinctive ‘V’ of London roof to rear
16	Design Guidance - End-of-terrace properties
17	Design Guidance - Rear of end-of-terrace properties
18	Design Guidance - Solar panels
19	Design Guidance - Individual treatment to rear slope of mansard
20	Design Guidance - Construction steps 1
21	Design Guidance - Construction steps 2
22	Design Guidance – Typical Second Floor Plan
23	Design Guidance - Building Regulations
24	Design Guidance - Head height in stairwell
25	Design Guidance - Structure
26	Design Guidance - Height constraints
27	Design Guidance - Materials

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Mansard Roof Guidance

Appendix 3 Summary
Design Guidance for mansard roof extensions

Purpose of guidance
The design guidance will help householders achieve consistency of design for mansard roof extensions in the Conservation Area. This was considered to be important to residents who attended the three public consultation events held in July to September 2016 and was further reinforced in the feedback received. Adopting a consistency of design for mansard roof extensions could look cohesive and if adopted over a group of houses or a whole terrace this would change the character but would not necessarily harm it, whereas inconsistent uncontrolled roof extensions could create significant harm.

Potential for reinstatement of lost features
The guidance illustrates the potential for householders to incorporate improvements to their property, such as the reinstatement of lost architectural features, which if carried out to a high quality, using materials and workmanship to match the original, could provide public benefit by enhancing the Conservation Area.

Guidance sheets summary
Sheets 1-3 of the Design Guidance address the architectural qualities of the streetscape and describe the features that enhance the character of the Conservation Area. This information would be relevant for applicants preparing a Design and Access Statement to accompany planning applications for mansard roofs.

Sheet 4 illustrates some existing mansard roofs in the borough and identifies their characteristic features.

Sheet 5 illustrates a typical mid-terrace house, using three-dimensional computer aided design. The assumptions on which the typical house is based are explained. The typical house was the base drawing on which a prototype design for proposed mansard roofs was developed. This allows a comparison of options, to explore the preferred shape and form and to assess their impact on the streetscape.

Sheets 6-8 illustrate different mansard configurations: option 1, 1a and 2. Option 1 is a traditional mansard roof set close to the line of the parapet wall to provide as much accommodation as possible within the mansard. Option 1a sets the roof back from the parapet wall. Option 2 is a flat topped mansard.

Sheet 9 compares the three options and illustrates the impact of each option when viewed from the street. Options 1 and 2 appear to have the least effect on the streetscape when looked at in elevation, but when assessed in three dimensions and viewed from the street and from the houses opposite, Option 1a was considered to have the least impact and to appear the most subservient to the host building. The pitches and set-back are in accordance with Historic England guidance. Option 1a was therefore taken forward as the proposed prototype design.

Option 1a is considered to be set back adequately to allow two dormers to be constructed on the front slope, and still to look suitably subservient to the host building. However each street varies slightly and this may have to be appraised street by street to ensure that the proposed dormers do not appear to dominate the façade. Further guidance on set-back is given on sheet 10 and guidance on dormers is given in Sheet 14.

Sheets 10-19 provide guidance on the items that would be assessed by LBTH for a planning application for a mansard extension, including materials, dimensions and details, chimneys and rainwater pipes. End-of-terrace, corners and the back of properties are also addressed. The design guidance illustrates the steps that are considered to be necessary to provide a consistency of design for new mansard roofs in order to minimize impact and enhance the character of the streetscape as much as possible.

Sheets 20-21 provide outline guidance on construction so that householders considering a mansard extension can understand the scope of work, sequence of construction and items to consider.

Sheet 22 shows a typical mansard floor plan, to illustrate how it might be laid out to include a bedroom with en-suite bathroom and typical room sizes that might be achieved.

Sheets 23-25 show the technical considerations including guidance on structure, building regulations and construction in order to give some guidance on the main issues that would need to be addressed.

Sheet 26 gives guidance on the proposed setting out dimensions that would allow consistency throughout the Conservation Area and the appearance of the mansard roofs to be subservient to the host building.

Sheet 27 gives guidance on materials. This also identifies some of the opportunities for reinstatement of lost features that would be encouraged as potential mitigation of any perceived harm.

Variations and exclusions
The design guidance is not prescriptive for all properties because it is acknowledged that there are variations from street to street, terrace to terrace and house to house. Appendix 4 provides a map to indicate which properties have been excluded from the guidance as they are atypical. Every house would need to be assessed individually and the guidance is not exhaustive, but it is intended to provide background information and general information for key items that would need to be considered.

Note on guidance documents
The drawings included in this guidance document are diagrammatic only and are used to illustrate general principles. The guidance sheets and drawings are not intended to be used purposes of construction. Older buildings need to be evaluated individually to assess the most suitable form of construction based on a wide variety of possible variables. The London Borough of Tower Hamlets, Kennedy O'Callaghan Architects and Alan Baxter ltd. do not accept liability for loss or damage arising from the use of this information

Architectural characteristics of the Conservation Areas (Driffield Road and Medway)

The following features are positive attributes of the Conservation Areas -

- Continuous line of parapet wall to conceal London roofs
- Cornice (decorative moulding on parapet)
- Mouldings or brick borders to first floor windows
- Timber sash windows with delicate glazing bars
- Embellished architraves to recessed front doors
- Decorative mouldings or bay window to ground floor
- Cast iron railings on stone plinth
- Cast iron metal window guards

The photographs below show that one or more of these characteristics has been lost from each of the properties illustrated

There is an opportunity to reinstate lost features when proposing a mansard roof extension

Loss of original windows, window mouldings and cast iron railings

Timber sash windows replaced with top-hung PVC windows

Removal of features can result in significant loss of character

Glazing bars are less prominent when painted in dark colours

Replacing cast iron railings with brick wall changes relationship of house to street

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Architectural features in the Conservation Areas (Driffield Road and Medway)

The character of the terraces is enhanced by the original mouldings and these vary from terrace to terrace. The variation in architectural detail from terrace to terrace is characteristic, but the consistency of approach in each terrace or group of houses provides coherence.
In some houses the mouldings have been removed, especially the projecting cornices, and in some cases the render band has also been removed or re-built with a plain brick parapet. This can detract from the character and integrity of the Conservation Area.

The reinstatement of missing original features is encouraged. This needs to be carried out using high quality materials and workmanship to match the original details. Reinstatment of lost cornices may help to unify terraces, especially if mansard roof extensions are proposed, and cornices can help to make the mansard roof extension appear less dominant.

Rendered parapet with cornice

Render band with missing cornice

Stucco window and door surround, timber panelled door and sash windows, railings and decorative grilles typical of the character of the neighbourhood

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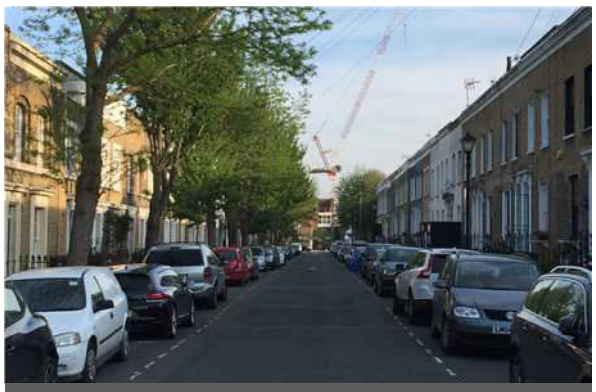
Streetscape in the Conservation Areas (Driffield Road and Medway)

Character and streetscape

- The continuous line of the parapet walls generates striking and uniform views
- The age, design and height of properties is generally consistent across terraces but varies slightly from road to road

Zealand Road

Vivian Road



Zealand Road

Lyal Road

Group of houses

- The continuity of forms, such as window and door spacing, provides a rhythm to the terrace
- The continuity of the cornice ties the whole terrace together visually
- In some cases the cornice has been removed and this lessens the continuity of the terrace

Grove Road

Chisenhale Road

Corner properties

- The distinctive V form of the London roof is clearly visible on corner properties and provides variety of form at the rear of properties

Medway Road

Lyal Road

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Precedence for mansard roofs in Tower Hamlets

There are examples of traditional Mansard roofs in the borough, often with the following characteristics:

- Double pitch roofs,with lower roof steeply pitched at approximately 70° and upper roof pitched at approximately 30°
- Parapet walls of brick-on-edge with clay creasing tiles extend above the roof line to provide a fire break between properties
- Brick chimney stacks with clay chimney pots, approximately 1 metre above line of pitched roof, and stepped lead flashings
- Continuous line of parapet wall, originally with decorative cornices, to conceal London roofs
- Gutters concealed behind parapet walls often draining to rear of properties
- Mansard roof is carefully proportioned to be subordinate to the main building
- Single or double dormer windows are subordinate to windows on the floors below
- A variety of gable treatments including half-hipped mansards, hipped mansard and mansard profiled gable walls
- Traditional slate roofs with lead flashing at the change of pitch, clay ridge tiles and stepped lead flashings to the party walls

Modern Mansard roofs on Roman Road E3 are often flat-topped, roofed in cement slates, with rain water pipes fixed to the front of the properties

Traditional mansard roofs on the corner of Mile End Road and Tredegar Square E3


Traditional mansard roofs on Mile End Road E3


Rear of traditional mansard roofs on Mile End Road E3

Flat-topped mansard roof on Roman Road E3


Mansard roof extensions on Morgan Street E3


Mansard gable on Tredegar Terrace E3

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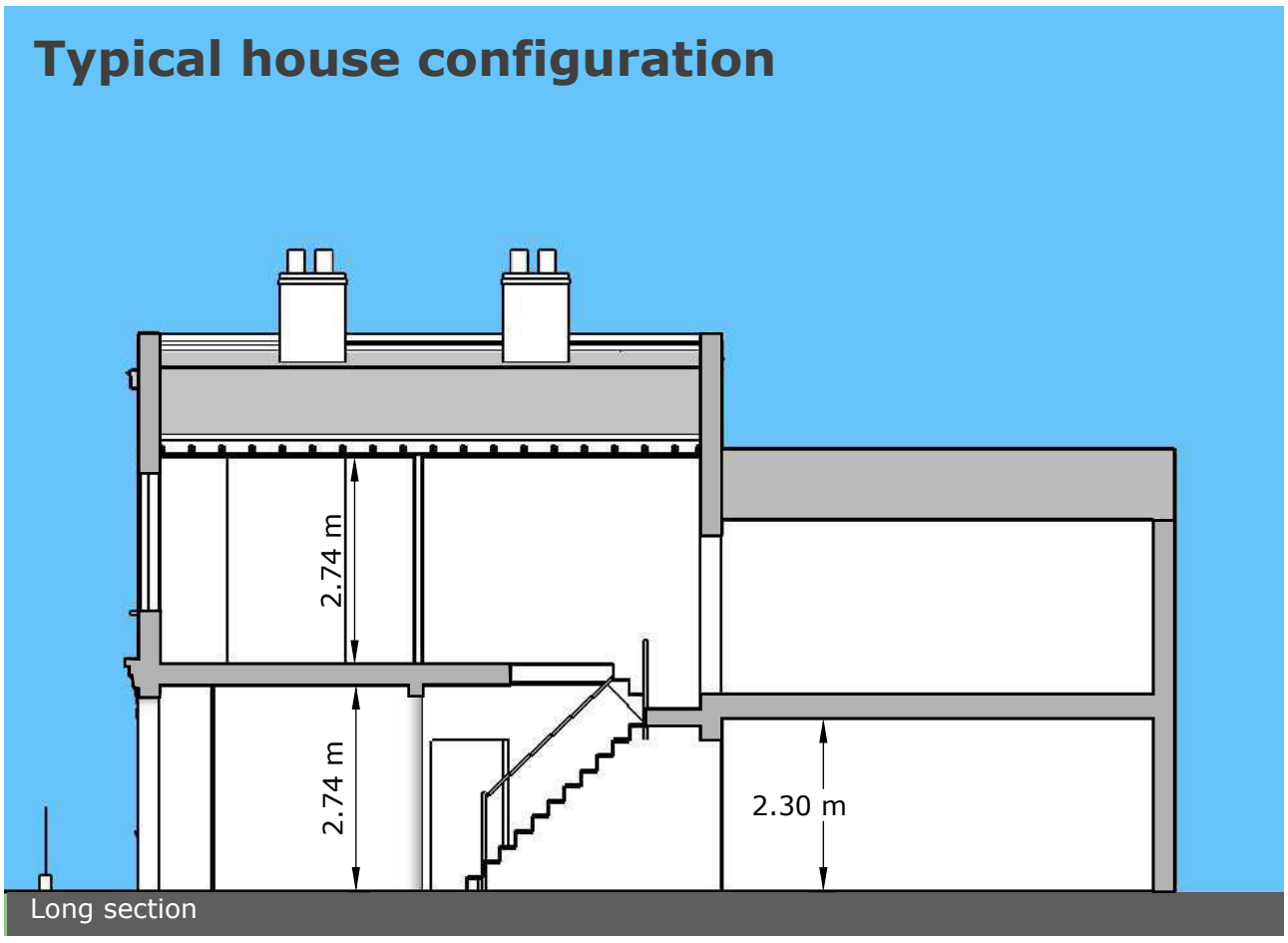
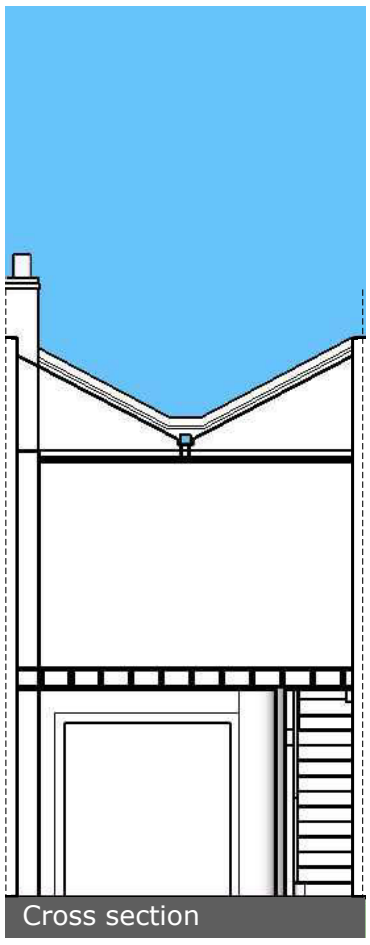
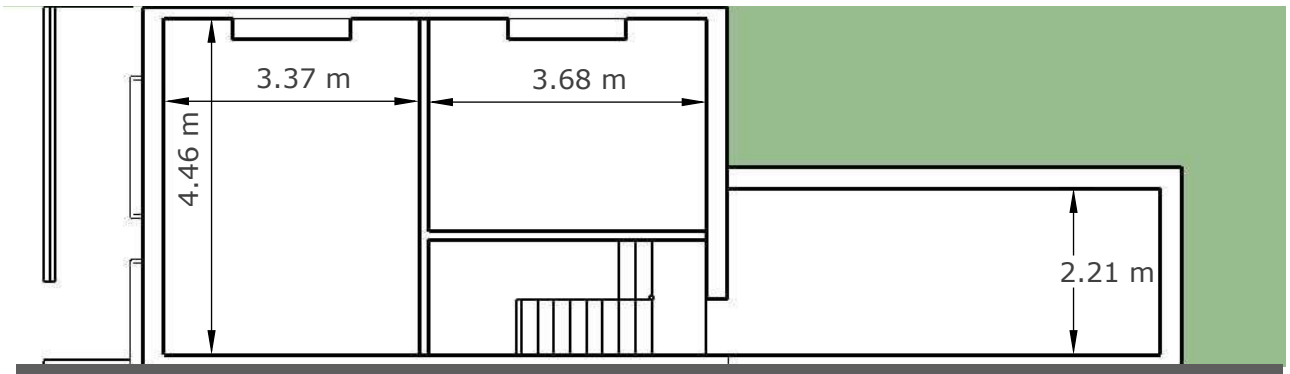
Typical house configuration

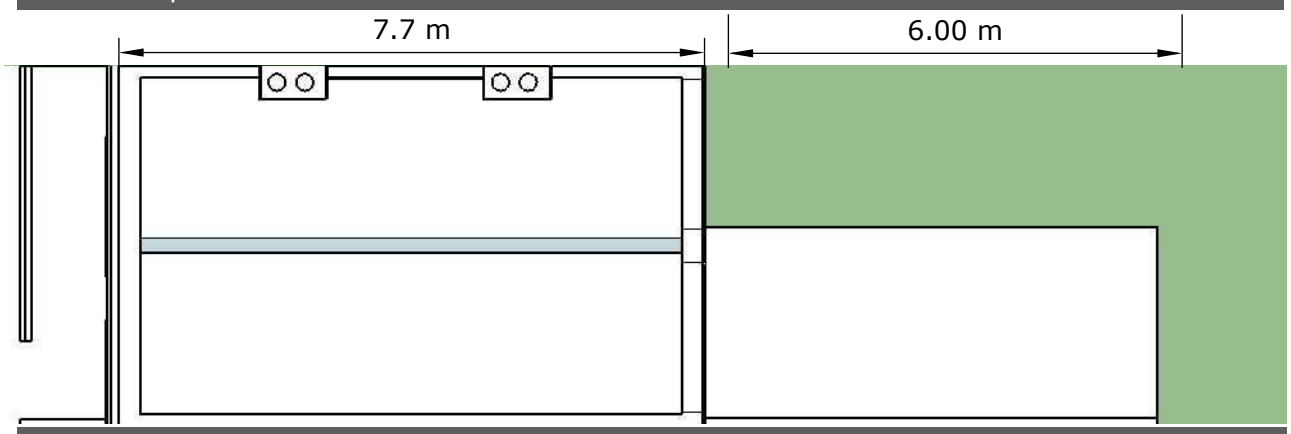


Long section


Cross section



First floor plan



Roof plan


Roofscape


Streetscape


Skyline

Typical house configuration in the Medway and Driffield Road Conservation Areas

- The typical house is 2 storey as 70% of houses are 2 storey
- The roof is a London roof (butterfly) as 84% of houses have London roofs
- The house is mid-terrace because 91% of properties are mid-terrace
- The front is 4.89m (16') wide, from centre to centre of party walls, as this is the average width of properties
- The front block is 7.7m (25'6") deep from external wall to external wall as this is the average depth
- The rear return is 6m long. Returns vary from 4 meters to 8 metres across the conservation areas
- The house has 2 chimney stacks in the front block as this is the most predominant configuration
- The typical ceiling height in the front room is 2.74m (9')

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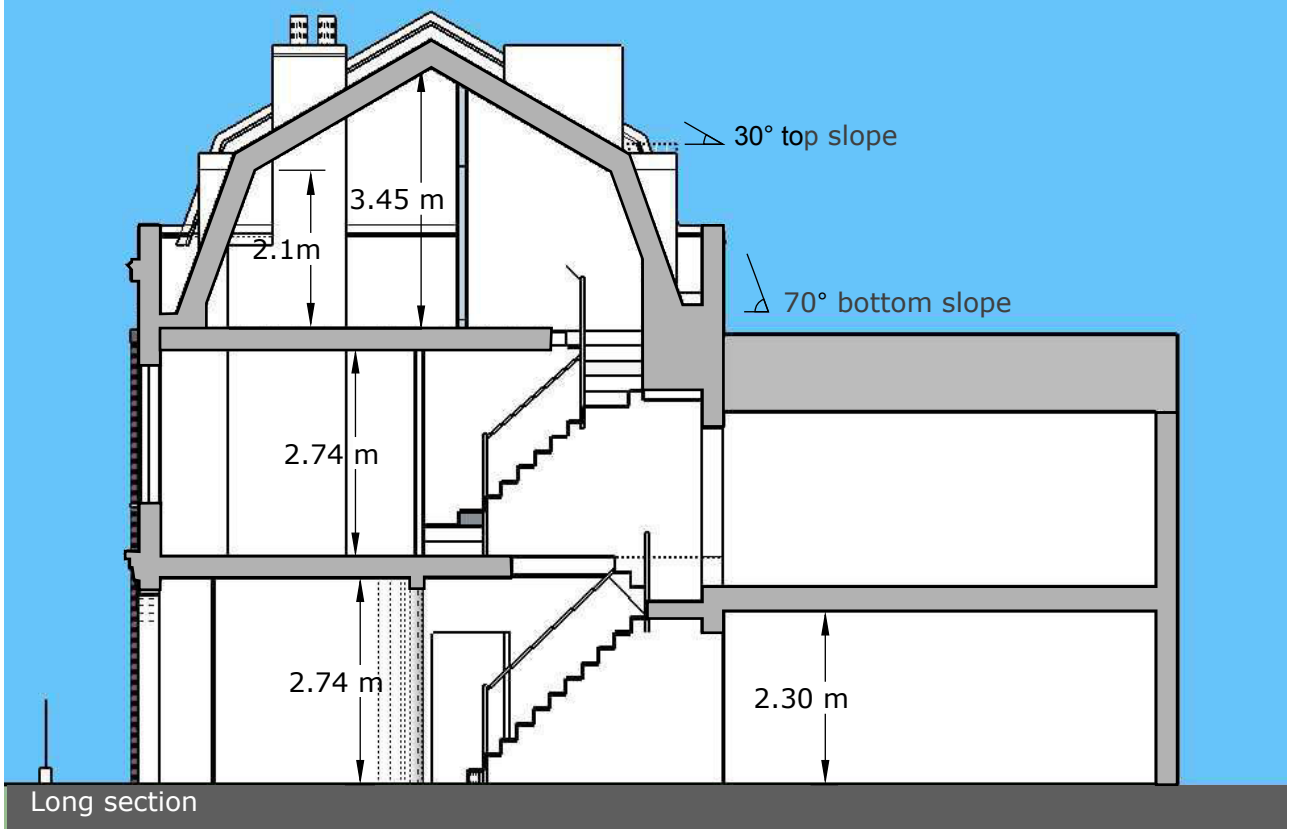
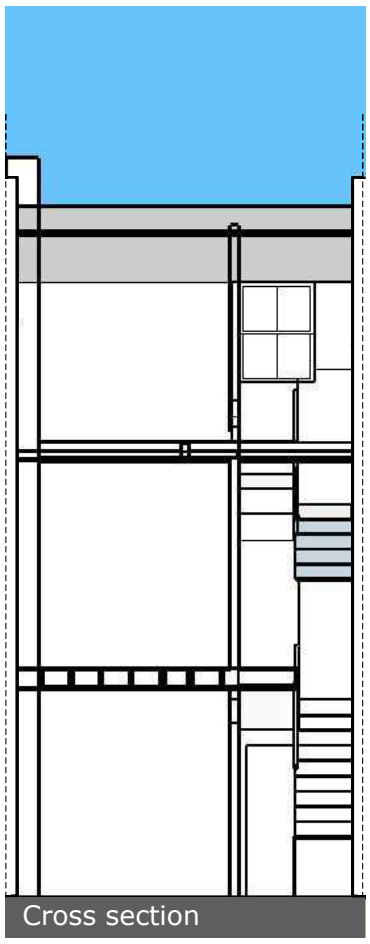
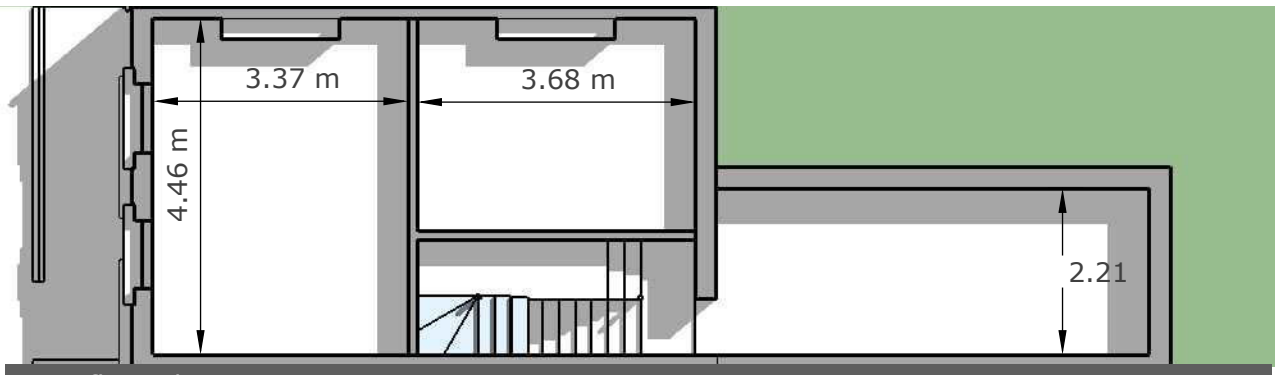
Option 1 Double-pitch mansard roof



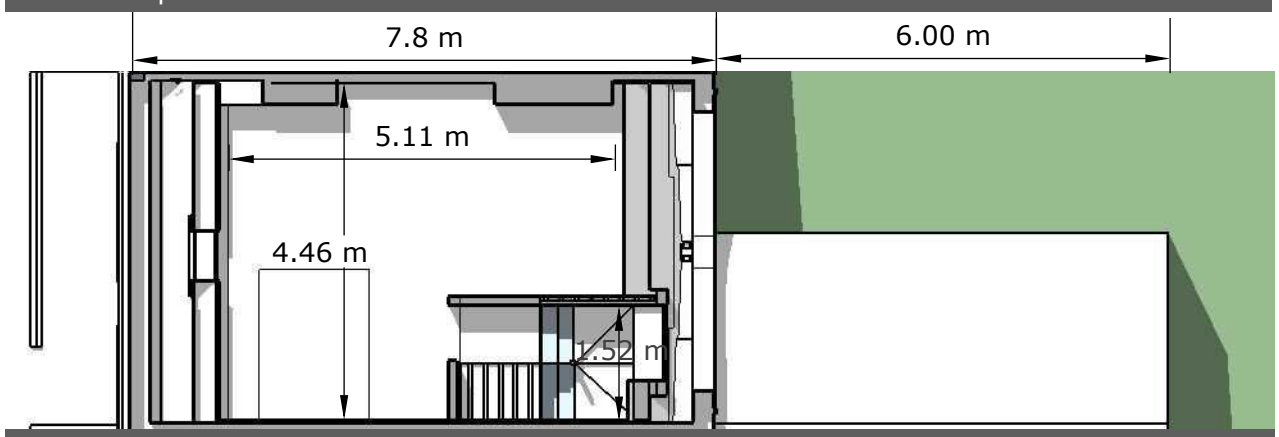
Long section



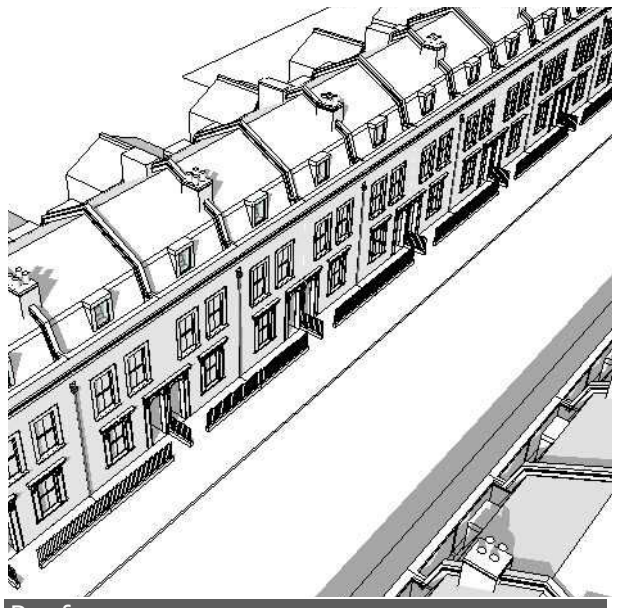
Cross section



First floor plan



Second floor



Roofscape

Streetscape

Skyline

Assumptions:

- Retain existing ceiling in first floor bedrooms (assuming temporary roof is installed)
- Construct lower roof pitched at 70 degrees, construct upper roof pitched at 30 degrees
- Place gutters behind parapet walls at front and rear
- Install rainwater down pipes on front façade subject to checking feasibility
- Construct staircase to comply with Part K of the Building Regulations with respect to pitch, going and headroom
- Construct lead cheeked dormers front and rear

Outcome:

- 2nd floor area = 18.5m² (199 ft²)
- Impact on streetscape: Mansard roof is too dominant in relation to the original building. The extension would be less dominant if the set-back were increased Refer to Option 1a on Sheet 7

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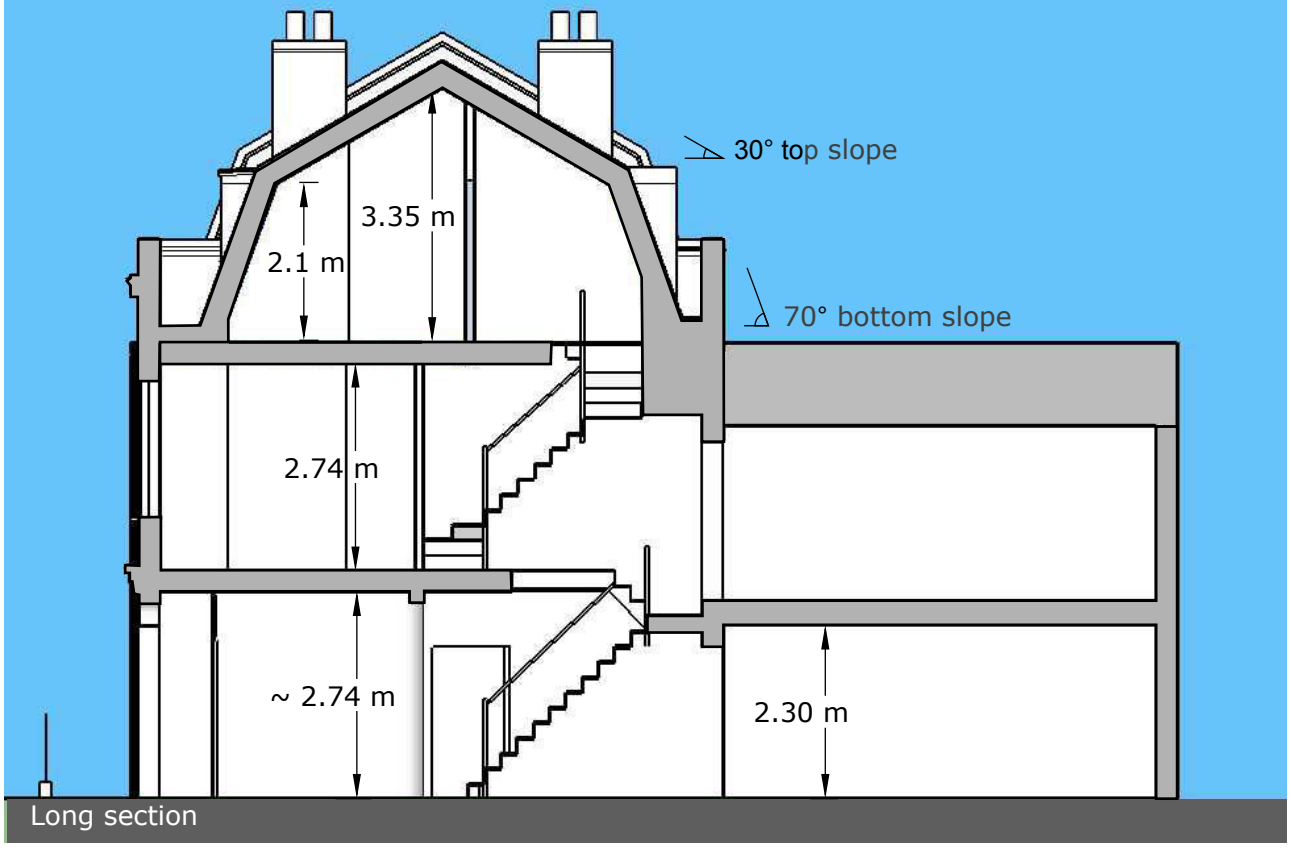
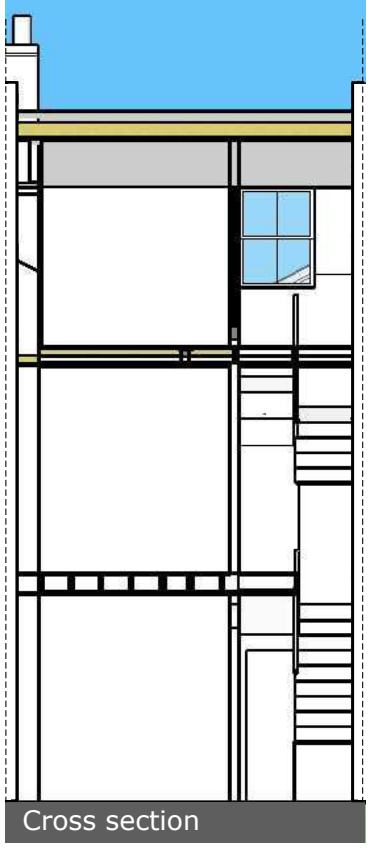
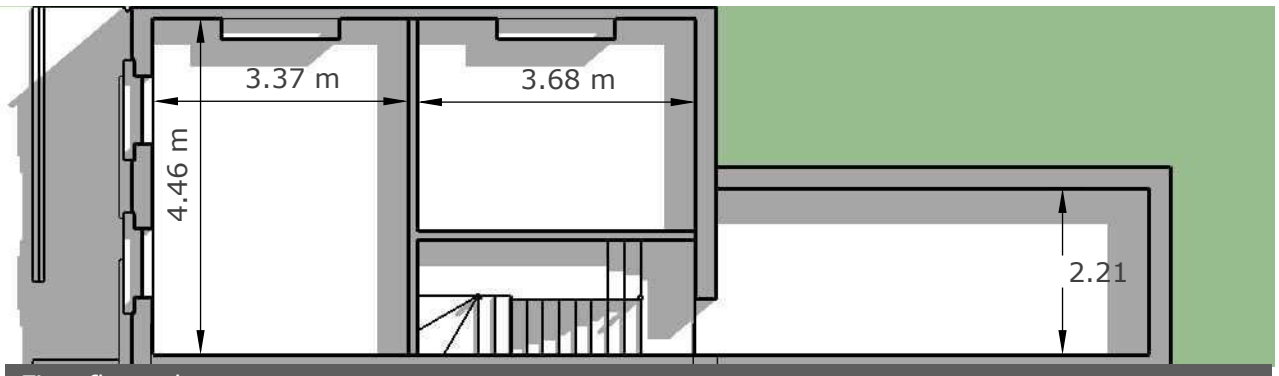
Option 1A Double-pitch mansard roof with increased set-back

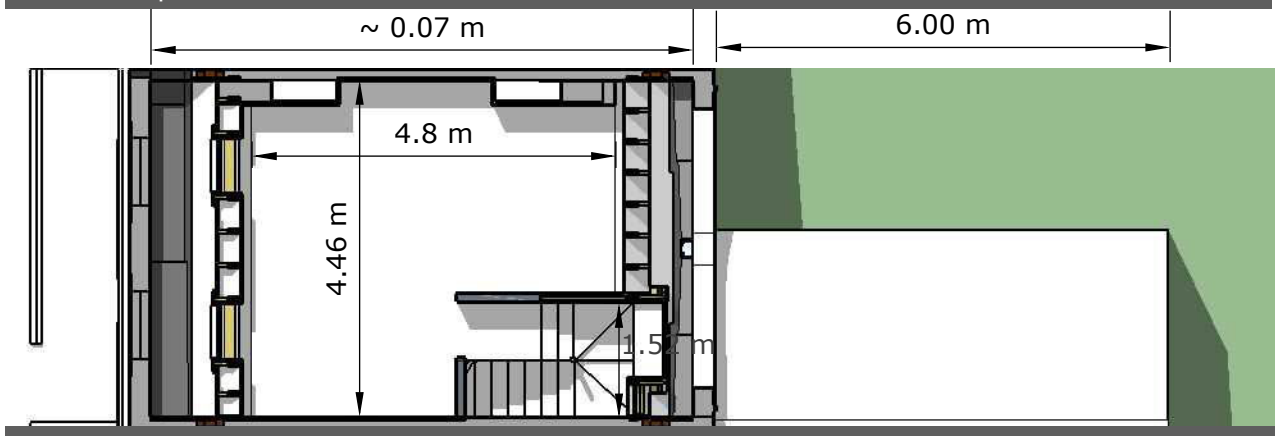


Long section

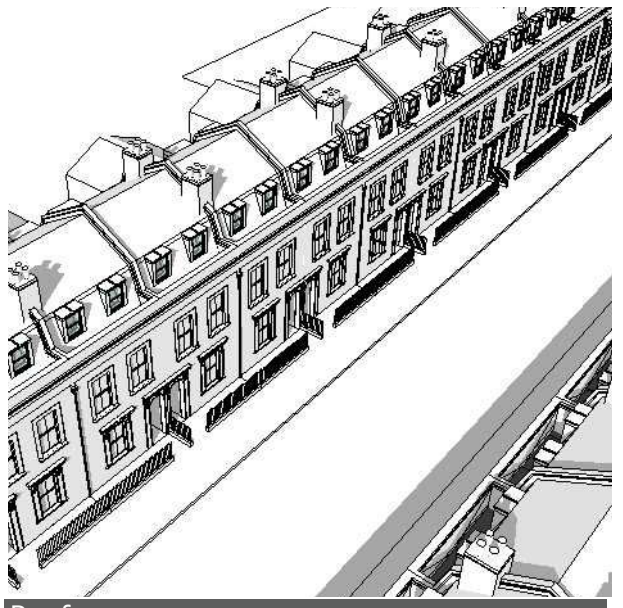

Cross section



First floor plan



2nd floor plan


Roofscape


Streetscape


Skyline

Assumptions:

- Increase set-back (by 300mm compared to Option 1)
- Retain existing ceiling in first floor bedrooms (assuming temporary roof is installed)
- Construct lower roof pitched at 70 degrees, construct upper roof pitched at 30 degrees
- Place gutters behind parapet walls at front and rear
- Install rainwater down pipes on front facade
- Construct staircase to comply with Part K of the Building Regulations with respect to pitch, going and headroom
- Construct lead cheeked dormers front and rear

Outcome:

- 2nd floor area = 17.3m² (186 ft²)
- Impact on streetscape: With the increased set-back the Mansard roof is less dominant in relation to the original building
- With an increased set-back double dormers may be appropriate as they still appear subservient to the host building whilst providing better amenity than a single dormer

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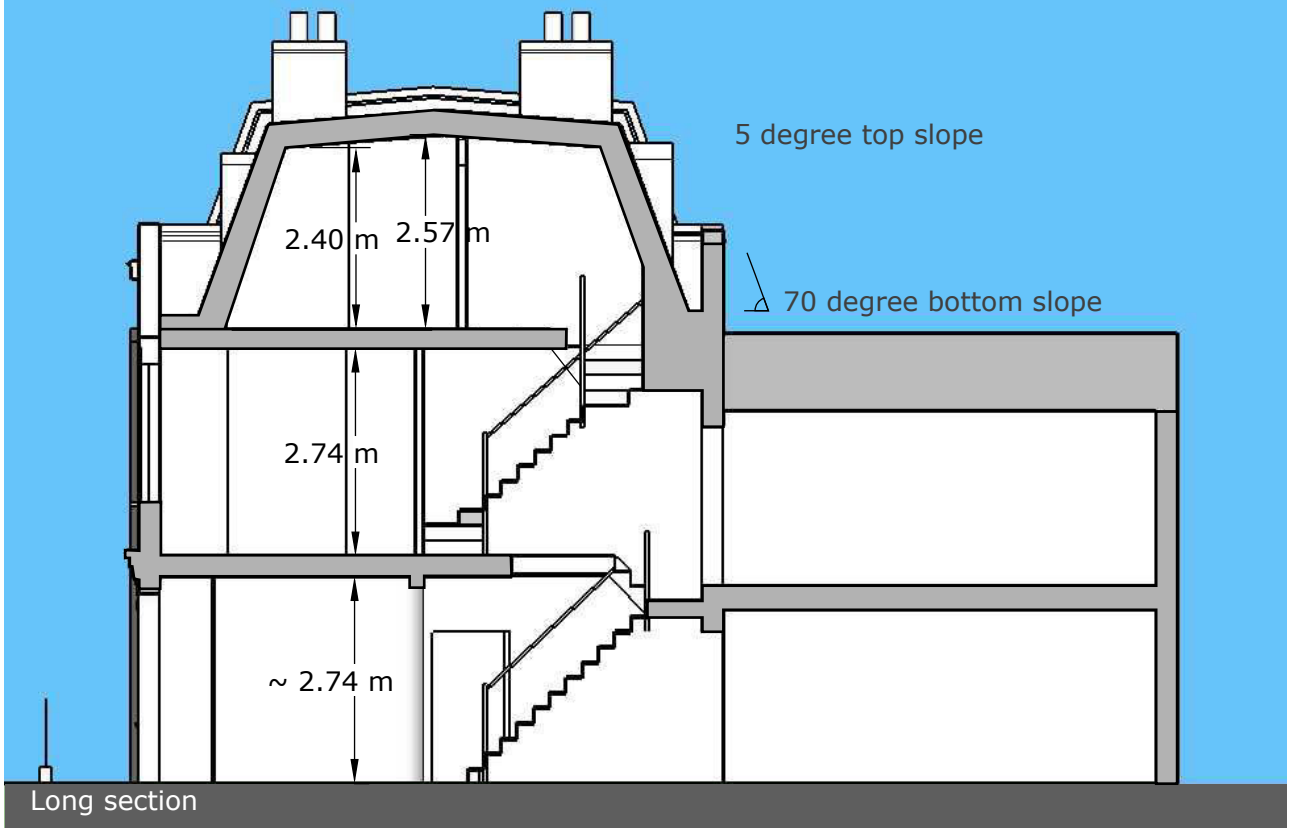
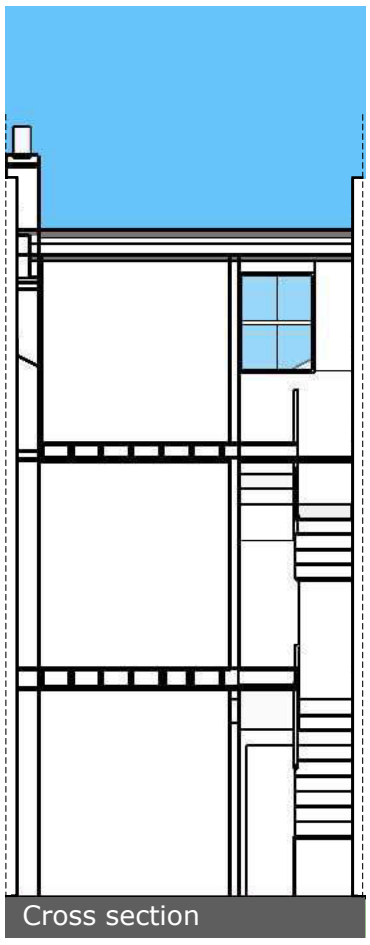
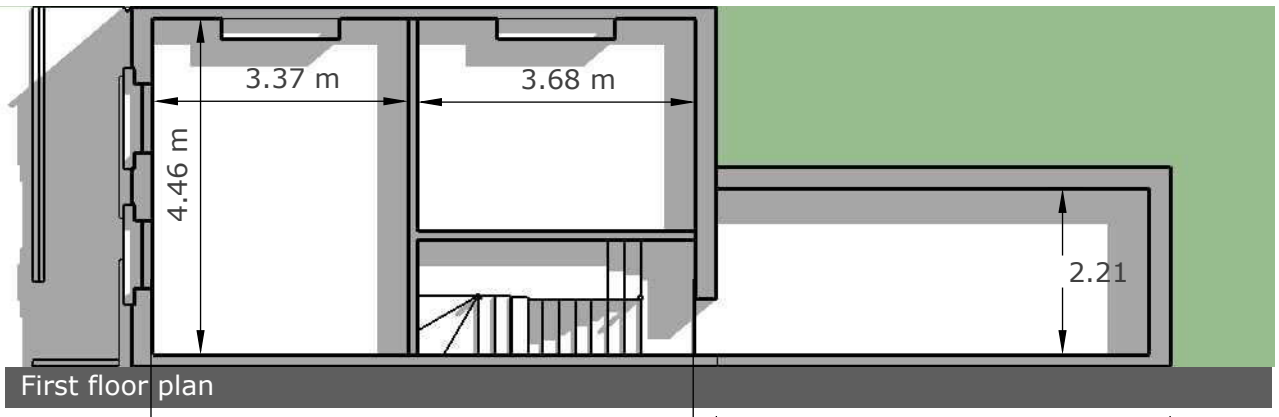
Option 2 Flat-top mansard

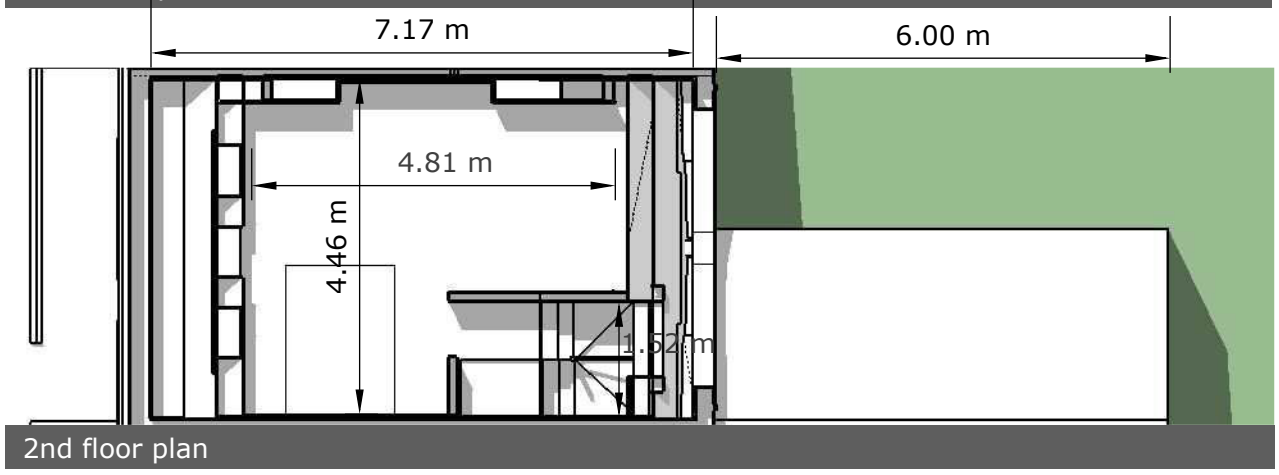


Long section


Cross section



First floor plan



2nd floor plan


Roofscape


Streetscape


Skyline

Assumptions:

- Construct lower roof pitched at 70 degrees, construct upper roof pitched at 5 degrees
- Place gutters behind parpaet walls at front and rear
- Install rainwater down pipes on front façade subject to checking feasibility
- Construct staircase to comply with Part K of the Building Regulations with respect to pitch, going and headroom
- Construct lead cheeked dormers front and rear with single dormer to front

Outcome:

- 2nd floor area = 17.3m² (186 ft²)
- With a flat-top mansard the height of the ridge is lower, while the front slope is higher, when compared to Option 1. This increases the apparent bulk when seen from the street or from the windows opposite (refer to comparative elevations, Sheet 9)

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Comparison: Option 1, Option 1a, and Option 2

Option 1 Double pitch mansard, single dormer	Option 1a Double pitch mansard, double dormer, +300mm set-back	Option 2 Flat-top mansard

Option 1 Double pitch mansard front slope and single dormer are more prominent	Option 1a Double pitch mansard front slope and double dormer are less prominent when set back further	Option 2 Flat-top mansard Front slope is higher and more prominent

Mansard Roof Guidance
Sheet 9

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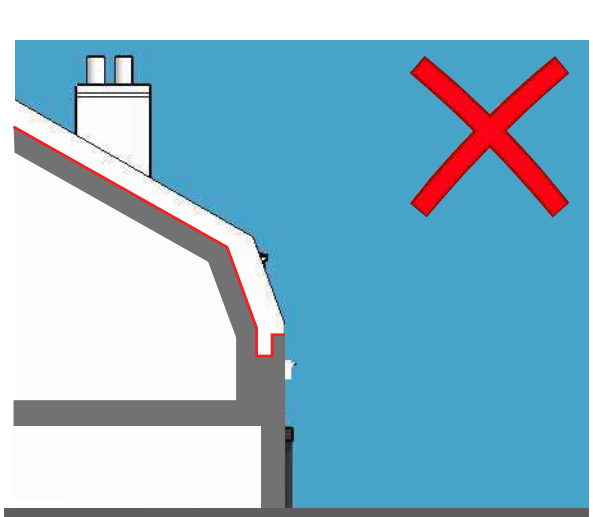
Design guidance
Mansard set back

The terraces in the Conservation Area were not designed with mansard roofs, therefore mansard roof extensions should be subordinate in size and scale so as to protect the design integrity of the original house.

Each property should follow the guidance to maintain consistency.

The mansard roof should be set back from the front facade to reduce its prominence and make it subordinate to the original building.

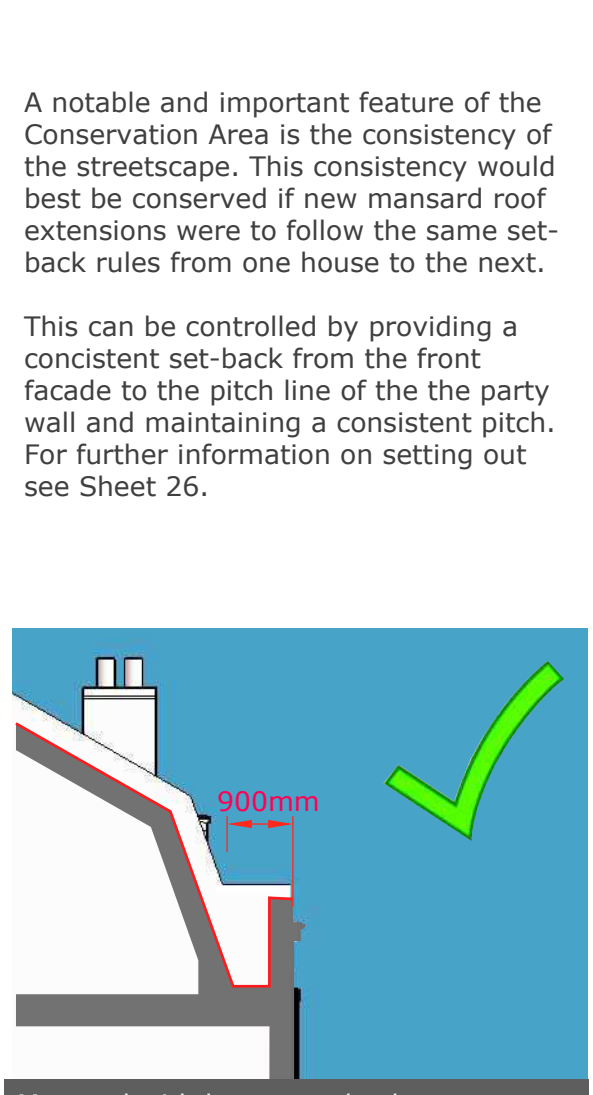


Mansard with minimum set-back

Mansard with minimum set-back to allow for gutter behind parapet wall

A notable and important feature of the Conservation Area is the consistency of the streetscape. This consistency would best be conserved if new mansard roof extensions were to follow the same set-back rules from one house to the next.

This can be controlled by providing a concistent set-back from the front facade to the pitch line of the the party wall and maintaining a consistent pitch. For further information on setting out see Sheet 26.



Mansard with larger set-back

Mansard with larger set-back behind parapet wall

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Integrity of the Conservation Area

There is precedence in Tower Hamlets for the addition of mansard roof extensions to a whole terrace of houses.

In Morgan Street E3 and York Square E14 a unified approach was taken to the design of the mansard roof extensions using traditional materials such as natural slate, lead, stock bricks and painted softwood sash windows.

Unified approach on Morgan Street E3

A unified approach to design was adopted when mansard roof extensions were added to York Square E14

The integrity of the Conservation Area can be retained if a uniform approach to construction is implemented, following a set of rules with respect to set-backs, roof materials and pitches, construction and placing of dormers, construction and sharing of rainwater pipes, chimney height and the quality of materials and craftsmanship used.

The design guidance for mansard roofs sets down the key issues and addresses constraints and opportunities for consistency, but it would need to be reviewed to check how it can apply to individual streets and groups of houses to cater for local variations.

Unified approach

The street would maintain a unified appearance if every roof extension followed the same design

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Design guidance
Chimney stacks

The chimney stacks make an important contribution to the character of the Conservation Area. They should not be capped off when constructing a mansard roof extension, they should be extended to match the original detailing.

Traditional clay pots should be re-used where possible or renewed to match the original, set in flaunching and flashings should be stepped lead flashings to match the original detail.

Rear view of end of terrace

Mansard extension with capped off chimney stacks

The existing chimney stacks make a subtle contribution when viewed from the street, except on the corners where the rear of end of terrace properties are clearly visible.

Chimneys will make more of a contribution to the streetscape with a mansard roof extension as the stack will need to be raised 1 metre above the line of the pitched roof to comply with building regulations. Flues and any existing flue liners or parging should be raised including those of neighbours where required. This work will require party wall consent.

Flues and vents should not be visible on the front slope.

Chimney stacks visible from street

Mansard extension with raised chimney stacks

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Design guidance
Rainwater downpipes

The terrace houses in the Conservation Area are mirror imaged, with paired font doors.

The guidance assumes that rainwater pipes would be on the front of properties to avoid internal pipework runs, but this is subject to checking feasibility of connecting to the existing drainage which would have to be checked by the designer.

Rainwater downpipes (RWPs) should be in cast iron, positioned on the boundary away from the front door. This is the only feasible location for properties with a basement area adjacent to the entrance door. Stucco mouldings would also complicate routing an RWP next to the front door, or where there is a decorative doorcase.

RWPs and hoppers should be shared to avoid doubling up on every other boundary and should align, to provide consistency on each terrace.

The construction of a mansard roof will require building owners to make alterations to the full thickness of the party wall. Owners should ask neighbours to provide written consent for alterations to the Party Wall and the introduction of rainwater pipes. The Party Wall Etc. Act 1996 grants rights to a building owner to carry out works to the party wall and provides a mechanism for neighbours and Party Wall Surveyors acting on their behalf, to agree to the scope of work. This scope should include agreement on sharing RWPs.

Individual RWPs for each property would look unsightly

Brokesley Street E3

York Square E14

Co-ordinated design treatment for RWPs in York Square E14

The street could maintain a unified appearance if neighbours shared a RWP

The guidance given above assumes that rainwater drainage can be provided to the front of the property but this would have to be checked with the water authority and the costs for drainage connections and all relevant permissions would have to be included in the cost of a mansard roof extension

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Design guidance
Dormer windows

Guidance on single or double dormers:

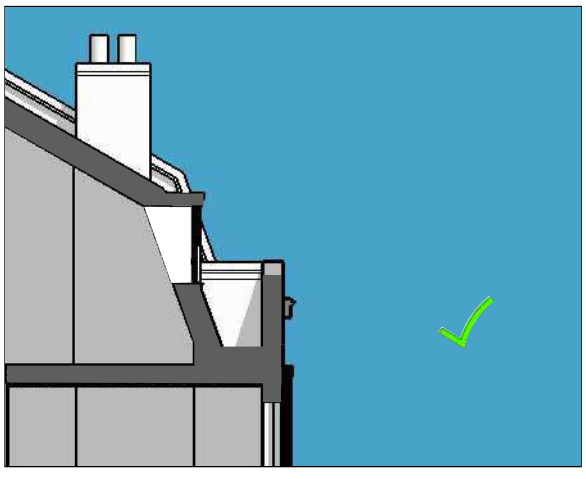
By virtue of there being just one window a single dormer can help to make the mansard roof extension subordinate to the original building.

Double dormers can also allow the mansard extension to be subordinate to the original building if set back sufficiently far from the facade. Refer to Sheet 10.

Dormers should be subservient to the first floor windows; the window and surround should be narrower.

In order to maintain consistency of design across the Conservation Area, dormers should be clad in lead on the roof and cheeks. The front face should have white painted timber surrounds of consistent thickness and the entire dormer cheek should not exceed 180mm as indicated on the images. In order to achieve the narrow profile it may be necessary to reduce the insulation on the dormer and increase the insulation in the roof to compensate, to meet building regulations.

Windows should be traditional timber sliding sash windows painted white. Metal or UPVC windows are not considered appropriate. Double glazed units can be appropriate for new mansard roofs provided that the glazing unit is slimline and the profiles should match the original windows as closely as possible with the box frame set into the dormer cheek so that the dormer windows appear subordinate to the first floor windows.



Double dormers would be subordinate when set back sufficiently and constructued with a narrow profile

Wide dormers

Double dormers

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Design guidance
Retain distinctive 'V' of London roof to rear

Most of the houses in the Conservation Area were built with London roofs (also called V roofs or butterfly roofs). Views of this original roof form can be glimpsed throughout the Conservation Area, and contribute to their character.

The London roof is concealed behind a parapet wall facing the street, however the form of the roof is expressed in the distinctive V-shaped parapet wall facing the rear. This is clearly visible at the rear of corner properties and can be seen through gaps. This makes a positive contribution to the character of the Conservation Area. Therefore where a mansard roof extension is constructed the V-shaped parapet wall should be retained.

Mansard roof set behind retained 'V' shaped rear wall

The London roofs are an architectural characteristic of the Conservation Area. The brick "V" should be retained to preserve the character and appearance of the area.

Mansard roof on rear wall

Rear view with mansard profiled gable - Outboard staircase

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Design guidance
End-of-terrace properties

In designing a mansard roof it is necessary to distinguish between end-of-terrace properties with either an outboard staircase (behind gable wall) or an inboard staircase (on other side of house adjacent to party wall).

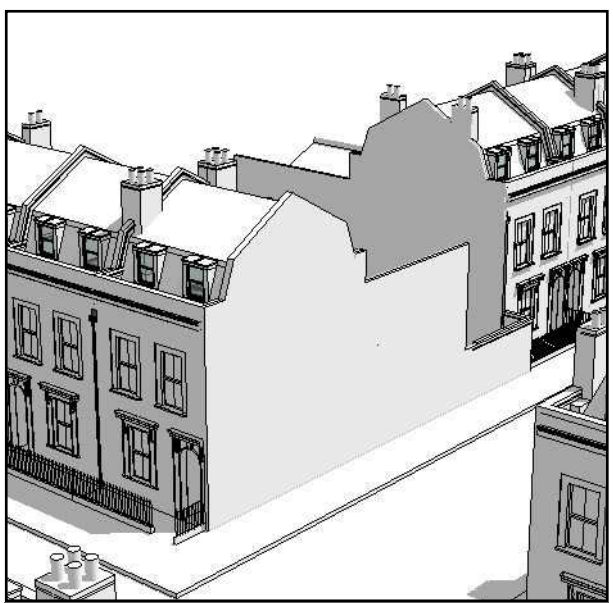
In end-of-terrace properties a hipped mansard would reduce the impact on the Conservation Area, however this configuration only works for houses with staircases located inboard. In houses with an outboard staircase a hipped roof would encroach on headroom in the stairwell.

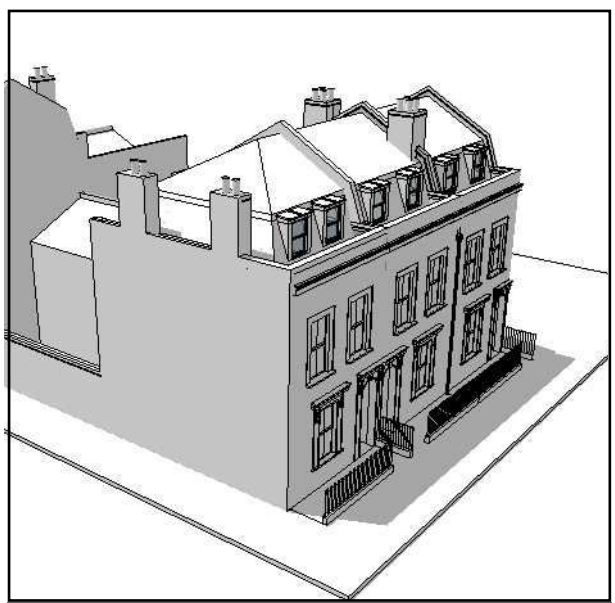

Corner property with outboard staircase


Corner property with inboard staircase

End-of-terrace properties with an outboard staircase can only access a mansard roof extension if the gable wall is extended to provide headroom.

There is precedence for this in Tower Hamlets on Morgan Street E3


Mansard roof with outboard staircase


Mansard roof with inboard staircase


Mansard roof with outboard staircase


Mansard roof with inboard staircase

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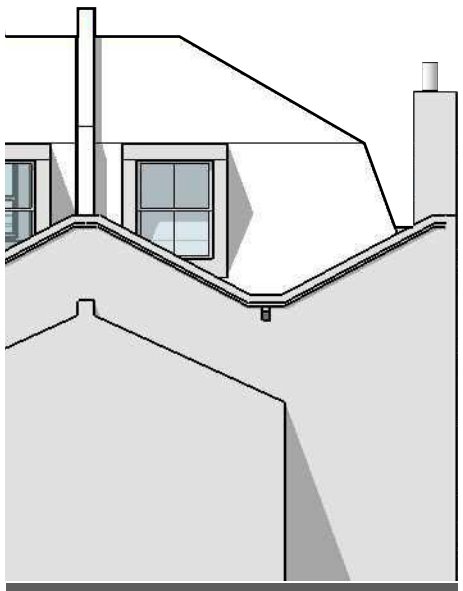
Design guidance
Rear of end-of-terrace properties

End-of-terrace houses on corner plots are more sensitive to development - they are more prominent within the Conservation Area.

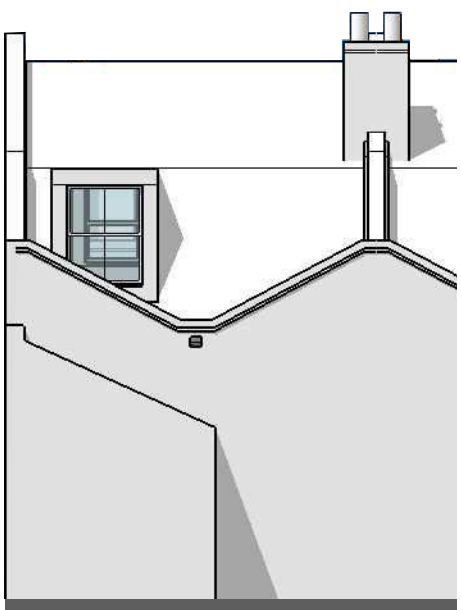
For corner plots with an inboard staircase a hipped mansard is appropriate, with retention of the V-shaped parapet on the rear wall, which would retain a memory of the London roof.



Rear parapet wall

Rear view of hipped mansard - inboard staircase

For corner plots with an outboard staircase, a mansard roof with a gable end wall is appropriate, with retention of the V-shaped parapet wall to the rear.



Rear parapet wall and end gable

Rear view with mansard profiled gable - outboard staircase

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Design guidance
Solar panels

Solar panels may be acceptable on the rear slopes of mansard roofs, where they would have less impact on the character of the Conservation Area.

There are two types of panels:

1) Photovoltaic panels generate electricity and can be eligible for the Goverment's Feed In Tariff (FIT), through licenced electricity sullpiers.

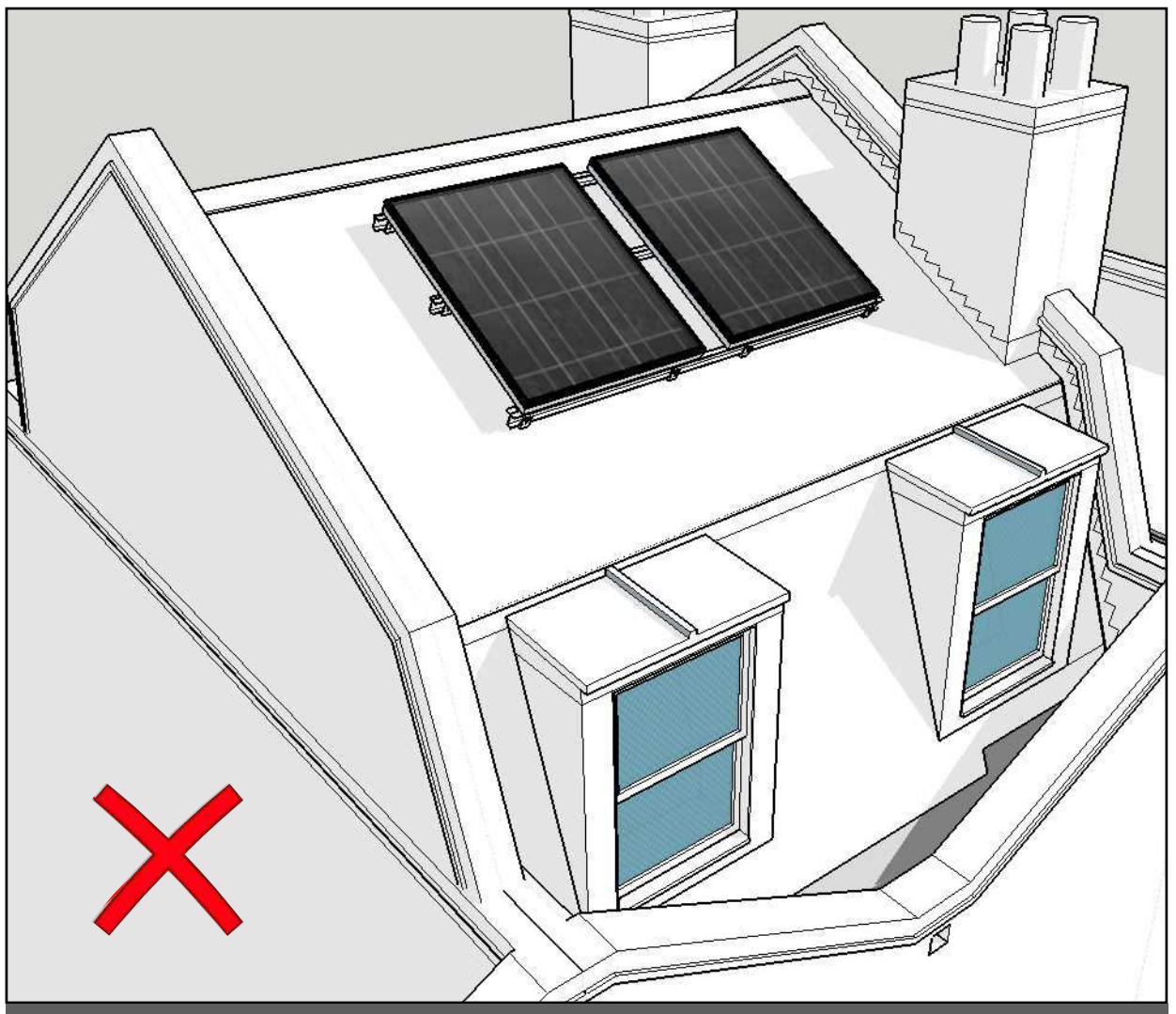
2) Solar thermal panels are available in several formats and are used to heat water for domestic use.

Orientation:
Photovoltaic panels perform best when they face south. According to BRE reseach the efficiency of photovoltaic panels reduces to 75% if orientated east/west.

Most of the properties in the Driffield Road and Medway Conservation Areas are orientated east-west, with the exception of properties on Chisenhale Road, Arbery Road, Strahan Road, Antill Road and Athelstane Road.

Fixing:
Solar panels are less intrusive visually if they are installed in-line with the roofing slate (see bottom image) as opposed to mounting them on a framework of brackets above the line of the slate.

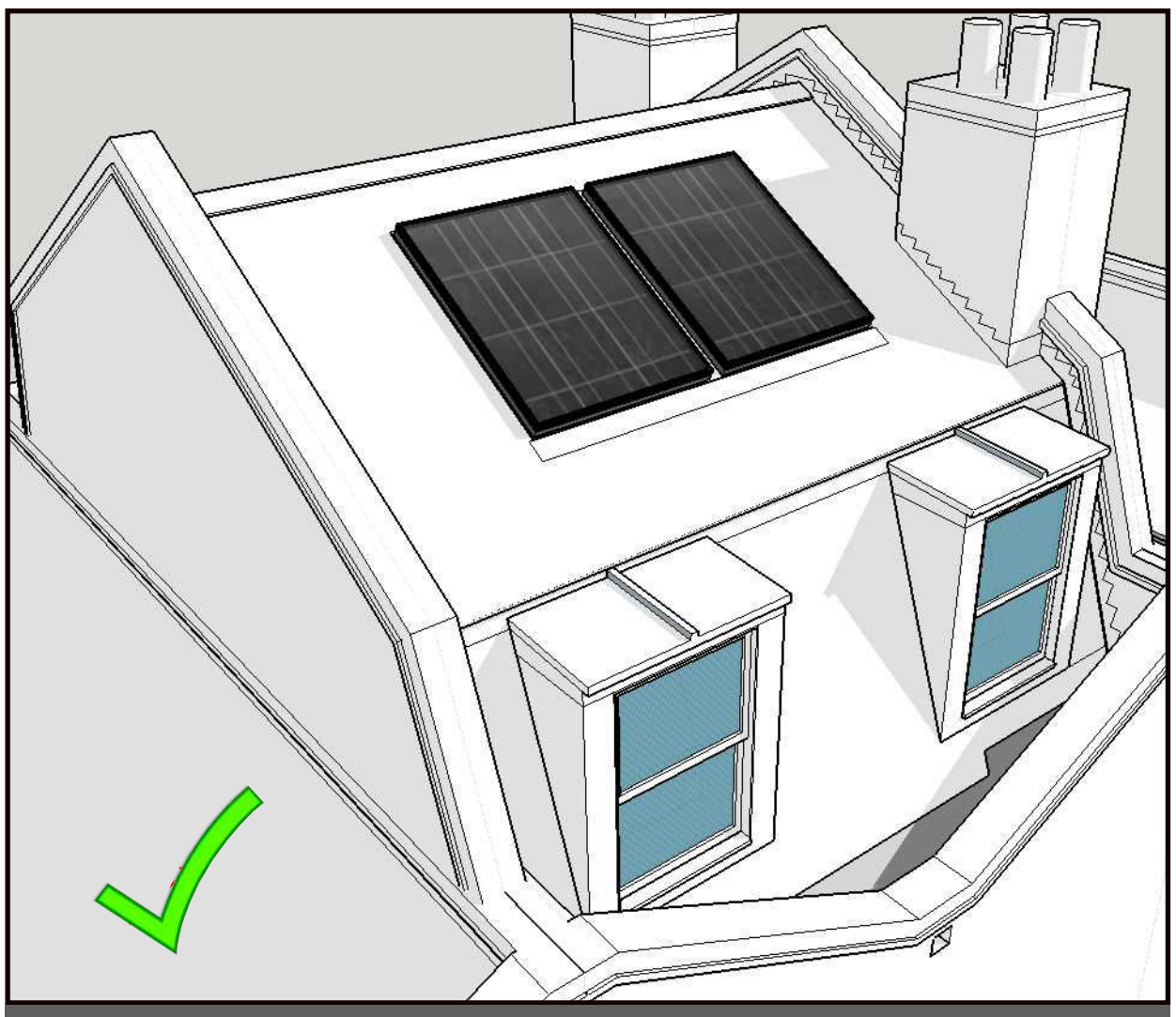
The similarity in colour of the panels and roof slates would help reduce the impact of the appearance of the Conservation Area.



Mounted on brackets above the roof slates

Solar panels on brackets raise the panel above the roof, making them more obtrusive in views from rear gardens

In-line panels sit flush with the roof and look more like rooflights



Installed in line with roof slates

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Design guidance Individual treatment to rear slope of mansard

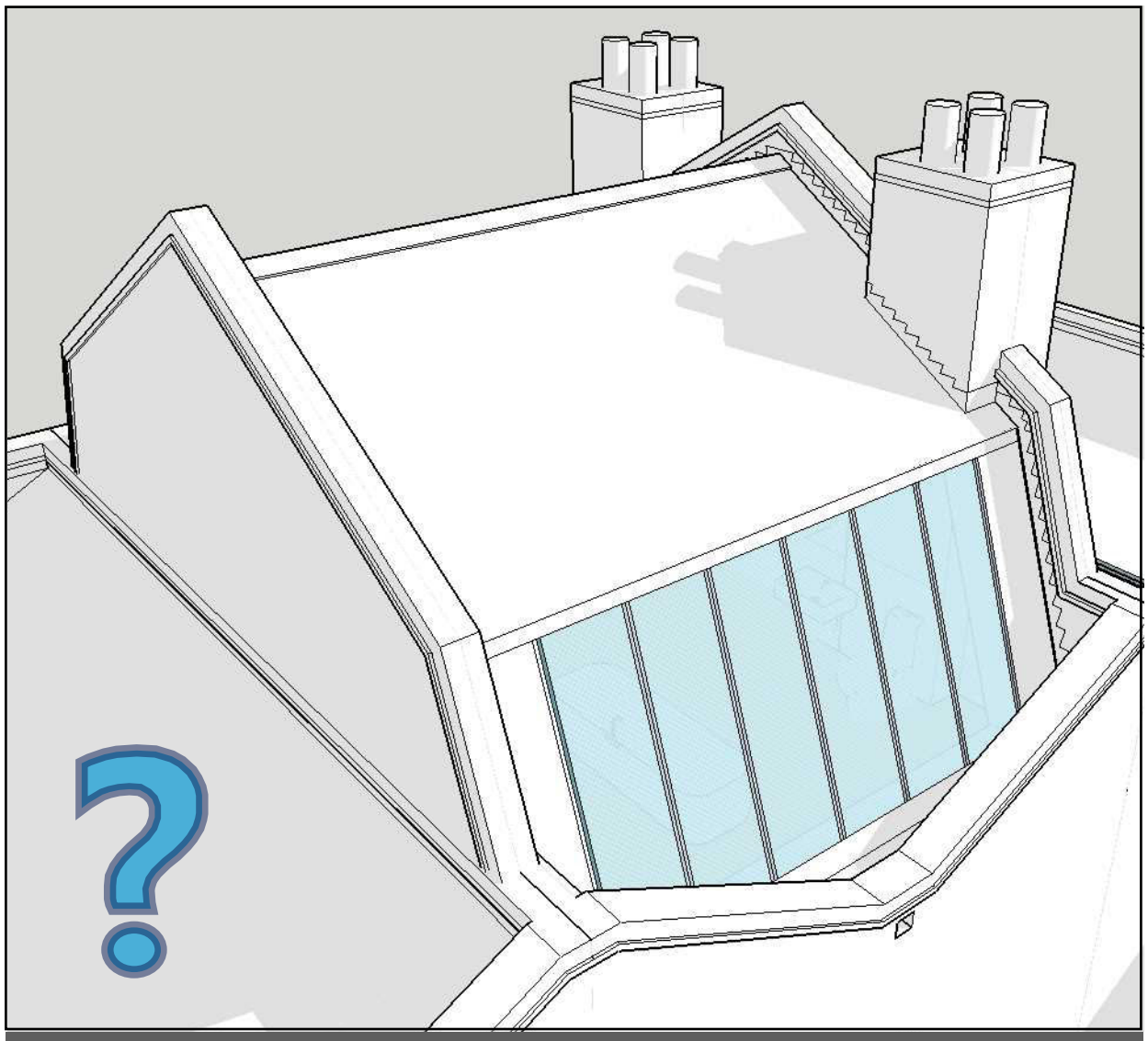
The design guidance is intended to provide a consistency of approach to mansard roof extensions. This is especially important on the front façade and where the properties can be seen from the Conservation Area.

To the rear where some properties cannot be seen from the street some owners may wish to take an individual approach to the design of the rear. This should be restricted to the lower slope of the dormer roof.

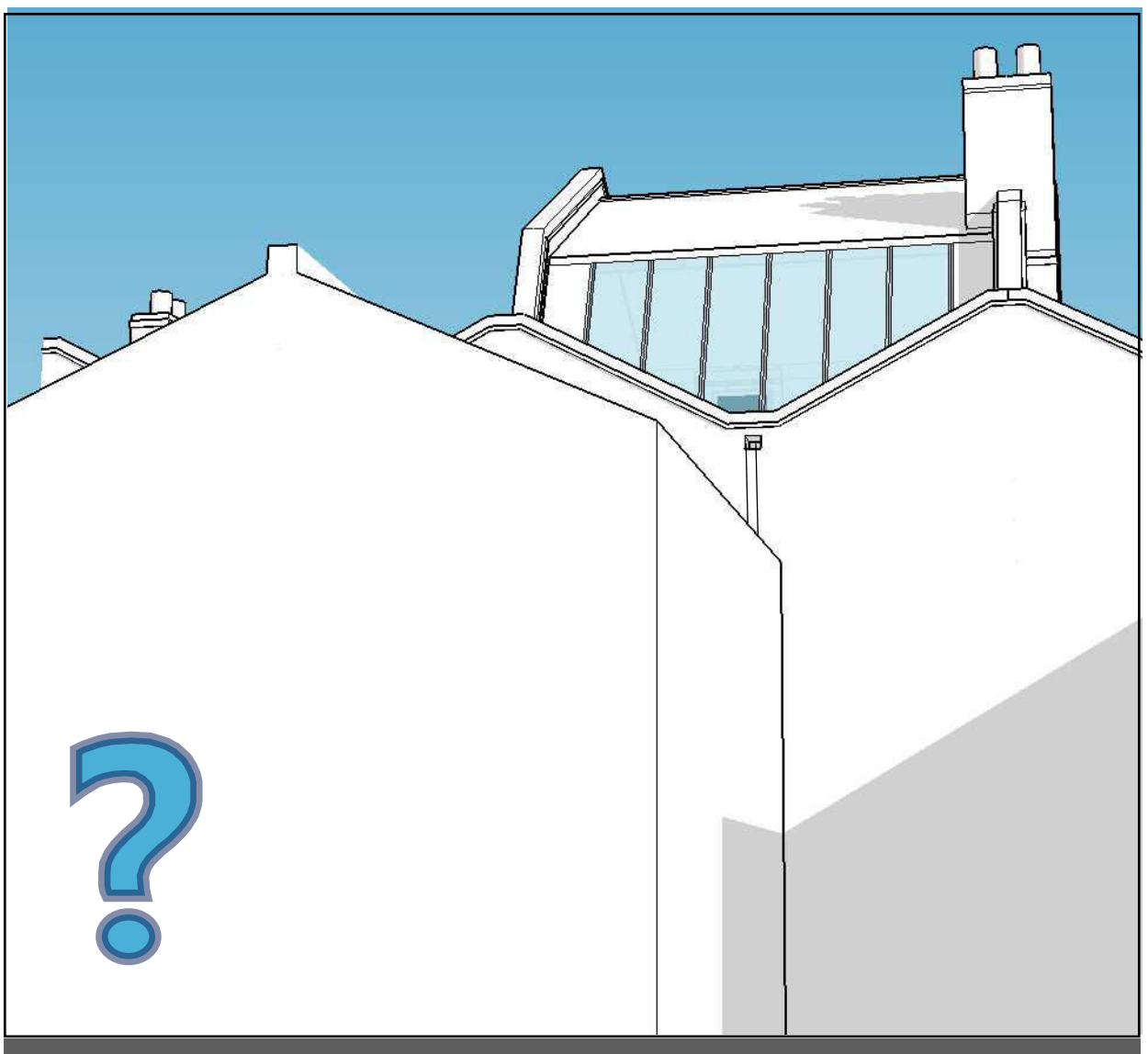
For example in some properties an in-line rooflight may provide adequate headroom over the staircase in lieu of a dormer window.

Some residents may like to gain an outdoor amenity space, although overlooking may be an issue.

This approach may not be permissible on the corner properties where they are visible from the street and where individual treatment of the rear slopes could have a detrimental impact on the Conservation Areas but each application would be assessed individually.



Indicative illustration of an alternative design approach to a the rear lower slope



View from ground level

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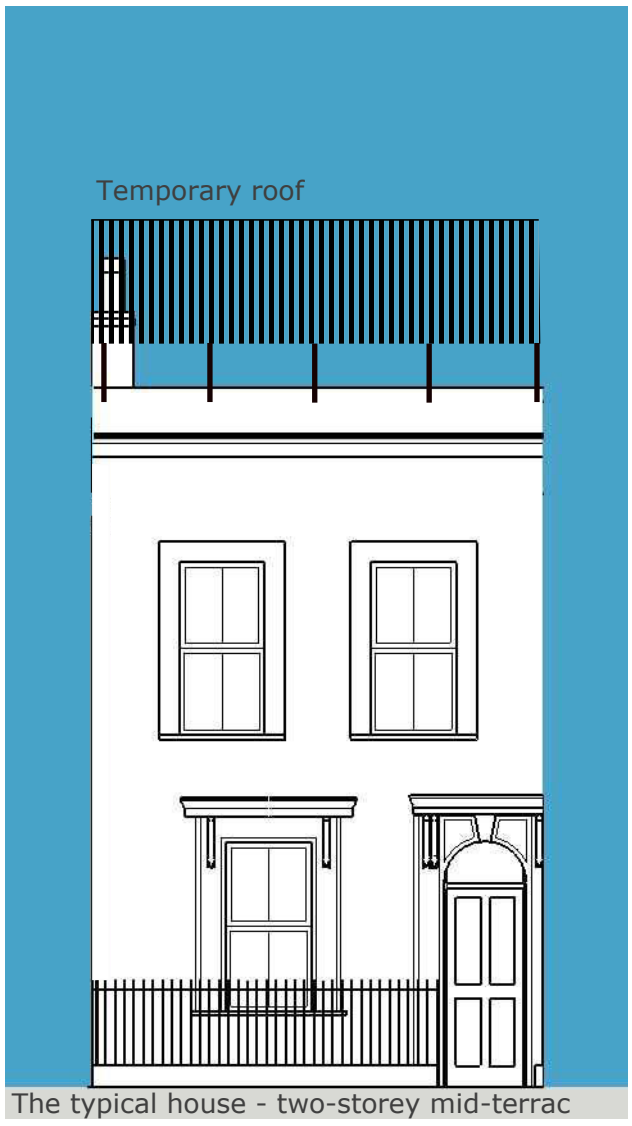
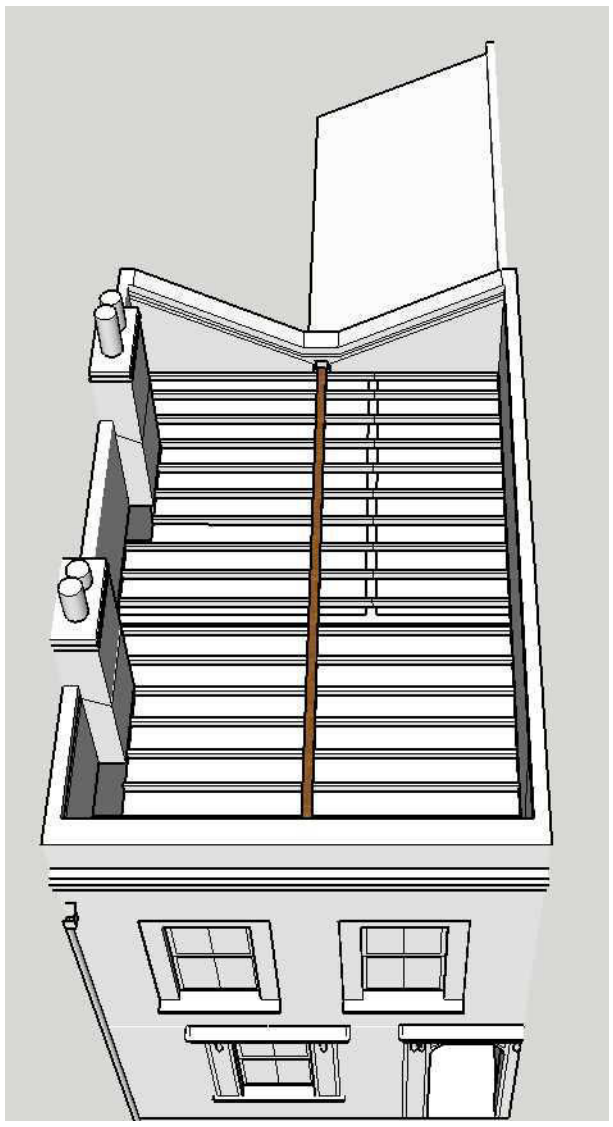
Design guidance
Construction steps 1

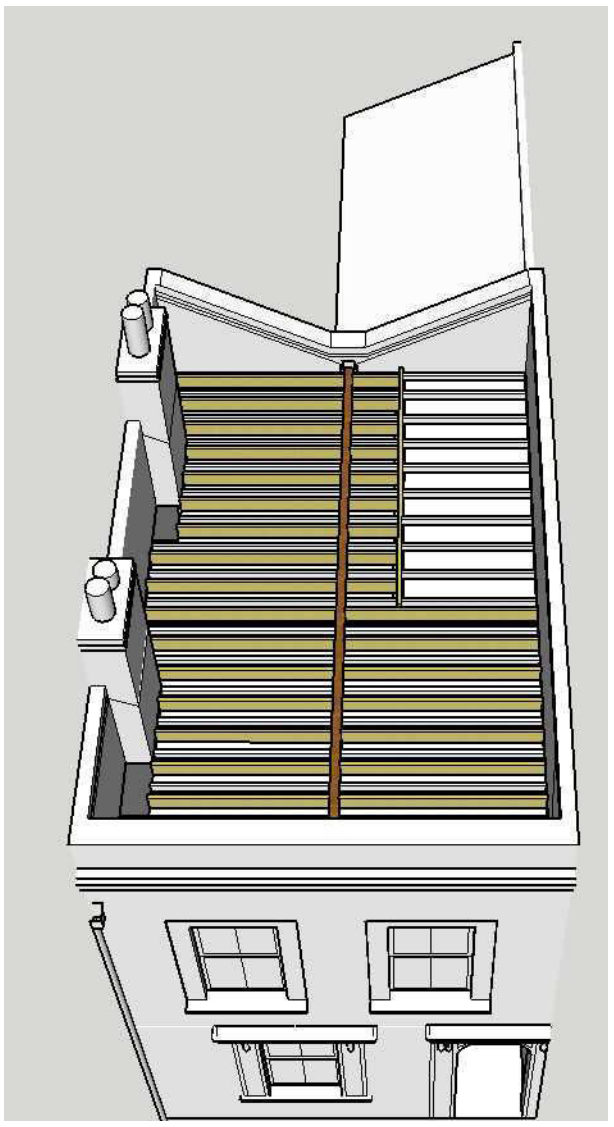


The typical house - two-storey mid-terrac

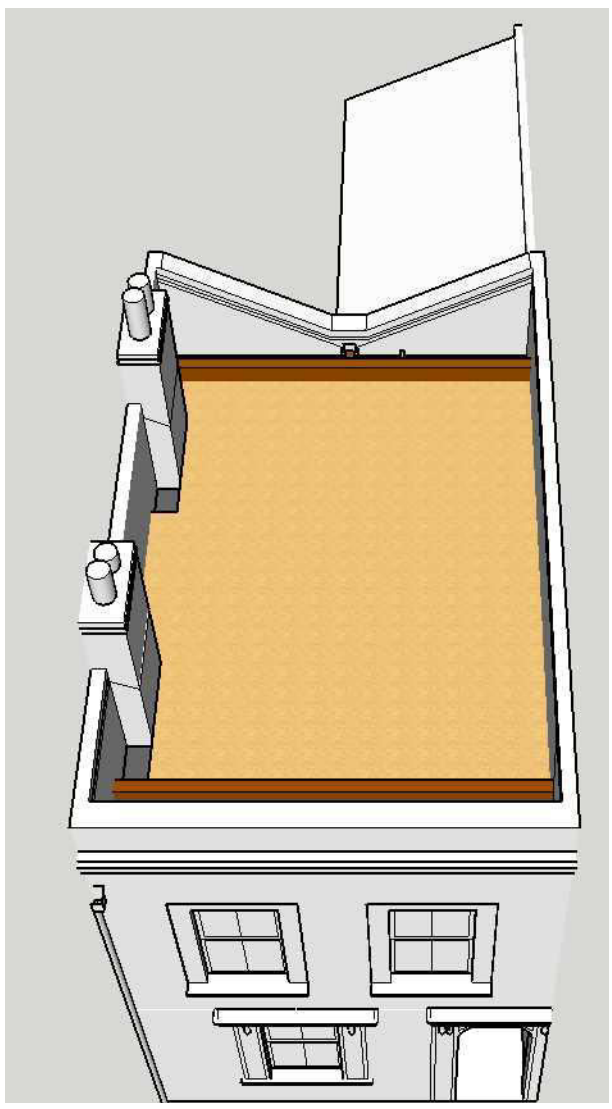
Each property would need a structural and measured survey prior to developing the design details. A mansard roof extension would require planning permission, building control permission and party wall consent



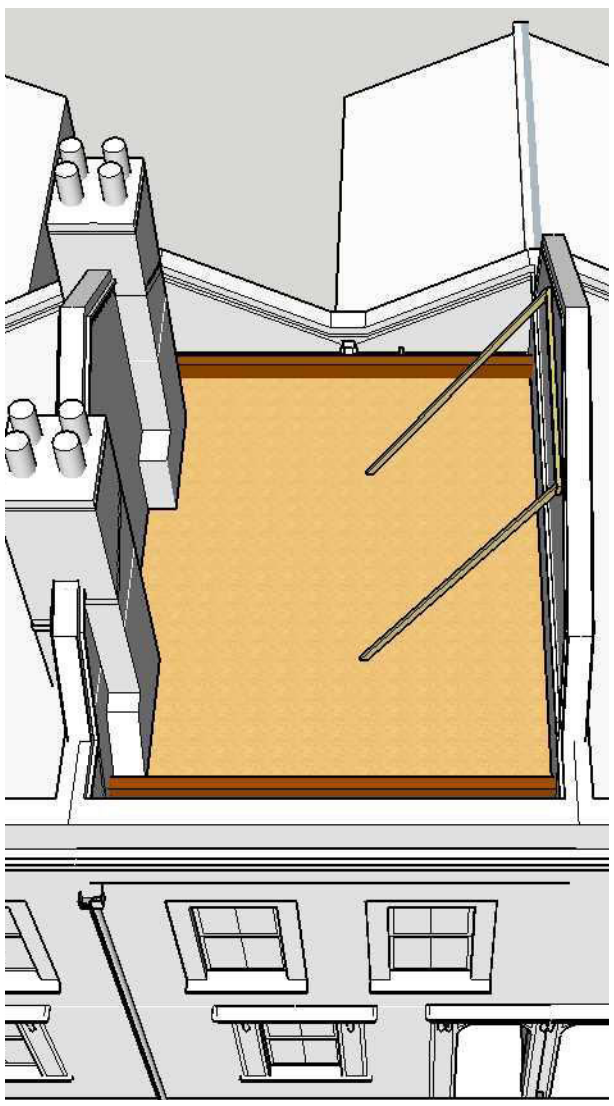
Provide temporary support and protection. Demolish the existing London roof. A structural engineer should inspect all structural elements. Repair and strengthen as required



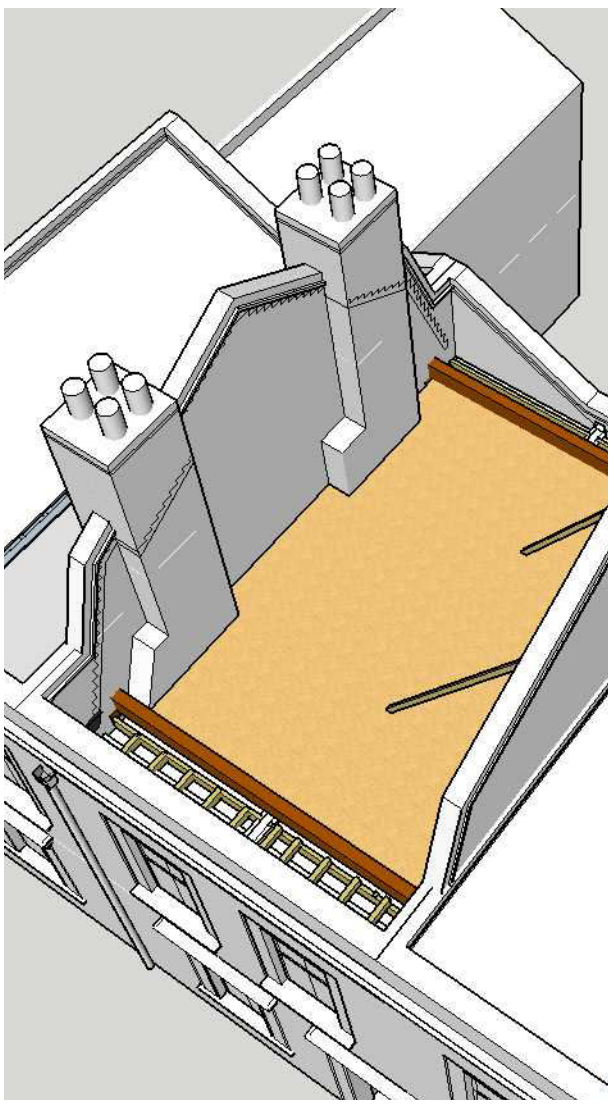
Fix new floor joists between ceiling joists supported on the bressemer beam and party walls. A structural engineer will need to design the roof framework to distribute the loads to the existing foundations



Install a roof framework which may include steel beams to support the mansard roof. The designer should consider how they will be lifted into place and installed



Raise the level of the party wall once temporary props are in place to restrain the party wall until the roof joists are tied in; the designer should consider all stages of work



Chimney stacks make a strong contribution to the character of the Conservation Area. Stacks and flues will need to be surveyed and raised with pots reinstated

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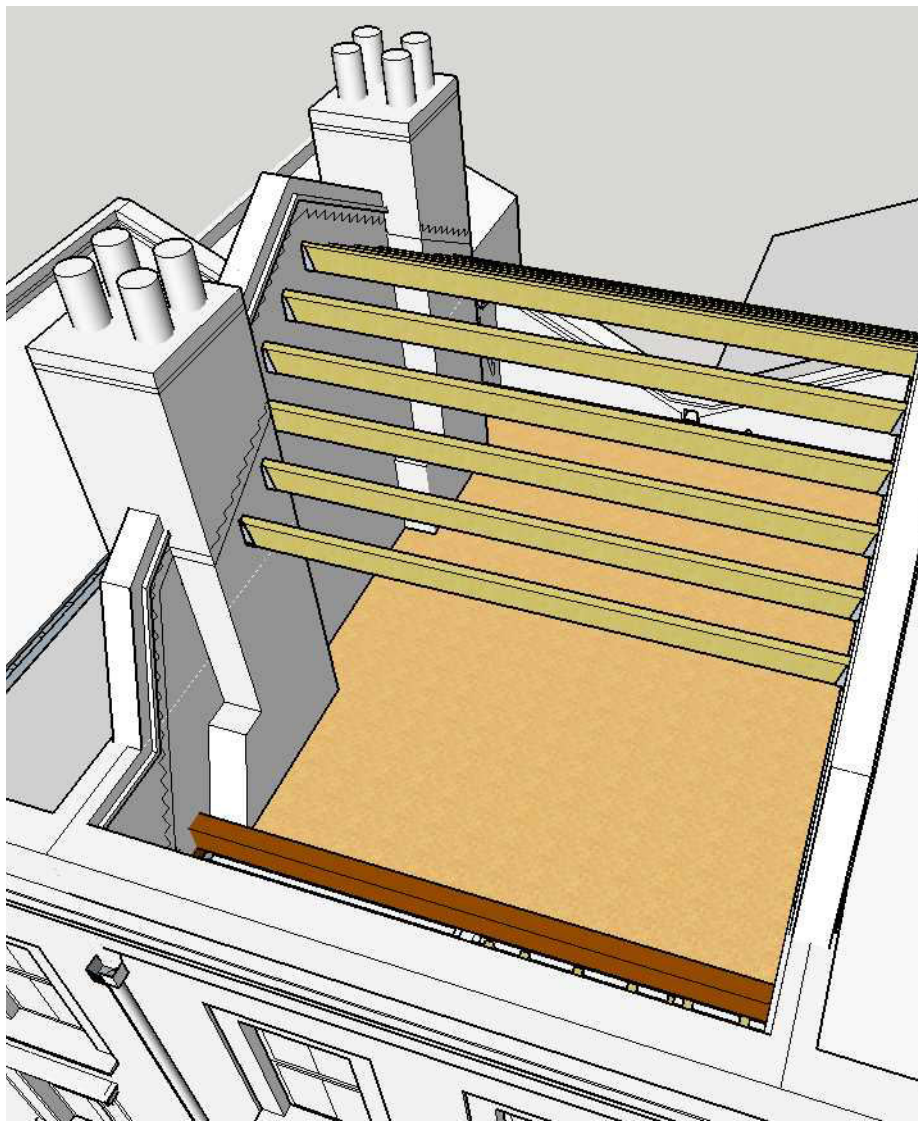
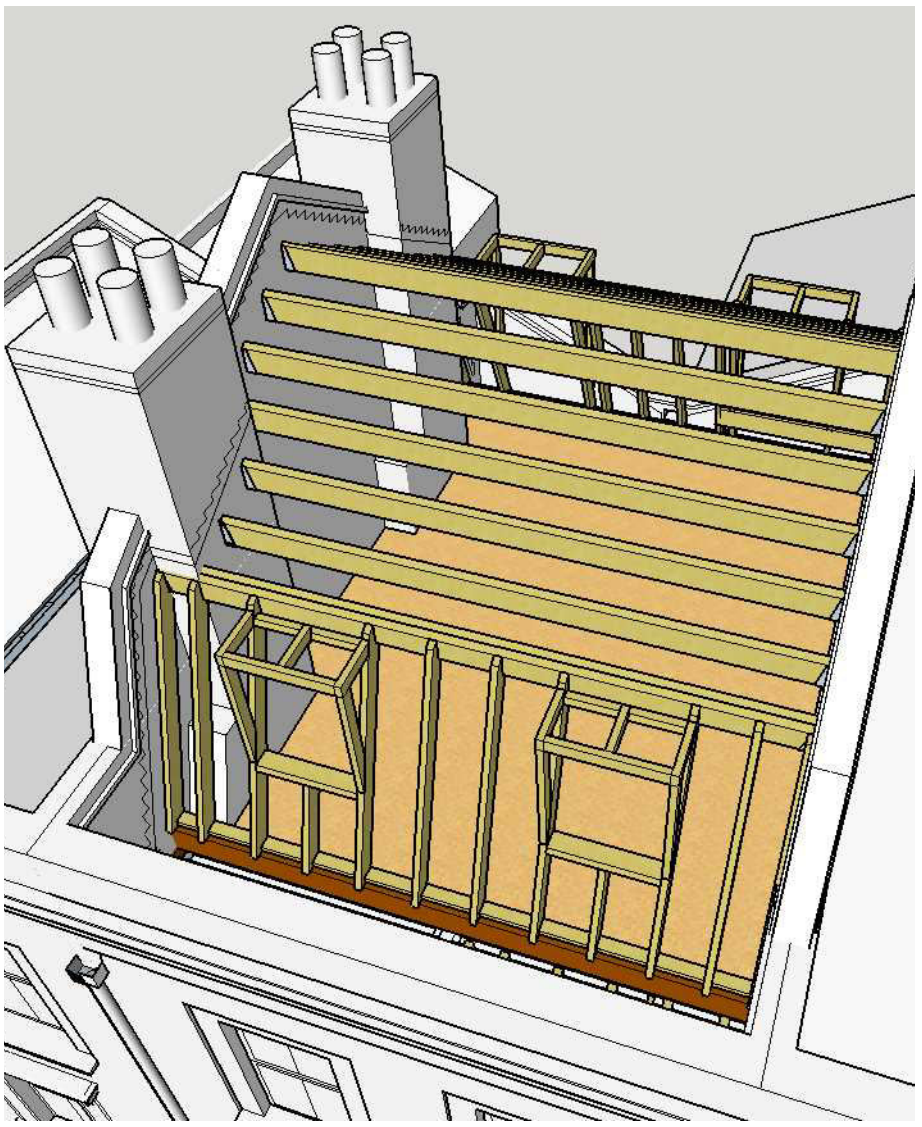
Design guidance
Construction steps 2

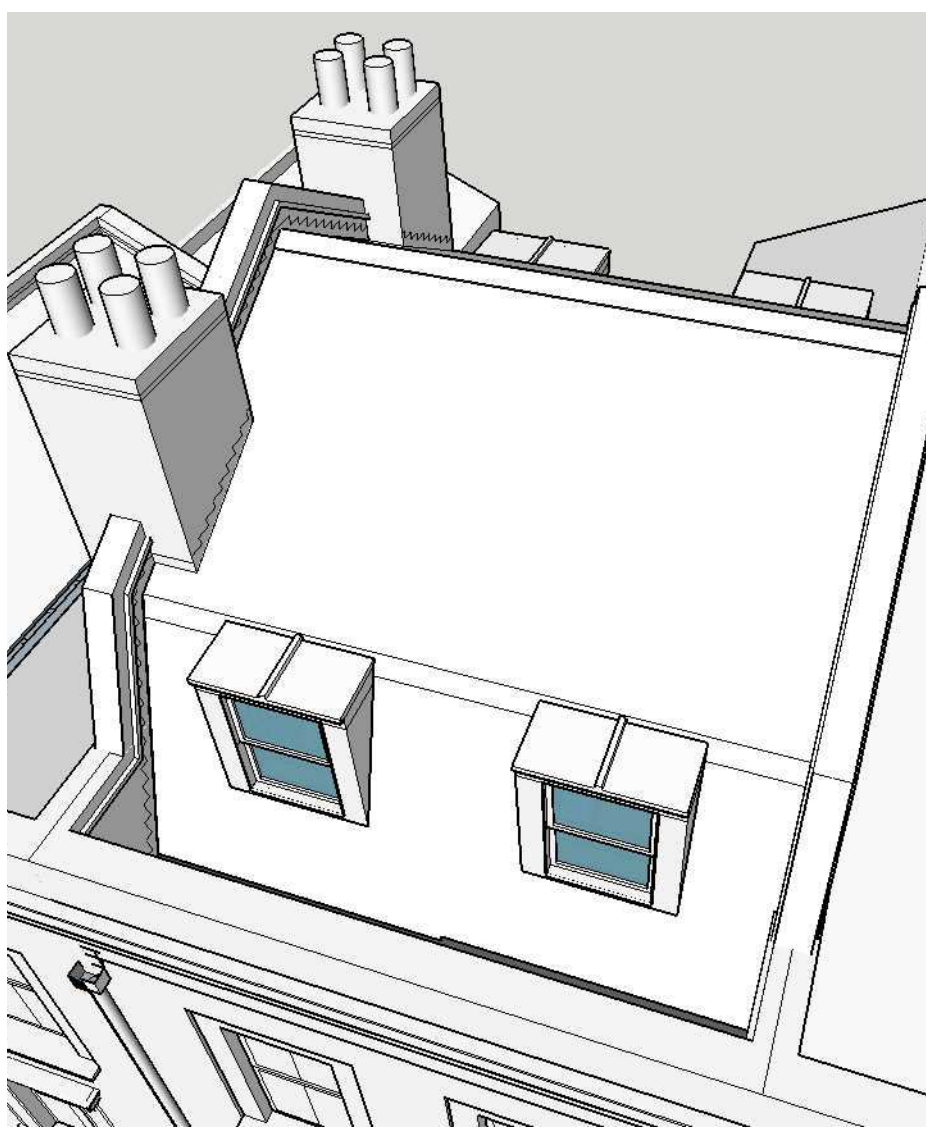


A structural engineer will need to design the roof framework to distribute the loads to the existing foundations. The load path and structure may vary from property to property, especially if internal walls have been removed. Refer to Guidance note Sheet 25: Structure



Set out the roof to allow finished surfaces to be set out in accordance with Guidance note Sheet 26. Install rafters and framework for dormer windows and the stepped gutters behind the parapet walls. If drainage to the front is feasible form outlet on line of party wall

Fix racking boards over rafters. These can have insulation properties to reduce cold-bridging, heat loss and heat gain. Additional insulation will be required to meet building regulations



Form any vents as required. These should not be visible on the front slope. Fix slate to pitched roofs with lead lining to gutters, dormers and flashings

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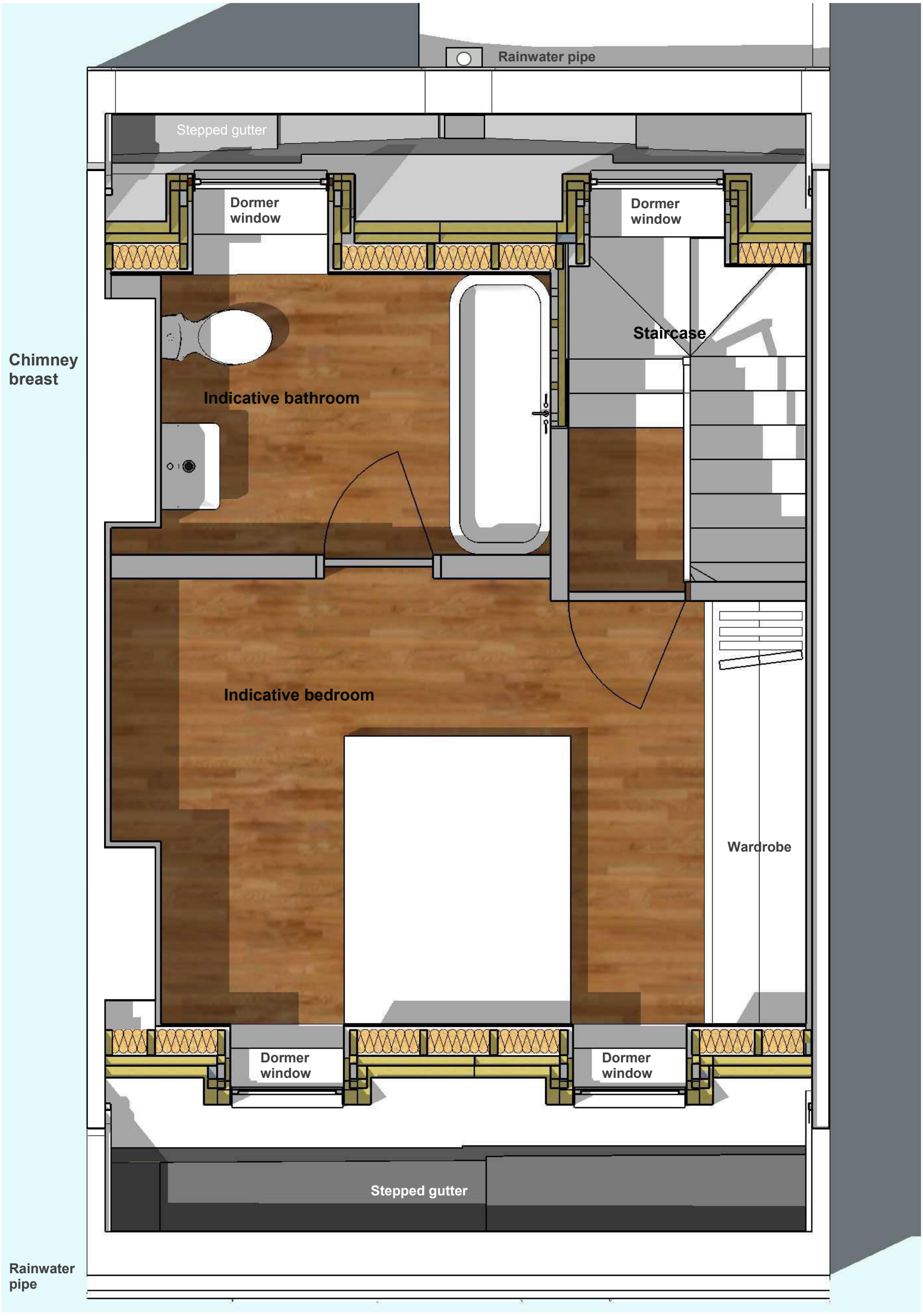
Typical Second Floor Plan



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Design guidance
Building Regulations

- A survey should be undertaken on each individual property before considering a mansard extension in order to identify key areas of risk. This would include a structural assessment and a risk assessment for all items that might have an impact on feasibility and cost

- A measured survey would also be needed to allow the designer to assess the detailed dimensions, especially the feasibility of adding a staircase in compliance with the regulations

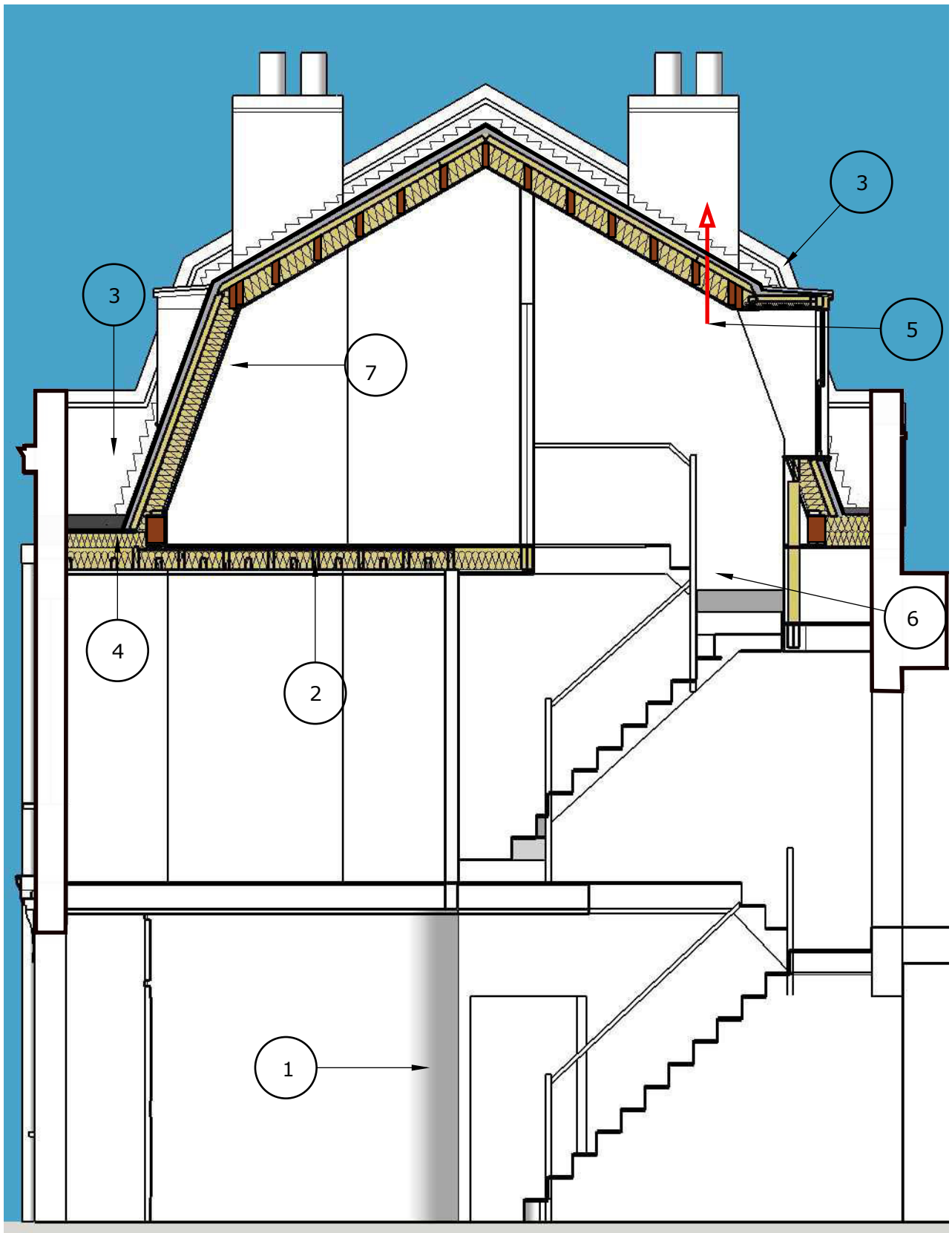
- Properties that have been altered previously may require additional measures to ensure fire regulation compliance is met

- Previous work may not have been done in accordance with building control or may have pre-dated building control if carried out prior to 1985. It may be possible to get previous work regularised. This is not mandatory but it is advisable

- Older properties do not necessarily comply with current codes and may benefit from measures to upgrade them

- Owners must be aware of their obligations to comply with CDM (health and safety legislation). Temporary propping and support are normally the responsibility of the principal contractor, who would have to assess the risk, plan the project operations and determine provisions for temporary work, propping, scaffolding, etc.

Structure
A structural engineer's design would be required for each property in order to assess the structural stability and assess risk of any weak spots in the existing structure and take into account lateral stability and bearing capacity. If existing properties have been altered through the removal of partitions it may have a bearing on the structural design and the load path from extension to foundation.



Building regulations approval will be required for the addition of a mansard roof extension. The following points summarise the main points to consider but are not exhaustive

1) The new floor will need a protected means of escape including 20-minute fire doors and an integrated smoke detection system. Open plan houses may require additional measures

2) The floor will need to be designed to provide sound insulation and 30 minutes fire protection

3) The raised party wall can provide fire resistance between properties

4) Box gutters rely on high quality workmanship and regular maintenance to prevent leaks and blockages

5) Provide ventilation to habitable rooms and bathrooms. Careful planning is required for bathrooms to integrate pipes and ducts into the structure so they are not visible on the front facade or roof slope

6) The staircase will need to be carefully considered to provide adequate head height under the rear mansard slope. A dormer window or in-line rooflight would provide additional head height

7) Insulate the roof to comply with the regulations. The designer should advise on ventilation and vapour barriers. Mansard roofs of 70 degree pitch are considered to be walls for purpose of insulation and thermal performance

8) Electrical work should be self-certified by the installer

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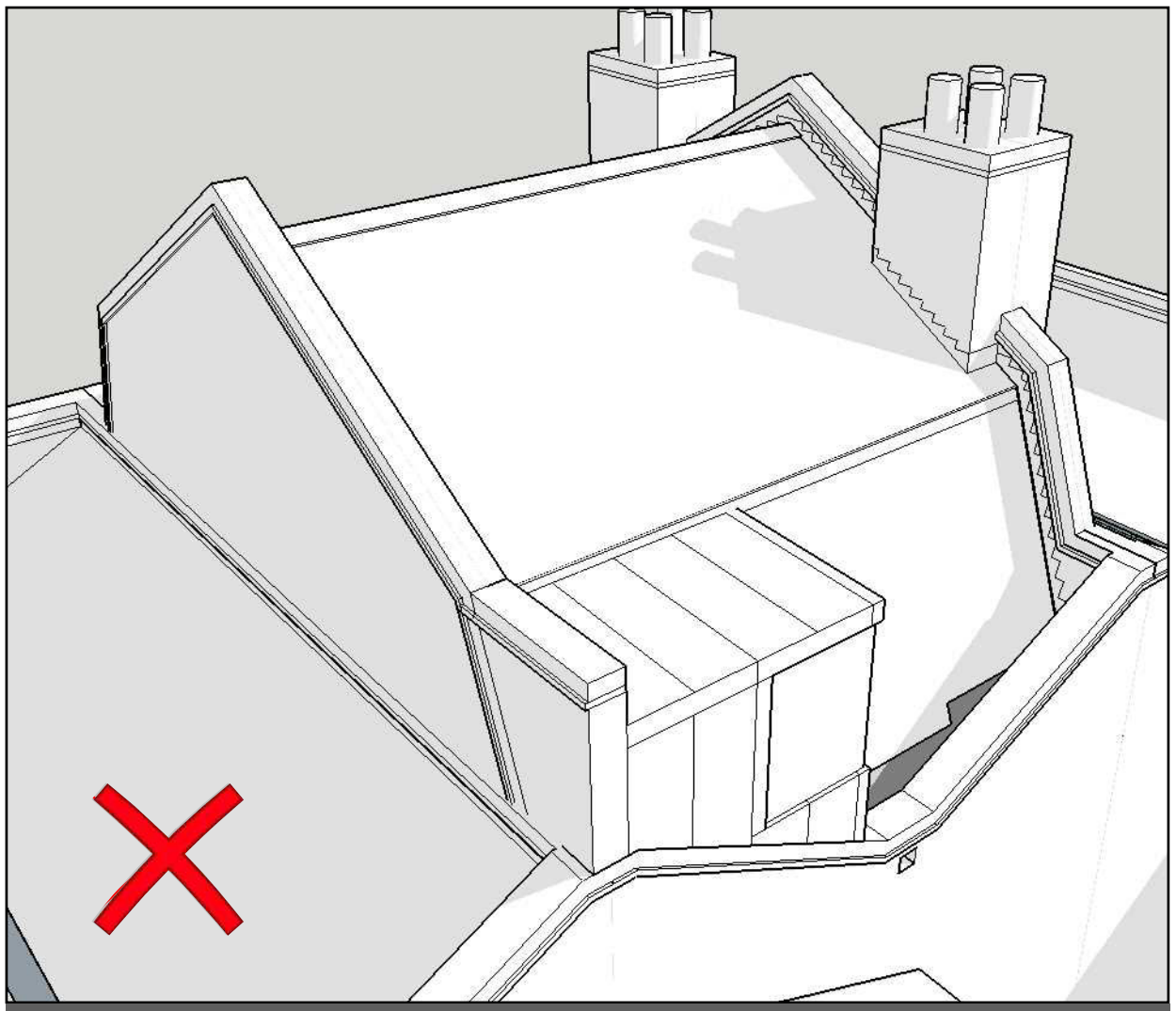
Design guidance
Head height in stairwell

Careful consideration will need to be given to the design and construction of the staircase leading to the the mansard roof extension to make sure there is adequate head-room.

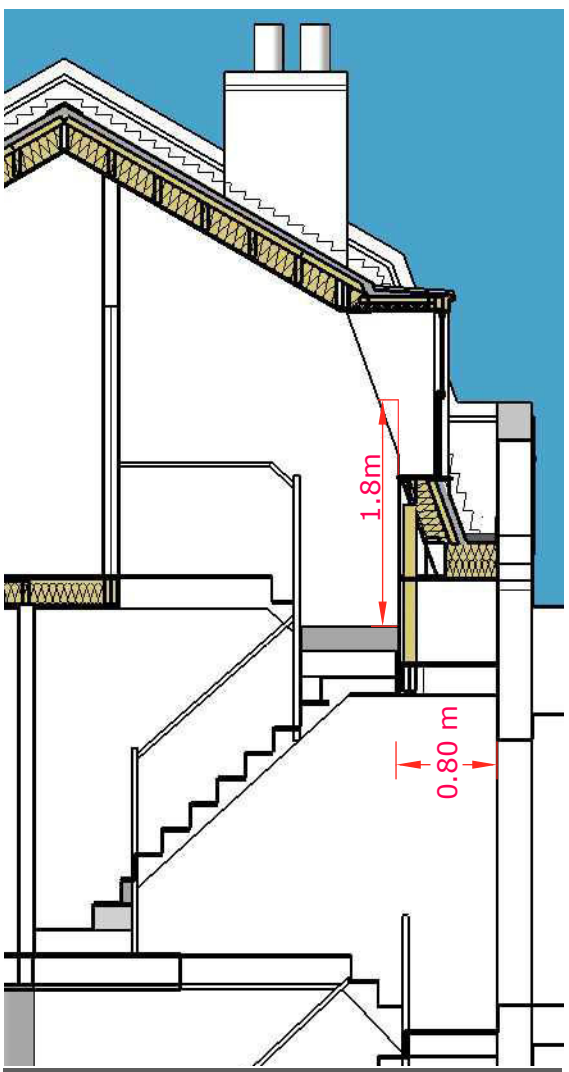
The section below illustrates an indicative design, however staircase configurations vary house by house.

The staircase will need to be set in from the rear facade to provide adequate head height under the rear slope of the mansard roof. Head height can be improved by carefully positioning a dormer window or an in-line roof light over the staircase.

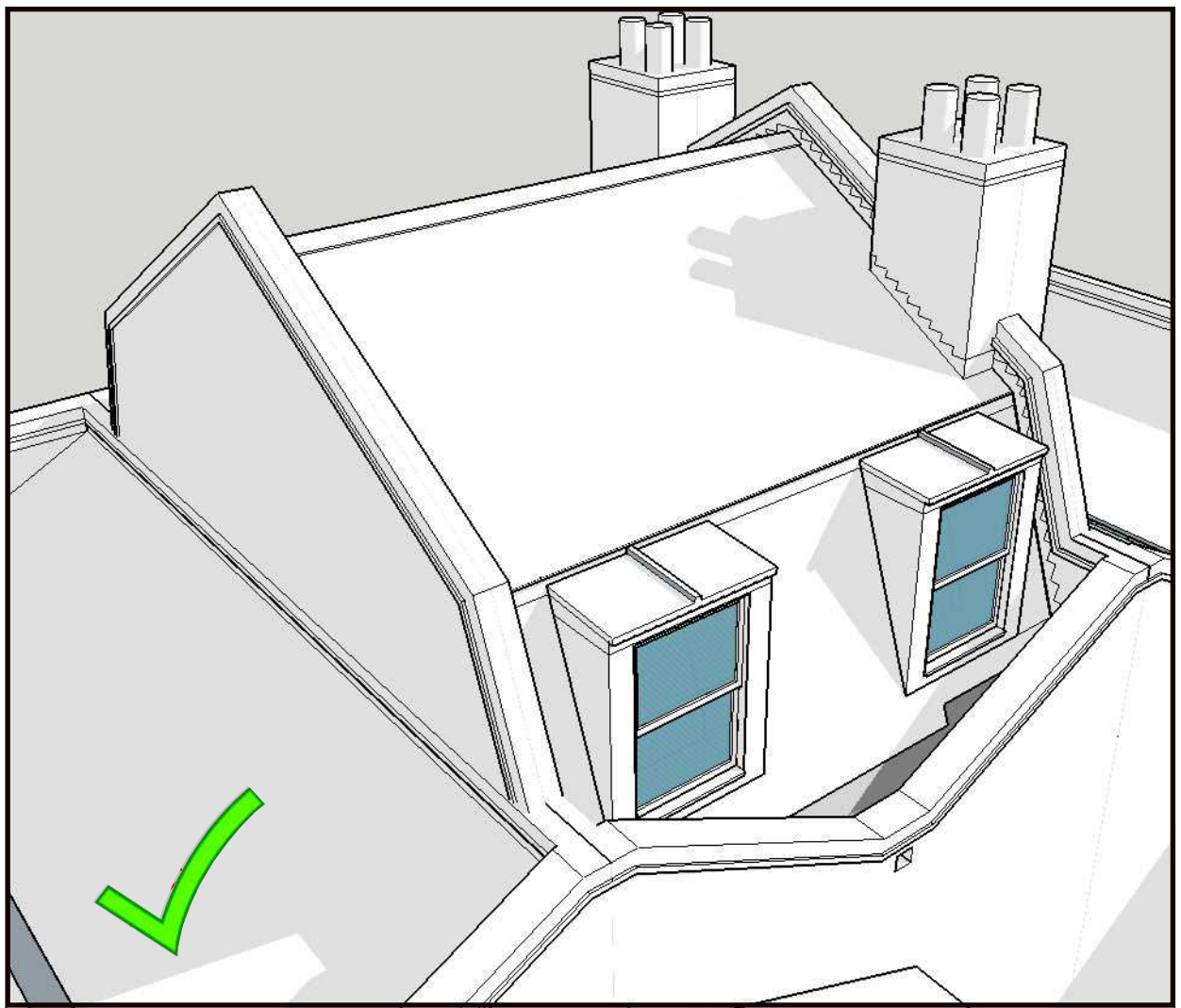
The building regulations state that head height over a staircase leading to a loft conversion can be reduced to 1.8 metres at the edge and 1.9 metres at the middle of the staircase above the string line. Tower Hamlets Building Control will allow this guidance to be followed for new mansard roof extensions.



A box-like enclosure to provide head height in a stairwell



Indicative staircase configuration



A dormer window to provide head height in a stairwell

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Design guidance
Structure

The nineteenth-century terraces of traditional brick and timber houses in Tower Hamlets were mostly built in stretches of a few houses at a time, by small builders rather than as large-scale comprehensive schemes. Their quality of construction can vary, as can the builder's approach to foundations. Some areas were open fields before construction, others may have been backfilled gravel or clay pits, so it is always beneficial to know about the original nature of the street and the individual house, and the geology of the area.

The first questions to ask are whether the house is well founded and well built, and whether previous alterations have affected the integrity of the building. Alterations may have been done to a low standard, creating difficulties now.

Then, the extent of any structural changes to the house during its lifetime should be investigated and understood.

The third area for investigation is the general condition of the building. Decay from damp and leaks or timber infestation can weaken the structure; it should be assessed whether or not the existing fabric is well maintained.

Desk study and investigations should be undertaken to explore the above considerations. These should include the following:

- The ground conditions on the site and the nature of the footings,
- The history of alterations to the site, the building, and its neighbours,
- The condition of the timber roof structures,
- The bonding of the cross-walls to the front and rear elevations,
- The bond of the facing brickwork on the external elevations to the internal face of masonry,
- The verticality of the walls,
- The condition of the masonry in the existing chimney breasts,
- The flue routes should be surveyed and all flues identified before any demolition/alterations are carried out,
- Any cracks or historic movements should be recorded.

An appraisal of the existing building should be carried out by a chartered structural engineer. This should then inform a review of the proposed alterations and the resultant changes to the load paths, and the design of new structural elements.

Where defects are discovered, these should be addressed prior to commencement of the proposed works to extend roofs. In situations where the robustness of the existing building is poor, further provisions to improve the robustness should be added into the building before undertaking any alterations.

The design and execution of the works should consider the effects the alterations will have on similar works being carried out by the neighbours in the future. Party Wall Awards will be required in all instances.

The following is a summary of considerations that are to inform the design of the structural alterations:

1. Existing roof structure
    - The proposals should be developed to retain and reuse the existing structure and original finishes where possible.
    - An assessment of the strength and stiffness of the existing roof level structure should be undertaken and its capacity to support the increased loads should be checked. It is possible that the new floor loads may be supported on the existing fabric, although some strengthening may be required to achieve this. Any strengthening should be carefully designed to mitigate damage to finishes and the design should mitigate the extent of intrusion into the existing fabric.
    - Where necessary, a separate, independent floor structure should be provided.
2. Chimneys/chimney breasts
    - New beams are not to penetrate into chimney flues – fixing to the face of chimney breast may be possible, depending on the loads.
    - Chimneys are to be extended upward, using brick, mortar, and workmanship to match the existing.
3. Foundations
    - The existing condition should be assessed and recorded, in particular the foundations' depth and the bearing strata. Any signs of movement should be investigated.
    - The foundations should be checked to see whether they can support the increased loads – in particular the party wall footings may be affected, considering the possibility that additional loads may be applied from both sides.
4. New structure
    - The new construction should be robust and should tie together the front, rear and cross-walls at all levels, including the roof level.

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Design guidance
Height constraints

The design guidance for height constraints is intended to ensure that any new mansard roofs in the Driffield and Medway Conservation Areas would be consistent in design and setting out in order to provide coherence to the streetscape

The height of the parapet may vary and therefore the roof and Party Wall may need to increase in height to achieve the minimum headroom under the dormer but the angle and set-back should remain as indicated.

Dormer lead roof to be set just below change in roof pitch

The guidance is intended to provide consistency in set-back from the parapet to the front face of the dormer

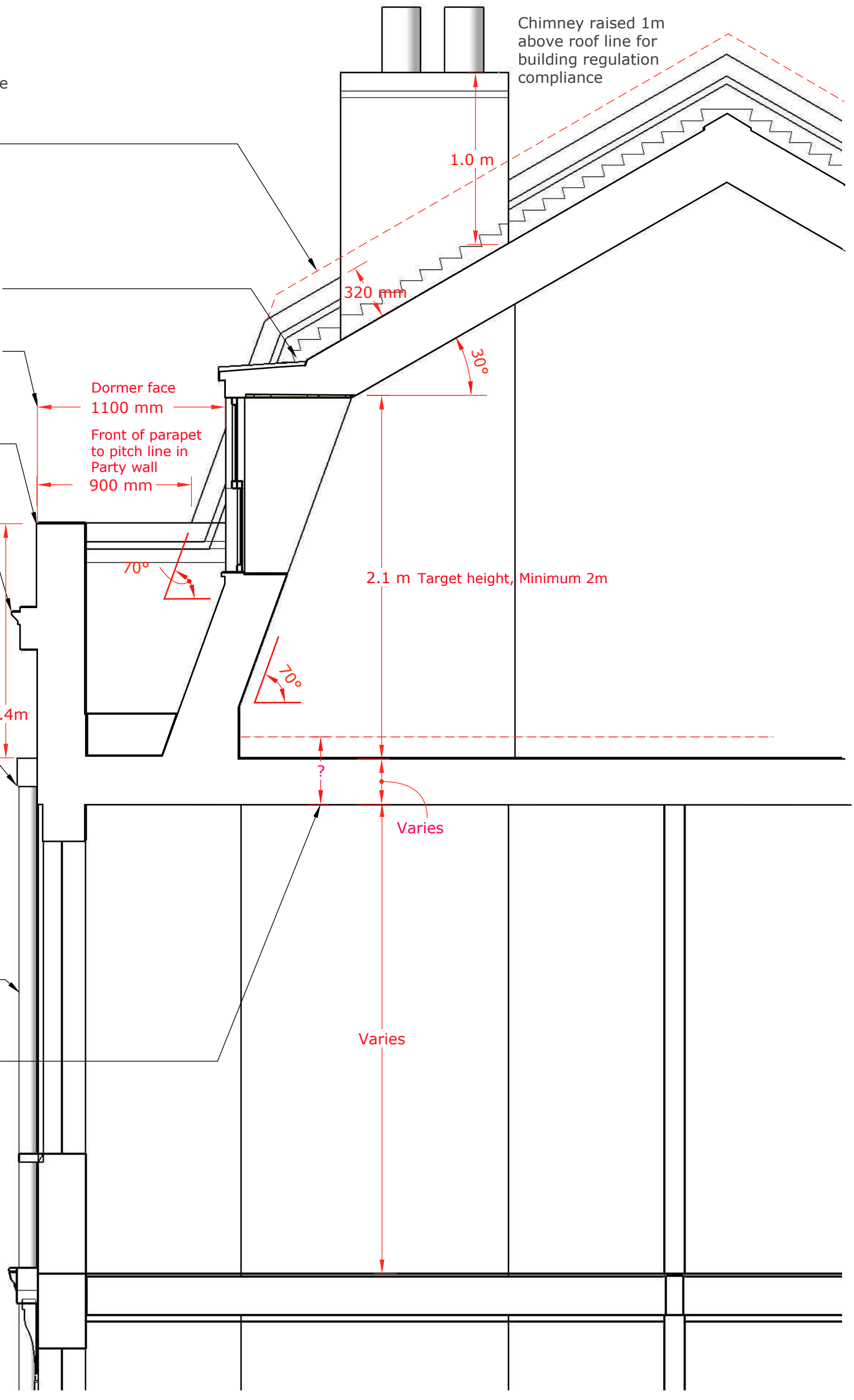
Parapet wall facing the street. The front of the existing parapet is to be taken as the setting out datum point

If the cornice is missing reinstatement is encouraged. This should be in the original position and in most cases this will align with the adjacent property. In some streets there is a step in height from one property to another in which case the cornices may also step

Rainwater hoppers should be installed on the party wall line as illustrated in the design guidance The cast iron hopper and lead lined outlet should be set at a consistent height along the street. Even one brick difference can result in an inconsistent appearance. The guide height indicated might need to vary from street to street due to discrepancies in construction detail in the existing properties

Rainwater pipe on the party wall line subject to survey of street drainage and confirmation of viability

The first floor ceiling should be retained if possible especially if its lath and plaster and if there are original cornicing or ceiling mouldings at first floor level. Consideration should be given to whether it is possible to install the new floor structure in between existing ceiling joists and set out the proposed mansard roof within the guidance dimensions. Any deviation from the guidance should be explained and justified in the design and access statement in support of a planning application, so that the implications on the streetscape can be assessed



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Design guidance
Materials

The design guidance for materials is intended to ensure that any work to properties in the Driffield and Medway Conservation Areas is carried out using appropriate materials
The addition of mansard roofs in the Conservation Areas would benefit from consistency of design and materials with careful detailing and workmanship in order to provide coherence and quality

Reinstatment of lost features is encouraged, to match the original
Reinstatement of lost cornices would help to reduce the impact of the mansard roof

Traditional clay chimney pots
Re-use existing if possible, set in flaunching mortar to match existing

Chimney and flues extended in line with the existing, in bricks to match existing (nb these are likely to be imperial sized bricks), with sulphate-resisting mortar flush with bricks

Brick party wall extended up with traditional soldier course coping on creasing tiles and stepped lead flashing

Traditional dormer with lead cheeks and lead roll roof, timber faced surround to windows painted white, traditional timber sliding sash window with slimline double glazing

Reinstatement of missing stucco cornices and rendered parapet painted white, to match the original, is encouraged

Cast iron hopper and downpipe pre-finished or painted in suitable black bituminous paint on line of party wall. Lead flashing at outlet

Reinstatement of missing stucco window and door surrounds is encouraged, to match the original, painted white

Any re-pointing should be in traditional lime mortar with slightly recessed joints that expose the edge of the bricks.
"Weatherstruck" pointing should be avoided

Reinstatement of lost mouldings is encouraged, to match existing, painted white

Reinstatement of panelled timber doors is encouraged where the original has been replaced

Reinstatement of missing cast iron railings with stone plinth is encouraged, to match the original

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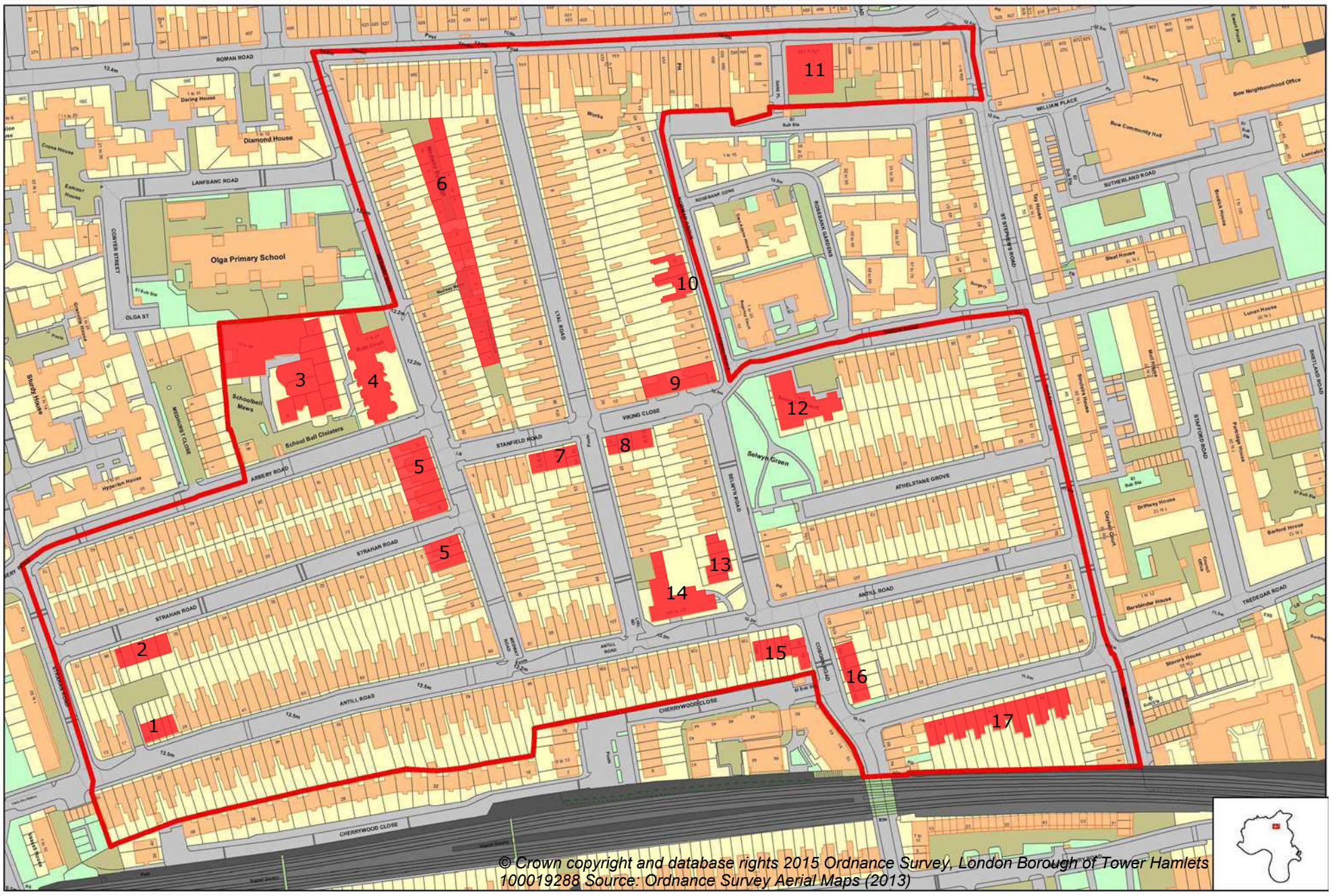
Appendix 4: Map showing properties where design principles are not applicable



Medway Conservation Area
Properties where the Prototype Design Guidance is not applicable

Guidance is suitable for terraced properties with London roofs and parapet walls to reduce the visual bulk of a mansard roof extension. The following properties differ and the guidance is not applicable

1. 19-27 Antill Road: 20th Century double pitched roof with overhanging eaves

2. 54-62 Strahan Road: 20th Century double pitched roof with overhanging eaves

3. Schoolbell Mews: Victorian school

4. 1-24 Roth Court: Late 20th Century hipped double pitched roof with overhanging eaves

5. 37-55 Medway Road: Victorian terrace double pitched roof with overhanging eaves

6. Mainly 20th Century infill development with double pitched (some hipped) roofs with overhanging eaves

7. Stanfield Road on corner of Lyal Road: 20th Century double pitched roof with overhanging eaves

8. Viking Close on corner with Lyall Road: 20th Century double pitched roof with overhanging eaves

9. 1 Norman Grove: Redeveloped property with flat roof structure unknown

10. 17-23 Norman Grove: Victorian terrace double pitched roof with overhanging eaves

11. 470-480 Roman Road: Redeveloped property with flat roof structure unknown

12. 1-9 Saxon Lea Court: Victorian property double pitched roof with overhanging eaves

13. 1-5 Selwyn Road: 20th Century double pitched roof with overhanging eaves

14. 109-127 Antill Road: 20th Century double pitched roof with overhanging eaves

15. Antill Road on corner with Coborn Road: 20th Century double pitched roof with overhanging eaves

16. 102-106 Coborn Road: 20th Century double pitched roof with overhanging eaves

17. 2-28 Tredegar road: Victorian terrace double pitched roof with overhanging eaves

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Prepared by Susannah Brooke and Kit Wedd
Reviewed by Alice Eggeling
Issued First draft: 03/06/2016 Second draft: 10/06/2016. Consultation draft 18/07/2016. Updated Draft 01/09/2016, 19/10/2016 and 30/03/2017

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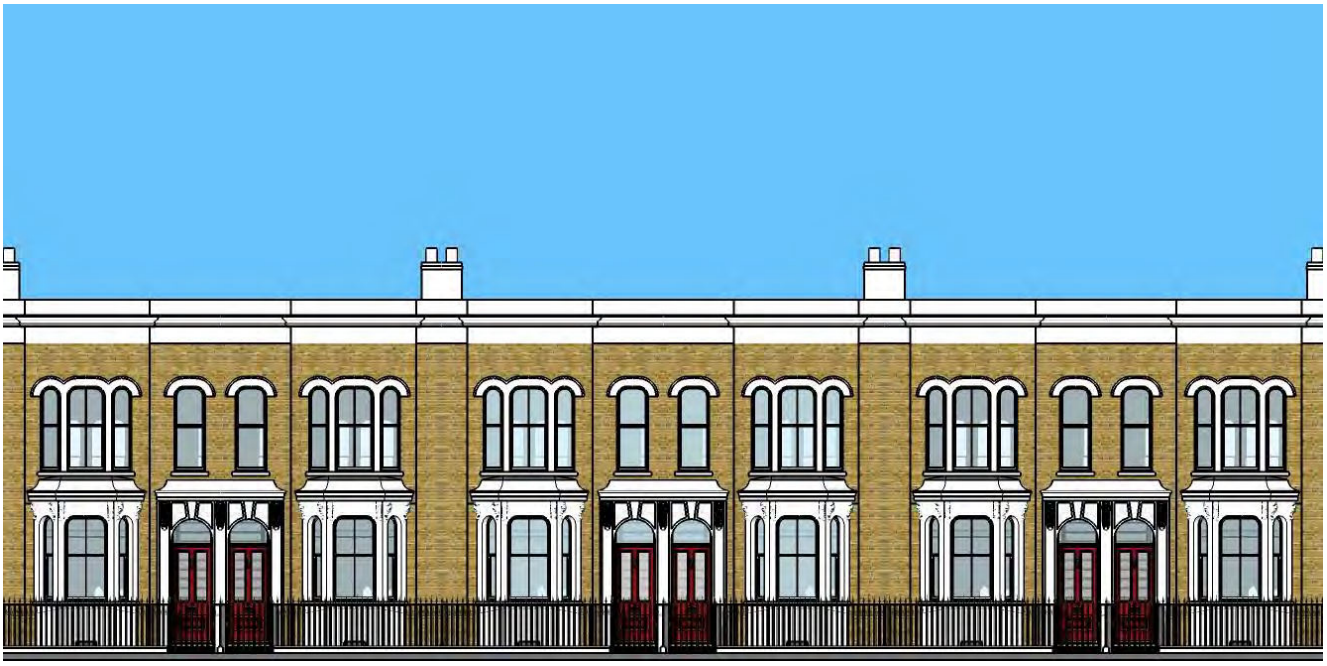
Registered office: 75 Cowcross Street, London, EC1M 6EL.

London Borough of Tower Hamlets

Medway Conservation Area
Detailed design guidance for façade enhancements

Adopted: 27 June 2017

To be read in conjunction with the Medway Conservation Area Character Appraisal and Management Guidelines adopted on the same date



Kennedy O'Callaghan
Architects

TOWER HAMLETS

Contents

1.0 INTRODUCTION

This guidance sets out potential enhancements to building façades in the Medway Conservation Area. Façade enhancements can help to improve the character and appearance of the conservation areas are considered necessary to help mitigate the harm that would be caused by the addition of a mansard roof extensions to a property. The document gives detailed advice regarding the type of enhancements which it is expected will accompany a proposal for a mansard roof.

This document identifies, describes and illustrates the potential for enhancements to be made to individual properties that will help to improve the character of the conservation area by the reinstatement of lost features. If carried out to an appropriately high standard, these works could provide a public benefit that may mitigate the harm caused by adding a mansard roof extension. The guidance is intended to show the standards expected and to illustrate examples that would be appropriate. It explains why using materials and workmanship to match the original could uplift the quality of the street. Adopting a consistent design over a group of houses or a whole terrace could contribute positively to the character of the area and could be considered a public benefit that would help to mitigate harm.

This document should be read in association with the Medway Conservation Area Character Appraisal and Management Guidelines. The appraisal document offers guidance about what is important in terms of the character and appearance of the conservation area and provides a design for a sympathetically detailed mansard roof.

Potential enhancements to the streetscape of the conservation area are explored in a separate document, which deals with both Driffield Road and Medway conservation areas. Planning applications for mansard roof extensions will need to demonstrate how they contribute to both types of conservation area enhancement (façade and streetscape) to deliver an appropriate level of public benefit.

2.0 POTENTIAL FOR ENHANCEMENT – TERRACED HOUSES

2.1 CORNICES AND PARAPETS

Illustrated Sheet 2 indicates the parapet wall, coping, cornice and stucco band and illustrates the contribution of the stucco mouldings to the character of the streetscape.

The guidance explains how it could be possible to achieve consistent parapet details even when they are carried out piecemeal across different houses.

Appraisal
The Conservation Area Character Appraisal identifies the continuous line of the parapet wall and the stucco cornices to the parapet as features of special interest, making a positive contribution to the character of the Conservation Area.

Most of the terraces in the Medway Conservation Area were designed to have a consistent parapet line with a rendered band course and cornice. Many of the cornices have been removed, resulting in an irregular, broken parapet line. Some have already been successfully renewed where previously missing and this can enhance the terrace substantially contributing positively to its character and appearance.

The maintenance, conservation and reinstatement of cornices is encouraged by the Council.

Parapet stucco band and cornice repairs
Repairs should be carried out by specialist contractors with experience of using lime mortar. The parapet brickwork should be checked for damaged bricks or loose or missing mortar. The coping should be checked to make sure that it is stable and there is no plant growth. Gutter cleaning and removal of all organic growth should be carried out regularly. Care should be taken when removing damaged render and when preparing surfaces for redecoration because they are likely to be coated in lead-based paint, which is toxic.

The stucco or render band on the face of the brickwork and the cornice should be checked for cracks and tapped with a metal tool to establish if there are any hollow areas where it may have come un-keyed. Where damaged, areas should be replaced in stucco to match the original mix (often containing lime putty with sand and stone dust but sometimes with other additives), or lime render. Lime products can only be applied if the temperature is at least 5 degrees and rising and it may require protecting with hessian to allow controlled drying, so these requirements need to be considered when the works are planned. Cement renders are not considered appropriate, as they can damage the brickwork because they do not allow for movement and water can get trapped behind hairline cracks and migrate to the inside of the wall. When any trapped moisture freezes it expands and can cause cracking.

Cornice replacement
If replacing the cornice the contractor would need to establish the moulding profile by taking a template from an adjacent property, accessed by ladder, by prior arrangement

and the agreement of the householder. Ideally, property owners in adjacent houses would liaise to facilitate reinstatement of lost mouldings at the same time, as this is likely to be cost-effective, would have the greatest visual benefit, and would allow the greatest consistency of detail.
Repairs to the brick parapet and coping may be needed before implementing cornice reinstatement. The parapet surface should be prepared and cleaned. The area to receive the cornice should be roughened to provide a key for the cornice.

There are 2 common methods of replacing cornices: run on site, or fabricated off site, as described below.

Run on site method
For short videos on running mouldings on site see https://specialistplastering.com/blog/[1]

The specialist contractor should make a template to match the original cornices in the terrace and make up a runner and guide. Brass fixings are installed at approximately 30 centimetre centres, drilled in with resin. Non-ferrous wire is fed through the brass fixings to provide a framework to prevent the cornice from blowing. The temporary guide needs to be set up carefully to prevent damage and to ensure the moulding is aligned with the moulding on adjacent properties and adjustment may be required to take into account any settlement or changes in height across the terrace. The cornice will then be run freehand on site using the template as a runner, typically with a stucco mix of sand, cement and hydrated lime. Once dry this can be painted. (If a self-coloured finish is required to reduce future maintenance, a pre-mixed stucco of Portland or stone can be used but this approximately doubles the cost. Samples of the finish should be obtained in advance, so that colour and texture can be reviewed.)

Off-site method
Cornice mouldings can be fabricated from a template in a purpose-made mould and cast, typically using Fibrocem or Jesmonite[2] or similar materials made to look like stone and suitable for painting. Fixings are cast into the mould to allow fixing on site. Moulds can be re-used and therefore it may be a cheaper method for use over several properties at a time, but normally the specialist subcontractor would assess the best method for each application.[3]

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[1] This is included for information only; we cannot vouch for the suitability of the work by the company or the contents of this blog.

[2] We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.

[3] The technical guidance has been compiled with the assistance of local plasterers listed below but their work has not been inspected and we cannot vouch for their suitability.

- KEVRYAN@londonrepointingandrestorationltd.co.uk, Kev Ryan Tel: 07830911177 www.londonrepointingandrestorationltd.co.uk
- cornicerepairs@gmail.com St. James' Plastering Services, James Lawlor Tel: 07970 308 825 / 0208 648 9173 www.cornicerepairslondon.co.uk

A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, www.buildingconservation.com. All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally 'approve' or 'recommend' them, they do screen out inappropriate suppliers and products to maintain the established integrity of the

The Council does not wish to be prescriptive about the method of installation of replacement mouldings provided that the appearance of profile and surface is appropriate and that it is adequately secured to the building.

However, products that are self-finished with a plastic appearance, such as fibreglass mouldings, would not be considered acceptable as they do not have the character and appearance of the traditional mouldings.

Corners and edges
Where only one house in a terrace is installing a replacement cornice, care should be taken to finish the ends neatly so that the next door neighbour could extend it seamlessly in the future. A movement joint may be necessary, especially where jointing to an existing neighbouring cornice; this should be profiled and coloured to match the cornice. Where adjoining properties do not align in height and at the end of terrace, care should be taken to return the moulding at 90 degrees to provide a neat edge.

Paint for cornices and rendered band courses
The original paint is likely to have been off-white to resemble stone. Traditional paint contained white lead and linseed oil which yellowed and dulled down over time. Care should be taken when removing damaged render and when preparing surfaces for redecoration because lead is toxic. Lead paint is no longer permitted except on some listed buildings. Redecoration paint should be in cream, off-white or a light stone colour. RAL 9001 is suggested. Matt or semi-gloss paints are considered to be appropriate. On lime render it is important that a breathable paint should be used.

2.2 WINDOW AND DOOR SURROUNDS

Illustrated Sheet 3 shows typical details of the original stucco window and door surrounds.

The council supports the repair and reinstatement of original features where missing, using traditional techniques and materials wherever possible.

Appraisal
The decorative mouldings around doors and windows make a positive contribution to the character of the Medway Conservation Area. The details vary from terrace to terrace, but generally include arched stucco window head mouldings, and profiled mouldings to the top of the bay windows supported with foliate embellishments. Many properties have recessed front doors with an embellished stucco surround, often featuring an arched entrance with vermiculated or reticulated stucco panels over the door, and projecting mouldings with stucco console brackets. These details require regular maintenance and redecoration. The arched tops and decorative details to doors and windows make a positive contribution to the local character of this conservation area.

Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.
Specialist trades may be members of the Craft Plasterers Guild or the League of Professional Craftsmen.

Repair
Each property should be assessed individually, to establish which features are original and if details are missing which details of neighbouring properties are the most appropriate to be copied. Most houses are paired with their neighbour, ie they are halls adjoining houses, but in some cases the features of the neighbouring property may not be original. Where decayed, original mouldings should be repaired before they become dangerous. Embellishments should be carefully recorded and repaired before the original details are lost. Missing door hood mouldings should be replaced to match existing originals, examples of which might exist at a neighbouring property. Similarly foliate supports to bay window heads and cills should be restored using existing originals as templates. To do this it may be necessary to get permission from a neighbour to allow a template to be made. Some of the projecting mouldings can be seen to be supported by brick or tile slips, but the construction details are likely to vary from house to house. The Council does not wish to be prescriptive about the method of repair or installation of replacements provided that the appearance of the profile and surface is appropriate and that the moulding is adequately secured to the building. This guidance recommends that repairs should be carried out by specialist contractors with experience of replicating traditional mouldings to match the original and experienced in the application of lime render or stucco (refer to Cornices footnotes above). The choice of colour is also important as a terrace looks more cohesive where consistency is achieved. As with the painting of the cornice, a cream, off-white or light stone colour is the most appropriate. RAL 9001 is suggested.

Replacement console brackets
Console brackets can be made off site, by plaster specialists (refer to Cornices footnotes above) or specialist suppliers of cast stone using products such as Fibrocem or Jesmonite[4], using moulds of the original, or using 3-d software to provide laser cut templates. This becomes more cost effective if the reproduction moulding templates can be re-used and costs are likely to decrease if a large number are required for several properties at once.

Bay windows
Refer to illustration Sheet 3. Many of the properties in Medway Conservation Area have bay windows, for example properties in Medway Road, Lyal Road and Antill Road; these are fairly consistent in appearance but vary slightly from street to street. However, incremental changes such as the loss of console brackets, mouldings, sash windows or leadwork, or more dramatic alterations such as the loss of the bay altogether, can substantially change the appearance of a property and result in the erosion of their historic character.

Bay windows require maintenance and should be inspected and maintained periodically, including the roof. From time to time bay windows require structural repair, especially if they have not been adequately maintained. If they are visibly sagging or cracks appear on or near to the bay, a structural engineer's advice with experience of historic structures should be sought. A site inspection will be required and possibly some opening up for further investigation may be needed before the repair can be specified.

[4] We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.

Paint for window and door surrounds and bay windows
Refer to guidance for 'paint for cornices and rendered band courses', on page 4.

Lead flashings
Traditionally the bay windows are likely to have been roofed in lead. However, the depths of flashings were small and the visibility of the lead limited. In some cases the leadwork over bay windows has been removed, or painted over.

The original door and window hood mouldings and some of the shallower projecting mouldings formed in stucco were laid to fall and do not appear to have originally had lead cappings, although some have been added to protect them over the years. However, an adequate fall on the horizontal surface of a moulding is generally found to be sufficient to ensure water run-off.

Leadwork that is of adequate thickness and with suitable laps and flashings generally has a life-span of in excess of 70 years. Some of the leadwork has been renewed with good quality replacement leadwork, whilst in other cases it has been removed, over-painted or poorly installed, dumbing down the original quality of workmanship and detail.

Lead can be toxic and it needs to be specified and laid correctly; by specialist leadworkers using details approved by the Lead Development Association. A list of leadworkers and further information is available from www.leadcontractors.uk, email: info@lca.gb.com.

2.3 TIMBER SASH WINDOWS

Illustrated Sheet 1 indicates the contribution of the traditional windows to the streetscape and Sheet 4 indicates the components of a typical sash window in the Medway Conservation Area.
The Council seeks to preserve and enhance the character of the streetscape by conserving the original windows, and replacing inappropriate windows.

Appraisal
The Victorian terraced houses typical of the Medway Conservation Area had timber boxed sash windows of varying shapes and sizes but often with an arched head. Many of these remain intact, and these are features of special interest which make a positive contribution to the character of the Conservation Area. However some have been replaced with inappropriate alternatives such as plastic or metal framed windows or casement windows. Often the replacement windows have a straight frame to the new glazing and this has a very detrimental impact upon the character of the conservation area.

Historic England states[5]:

[5] https://content.historicengland.org.uk/images-books/publications/traditional-windows-care-repair-upgrading/heag039-traditional-windows.pdf/

"in conservation areas, surviving historic fenestration is an irreplaceable resource which should be conserved and repaired whenever possible"

"Replacement plastic (PVC-u) windows pose one the greatest threats to the heritage value of historic areas"

"Traditional windows can be simply and economically repaired, usually at a cost significantly less than replacement. For timber windows this is largely due to the high quality and durability of the timber that was used in the past (generally pre-1919) to make windows. Properly maintained, old timber windows can enjoy extremely long lives."

"Repairing traditional windows rather than replacing them is not only more sustainable but makes better economic sense, particularly when the use of shutters or secondary glazing to improve their thermal performance is taken into account. Crucially, retaining historic fabric, including traditional windows, is fundamental to good conservation."

"Estate agents suggest that using poor facsimiles of historic features can actually reduce the value of a property. A survey of UK estate agents carried out by English Heritage in 2009 showed that replacement doors and windows, particularly PVC-u units, were considered the biggest threat to property values in conservation areas. Of the estate agents surveyed, 82% agreed that original features added financial value to homes and 78% thought that they helped houses sell more quickly."

In the late C19th sash windows with relatively large panes of glass were fashionable and the windows in Medway Conservation Area are typical of their period, with timber box sliding sash windows with horns. The intermediate glazing bars were typically 19mm or slimmer.

"*The introduction of cheaper and stronger plate glass in the I830s removed the need for glazing bars, thus allowing uninterrupted views to the outside. However, the weight of the glass and the absence of any internal supports necessitated the introduction of 'sash horns' on the upper frame, extensions of the stiles that helped to strengthen the vulnerable frame joints at either end of the meeting rail"*

The C19th glass had more character than modern float glass, retaining smaller bubbles and wavers. Where original glass still exists, it should be retained.

Many of the original windows also incorporate internal shutters, which significantly improve draught exclusion and solar shading when closed and their retention is encouraged.

Window Repair

Timber repairs should be carried out by a specialist. There are many specialist joiners who can undertake refurbishment including discrete draught exclusion using brush systems and repairs using precise replication of original moulding profiles. [6] They will assess whether the windows can be repaired in situ or if they need to be taken to the workshop.

[6] A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, www.buildingconservation.com. All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally 'approve' or 'recommend' them, they do screen out inappropriate suppliers and products to maintain the established integrity of the Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.

Paint removal
Paint accumulation can clog up the drips and anti-capillary grooves and should be removed carefully. All accessible paint should be removed using wet abrasive paper. The original paint would be lead-based, which is toxic if inhaled, so masks and finger protection should be worn and the wetting reduces dust. Avoid stripping by immersion in an "acid bath" as this will deform the timber and weaken the joints ultimately leading to faster deterioration of the window. The paint removal will reveal the original mouldings.

Timber repair
Damaged components should be retained and repaired to match the existing (where original). Modern off-the-shelf replacements are often less crisp than the original moulding profiles and samples may be needed to ensure an exact match and for quality control.

Further information on windows and glass and their conservation is available from Historic England.

SPAB Technical Pamphlet 13 describes and illustrates typical joinery repairs and explains how to repair loose joints and carry out other repairs[7].

Sealing
Weather stripping and acoustic sealant can be applied by creating a groove in the frame and/or replacing the timber beads at the edge of the window (sash beads parting beads). There are various methods, some of which are highly visible, and others which are equally effective but more discreet because they are inserted behind the timber bead. Replacement beads that incorporate draught seals can make a significant improvement to the thermal comfort of the room by reducing draughts.

Double glazing
If householders are considering replacement of glazing with double glazing then detailed proposals should be submitted for consultation and approval as double glazing is considered to be a material alteration requiring planning permission in the Conservation Area if not appropriately detailed.

Installation of double glazing can damage existing glass and mouldings, and is not encouraged in the Conservation Area. However where original glass is no longer present, it may be acceptable to install a thin sealed double-glazed unit (such as Histoglas[8] or others) with coloured spacers within the existing frames. However, this is not encouraged as it is all too easy to lose original mouldings and dumb down the fine detailing. Often the replacement of windows can result in the loss of the characteristic arched top to windows, and the impact of this can be particularly detrimental.

[7] www.spab.org.uk/bookshop

[8] We cannot vouch for the suitability of this product but specialist joiners should be able to provide advice on appropriate methods and materials for each situation.

Wide profiled double-glazed units with silver spacers are not appropriate for use in the Conservation Area because they are highly visible, result in a strange mirrored appearance to the glass and often require replacement glazing bars with deeper profiles.

Secondary glazing
Secondary glazing, sometimes referred to as storm windows, can be considered. As the properties are not listed, internal secondary glazing that is separate from the external window does not require planning permission. A sheet of glass or perspex can provide a good level of acoustic insulation, draught exclusion and security, although it should not be considered if this would result in damage to shutters or original mouldings and the contractor should assess whether secondary glazing could be installed without damage. It is necessary to consider how the room will be ventilated and how the windows will be cleaned.

Redecoration
The windows should be primed and painted with a minimum of one undercoat and one top coat, but this will need to be done in stages if the windows are repaired in situ. The junction of the sash window pulley stile and sash stile should be waxed instead of painted to allow the window to slide open.

Window replacement
If a property has windows that have been replaced in the past with plastic or metal windows or casement windows, then replacement with timber sash windows to match the original is encouraged. Original windows may still be intact on neighbouring properties and these may be appropriate for basing the details on; professional guidance might be needed but illustrated Sheet 4 provides guidance on the typical components of the traditional Victorian windows to facilitate identification of the original features. There are many joiners who specialise in providing traditional timber sash windows to match original Victorian details and who should be able to provide advice on thermal and acoustic performance. It is important that detailed site dimensions are taken for every window as Victorian properties are often out of plumb and sizes may vary.

Changing windows within a single family house does not require planning permission unless it is considered to be a material alteration such as a change to upvc (plastic), to double glazing, to the size of the window, or the method of opening, whilst in a flat within a terraced house changing windows is something which needs planning permission. Upvc is not likely to be acceptable as the details and appearance differ from traditional timber framed windows. Double glazing would require careful detailing to maintain a traditional appearance (see Double Glazing above).

2.4 FRONT DOORS

Illustrated Sheet 5 shows photos of typical doors and Sheet 6 identifies typical original details for design guidance.

The council supports the repair and reinstatement of original features where missing, using traditional techniques and materials wherever possible.

Appraisal
Many of the properties in the Conservation Area retain their original front door and architraves. Their details and quality enhance the character of the Conservation Area. The typical door in Medway Conservation Area has a single bottom panel with a heavy timber moulding and applied central panel with scalloped concave corners. The top has two vertical glazed panels with timber beads. Some of the doors have leaded lights with stained glass, some have plain glazed panels which may have etched or sandblasted glass for privacy. Some replacement doors have solid timber panels with beaded surrounds. Most doors do not have a weather bar projecting at the base as this is not required due to the depth of recess, so driving rain is not an issue. The doorways have plain glazed over-lights (or fanlights) above the front doors, sometimes with the house number applied to the glass. Some doors retain their old glass, but others have been replaced, sometimes with laminated glass to enhance security.

The doors are typically set well back from the façade behind the stucco surround, which provides shelter and modulates the terraces. In some cases doors have been repositioned at the front of the reveal and in some houses metal gates have been added, but these interventions have a detrimental effect on the character of the terraces.

Repairs to doors
Repair using traditional methods is favoured wherever possible, and many joiners offer this service. If the original door is in place, this should be regularly maintained and overhauled. Specialist conservation joiners may upgrade the draught resistance and security by concealing seals and bars within the frame and replacing the hinges. Leaded lights can be temporarily removed for restoration and cracked panels can be re-glazed.

Sometimes even if the original door has been lost, the original frame is still intact and can be retained. Conservation joiners are usually able to determine the most appropriate method for repair. Previous grooves for locks can be in-filled using pieced in timber. In some cases a two-part filler may be used if this retains more of the original timber; conservation grade filler can allow planning and sanding whilst some products dry too hard and can lead to further timber decay.

Replacement doors
Victorian style doors to match the original style are considered to be the most appropriate. Quality timber door manufacturers can offer the best traditional methods of construction for durability, using sustainably sourced timber, combined with draught resistance, advanced paint systems and integral locks with high levels of security.

Replacement front doors can be inappropriate such as those with large panels of glazing, semi-circular top-lights within the door, applied plywood panels or flush doors. These are not traditional features of Victorian doors and are not considered appropriate. PVC (plastic) doors are not appropriate in the Conservation Area because they do not follow traditional patterns or details adequately closely.

Doors should be positioned set back in the opening in their original location, to retain the depth and modulation of the streetscape.

Glazed panels
Original glass should be retained where possible. Replacement glass may be clear, etched, sandblasted, stained glass or obscured with film. A variety of glazed panels adds character to the area. Glazed panels may be laminated for improved security.

Door colour
Doors were traditionally painted in different colours, using oil based paint with natural pigments. Historic colour charts are now available from many paint suppliers, offering Victorian and Edwardian paint colour ranges. These colours are the most appropriate. Gloss or semi-gloss finishes are both considered acceptable.

Door ironmongery
Traditional doors generally had a central letter-box, a knocker and knob, an applied house number, and key holes protected by an escutcheon cover. Fittings would have been brass or cast iron. Door bells often had a push button beside the door. Some properties retain their original ironmongery although in some cases this has been over-painted. The quality of ironmongery is now very variable throughout the Conservation Area. Where properties are divided into flats, large surface-mounted intercom boxes can be detrimental to the appearance of the front of the property. Ideally boxes should be discretely located within the recessed area. Good quality traditional ironmongery can enhance the character of the property and Victorian patterns are still available. Where missing, reinstatement of traditional style fittings is encouraged.

Metal door gates / grilles
Some properties now have a metal grille in front of the front door, presumably added for fashion or to enhance the sense of security, especially where garden gates have been lost. These are not an original feature of Victorian properties and detract from the character of the Conservation Area, because they reduce the modulation of the facade provided by the recessed front doors. Planning permission is required for the introduction of a metal gate and would not be granted if permission were sought. The removal of gates in door openings is encouraged.

2.5 BRICKWORK AND POINTING

The guidance on illustrated Sheet 13 alerts residents and contractors to the harmful effects of cement pointing and illustrates appropriate and inappropriate pointing.

Appraisal
The original soft London stock bricks provide a consistent appearance to the Conservation Area. The brickwork would have been bed and pointed using lime mortar. The pointing (the visible finished surface of mortar) can be susceptible to damage, particularly when bricks are cleaned, and needs periodic replacement. Many properties have suffered from inappropriate pointing in hard cementitious mortar. Most of the properties in the Conservation Area have been re-pointed with mortar that projects beyond the face of the brick. This does not match the original pointing, which was more recessive and therefore

less visible than the modern projecting mortar. This detracts from the delicate character of the original brickwork.

Re-pointing
The pointing should be set back from the edge of the brick to expose the arris (the edge of brick) to provide a crisp appearance. Some of the Victorian properties had a “struck” joint but the modern version of this (“weatherstruck pointing”) is far too visible and great care must be taken to avoid the mortar projecting in front of the face of the bricks.

Re-pointing in lime mortar
The use of traditional lime mortar for re-pointing is encouraged. Natural lime products must be applied when the temperature is above 5 degrees and rising and so this needs to be taken in to consideration when programming work. The existing pointing should be removed to a depth of about 20mm, carefully so as not to damage the corners of the soft brickwork. Re-pointing in lime mortar should be done by a specialist brickworker with experience of selecting and using lime mortar; pre-mixed lime mortars are available and can assist in quality control but the appearance can vary from one batch to another. The choice of sand is important to the final appearance of the pointing and samples are useful to establish an agreed appearance.
The problem with cement mortar and pointing is that it is harder than the soft bricks and so any moisture absorbed by the bricks cannot evaporate out through the joints. Trapped moisture builds up behind the face of the brick and frost-thaw action can accelerate deterioration of the brickwork.

Brick cleaning
Brick cleaning is sometimes desirable for aesthetic reasons, however, this is not usually necessary if the brickwork has not had any coatings applied. Sometimes staining is uneven and local stain removal is required, such as cleaning off bird fowling or atmospheric particulates that build up unevenly beneath projecting mouldings, so each case needs to be assessed individually to determine the most appropriate method of cleaning. The removal of paintwork or cleaning of brickwork after removal of over-coatings requires specialist procedures.

The main methods of brick cleaning are water cleaning using cold or hot nebulous spray, chemical cleaning, or poultice application. Brick cleaning should only be done following a trial sample area, using specialist methods with skilled specialist brick cleaning contractors with proven experience, as it can have a harmful effect on brickwork and decorative mouldings. The contractor will need to know the main factors of brick cleaning i.e. water contact time, water pressure, associated rinse procedure, pre-wetting procedure, etc. Aggressive sand blasting, high pressure water or harsh chemical cleaning are not generally accepted conservation methods because they can damage the surface, removing the fireskin (the outside hardened face) of the brick, leading to premature decay. This is can sometimes only become evident after the damage is done so close site control and a great deal of skill is necessary.

2.6 RAILINGS

The illustrated guidance starting at Sheet 7 identifies the features of existing railings in the Medway Conservation Area and points out the features that are traditional. In typical Victorian properties railings provided a safety function to guard the edge of a light-well, and on properties with no basement the function of the railings was to demark the property's boundary, provide security and enhance the character of the streetscape.

In the Medway Conservation Area, there are few basements and very few of the original railings remain. It would appear that with no safety function they have largely been removed during the war to help the war effort. Some properties have replacement railings that were installed post-war and whilst these provide some streetscape enhancement, they are less embellished than Victorian cast iron railings and provide less architectural interest. By contrast, no. 9 Selwyn Road has a traditional railing style that enhances the character of the street and the details are a good example of appropriate detailing and are characteristic of the Victorian style (although the gate is missing). Illustrations are provided on Sheet 7.

Railing repair and reinstatement, where missing, is encouraged by the Council and the design guidance identifies the elements, methods and materials to consider. It may not be appropriate to install railings in all streets and in all properties, but the guidance is generic.

Appraisal
The original railings would have added a layer of interest to the streets of Medway Conservation Area. Reinstatement of traditional railings along terraces would substantially enhance the area. Victorian railings tend to be robust, with generous rail heads and ornate scrolls, as illustrated in the guidance sheets. In Medway as there is no original precedent to use as a basis for replication, a generic style has been proposed in the guidance, using components that are available as standard patterns. Some variety is likely to be acceptable, but as a general guide the quality should be at least equivalent to that shown in the guidance, but each proposal would need to be assessed on its own merit.

Cast iron
The traditional railings of the late 19th century were of cast iron. Ornate rail heads and finials on gate posts were cast from moulds and mass produced in foundries using sand casting. Over 200 patterns are still available for re-casting. The rail head was forged to the bar, which was typically ¾-inch (20mm) diameter, or profiled in a fluted or barley sugar pattern which were cast together with the rail head. Top rails to join the bars together were formed from flat iron bars supplied loose, drilled at six-inch (150cm) centres, and fixed on site, with the palings (vertical rails or bars) pegged and leaded to the rail, and the rails were joined together with traditional lap joints. At the base, each bar was installed into a recess in the stone plinth and secured using molten lead to caulk the joint, a technique which is still used today and is favoured by conservationists (see guidance on caulking below). At the end of the run and at gate posts, cast iron stays were installed to provide lateral restraint, often detailed with a scroll and sometimes with some further embellishment and boot scrapers were sometimes incorporated.

Steel
In the C20th mild steel became more commonly used as a cheaper alternative to cast iron. Steel is heavier than cast iron and modern steel railings are often much thinner than the originals and their details appear unsubstantial and less characterful than cast iron. However, it is possible to detail steel railings to have the same appearance as traditional cast iron, combining traditional craftsmanship with modern production techniques. To enable the traditional details need to be adapted to suit the use of steel.

Steel rail heads were developed using the dye cast process which is a stamping method using hydraulic pressure applied to molten steel inside a box containing reusable templates. This method is quicker and more cost-effective than the cast iron sandblasting technique.

Where cost constraints drive the proposal for steel in place of cast iron, great care should be taken in the detailing to ensure that when painted, the railings resemble the traditional cast iron originals as closely as possible.

Details to avoid
Thin bars, railings without decorative rail heads or with rail heads that are too small are not considered to be appropriate in the Conservation Area as they are not traditional and are not a close match to the original. Welded joints visible on the surface should be avoided as they can be unsightly. Some modern finials are screwed to the rail, but if the screw remains accessible these are unsightly and can be prone to theft, so all fixings should be concealed. Some modern replacement railings incorporate a bottom rail but this is not considered appropriate as the traditional railings in the area were fixed directly to the base with lead caulking (see below for guidance on caulking). Householders should also be aware that steel can be galvanized for rust resistance, but galvanised railings are not considered appropriate because most galvanised railings are made in panels and factory finished and this technique does not lend itself to traditional detailing. Railings traditionally had an oil based painted finish and the appearance of a galvanised steel finish or a polyester plastic coated finish are at odds with a traditional appearance.

When considering a planning application for railings, the Council would require adequate drawings and illustrations or samples to ensure that the proposal would be appropriate for the Conservation Area. The bars, heads and finials should be as large as the original examples in the surrounding neighbourhood, and all details should be designed to the correct authentic design. Guidance is given below.

Railing maintenance
The illustrated guidance starting on Sheet 7 provides illustrations and notes to facilitate appropriate details for the restoration of railings.

If not adequately protected from the rain, over time cast iron rail heads can become brittle at the junction with the bar when rust leads to decay. Cast iron is durable provided that it is well protected by rust inhibiting metal primer and paint; both iron and mild steel will rust if not adequately protected. Paint on original railings would have been lead based and adequate health and safety procedures should be taken when removing it. Cast iron railings were traditionally coated in a red lead base layer to provide rust resistance. Care

therefore needs to be taken when carrying out repairs as lead is toxic and health and safety procedures must be followed. If the metal is rusting the affected areas should be rubbed down to bare metal or stripped using conservation approved paint stripper in a controlled environment, and re-protected using specialist paint systems, often using zinc phosphate as a rust prohibitor. See 'painting ironwork' below for further information on decoration.

Where original railings remain, even if they are in poor condition, it would be appropriate to repair them as follows:

> *"seek to retain and preserve as much original material as possible, using traditional materials and techniques in repairs, with minimal disturbance to the original work, and using reversible processes where possible"*[9]
>
> *"Regular inspections combined with cleaning back and repainting localised defects can extend the life of a paint system almost indefinitely.*
> *Historic railings should ideally be repainted using traditional paint systems*[10] *but, where maximum longevity is required or the site is very exposed, the use of modern two-pack epoxy-based paints, which provide excellent protection for up to 25 years, may be considered"*

If the existing railings are original or appropriate good quality cast iron railings, they should be repaired with missing components replaced to match existing, using traditional techniques, by a specialist contractor[11].

Missing rail heads can be replaced to match existing, either using castings from standard patterns where available, or from a cast made from an adjacent rail head. The replacement rail head can be wedged into place and fixed with a galvanised pin through the side, sheared off, sealed and decorated.

For gates and railings not acting as guarding, the spacing is not currently legislated, but safety should be taken into consideration and it is important that there are no sharp edges or loose bars or rail heads.

Replacement railings

As original railings do not survive in the Medway Conservation Area, it is appropriate to install railings to a traditional pattern to complement the streetscape and enhance the conservation area. This would have the greatest benefit if reinstatement to more than one property can take place and if the design is consistent with other houses in the terrace. It

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[9] http://www.buildingconservation.com/articles/historicrailings/historicrailings.htm

[10] Lead paint is not permitted except in some grade 1 and 2* buildings so would not be appropriate here.

[11] A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, www.buildingconservation.com. All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally 'approve' or 'recommend' them, they do screen out inappropriate suppliers and products to maintain the established integrity of the Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.

is important to establish which style is considered most appropriate as this will vary according to location.

Non-traditional materials or features designed out of character with the existing buildings will not normally be acceptable. The replacement of existing non-traditional features with traditional alternatives will be encouraged.

There are several specialist ironwork companies that specialize in supplying and installing railings to closely match the traditional pattern and details and some provide a complete package of design, installation and decoration, including the stone base. They would be able to match the details and reproduce railings to match the original examples that remain in the neighbourhood. There would be an economy of scale if metalworkers were to produce the same design for multiple properties, especially if bespoke details were to be produced.

Finials and rail heads

Finials are the decorative headings to railings, often a railing will include principle finials, slightly larger more decorative heads on the top of gate posts, and support stays whilst the rail heads between these principle finials are more simply and modestly detailed.

Finials are generally more substantial than rail heads and are still formed in cast iron as the pressed steel method is not suited to finials. Timber templates were formed and sometimes the cast had to be made in several sections to allow the removal of the template from the cast. Modern templates can be made in resin using 3-d laser cutting using computer aided design. Existing original finials should be maintained and may be suitable as a template for reproduction. The guidance sheets illustrate examples of original styles of finial and rail head. If possible, liaise with owners who have original railings so that the railings contractor can measure the originals and if this is not a standard pattern they could take a cast of a rail head to use as a template for reproduction. This would mean that the sizes can be matched an important element of the historic character of railings. Taking a cast does not normally create any damage but any damage should be made good.

In streets with no precedence for original railings, a standard pattern of rail head as indicated in the guidance is considered to be appropriate and other styles may be acceptable although in order to maintain a locally distinctive vernacular, copies of original details from the area are encouraged. It is important that the rail heads are adequately substantial as small rail heads are not characteristic of the C19th railings in the area.

The rail head may be produced complete with the bar, or should be fixed to the bar without visible welds or fixings. The combined rail head and bar can be fed through the holes in the top rail with a 0.5mm gap all round that must be fully filled with paint to avoid degradation.

Finials should be fixed to the bar without visible welds or fixings and the joint should be neat and well decorated.

Balusters / bars / palings, top rails and backstays
The paling is the vertical rail, or baluster, in a railing. Profiles of these varied, but spacings were typically six inches apart (150mm centres).

The top rail is typically 50x10mm, but may be larger on some of the original railings with wide bars. The rail should be traditionally jointed with a lap joint. This was traditionally wedged and leaded but non-ferrous screws can be used if countersunk, filled and painted. Visible welds are not traditional and should be avoided.

Brackets and back stays are used to support the railings and gate posts. These were often formed with scrolls and embellishments, adding character to the railings.

New railings may be produced in panels, provided that the panel has no bottom rail and that the supports and joints between panels are traditionally detailed. A typical railing assembly may be supplied in 2 panels with a lap joint in the top rails, with the bars pre-assembled to the top rail, and with a temporary angle clamp at the base to maintain the spacing and facilitate site installation. At the base the bars should be caulked as described below.

Gates
Traditional Victorian railings often incorporated a gate to provide security and to demark the property boundary. Gates were fabricated to match the railings, so that the railing centres were maintained. Gates were hung from a pin and supported at the base. Some examples have gate posts with ornate finials and decorative scrolled stays, whilst others can be a simpler design to match the pattern and spacing of the railings. Traditional gates can still be made to match the railings. Gates should be inward opening as they must not encroach on the pavement.

Plinth details
Traditionally the plinth, or base, was stone. In the C20th concrete was used as a cheaper substitute, sometimes painted, and cast stone is now available.

To establish whether an existing base is of stone or concrete, look for visible joints and if there are joints it is likely to be stone. Paint removal can reveal the surface but beware the possibility of lead-based paint and take adequate precautions such as wearing a mask and gloves and wet down the surface prior to rubbing with damp abrasive paper.

Cast stone plinth blocks are available in pre-cast units made of a composite of cement, stone dust and other additives. They are typically 600mm long in order to be handled on site and the joints are typically 5mm wide, and are filled on site with a mortar containing stone dust to match the cast stone, so they do not need site painting. The units are pre-cast to include the recess for the railing bars and any gate posts and stays that are incorporated in the design. Sometimes deeper recesses are formed to increase the strength especially for railings that are for guarding. The coordination for setting out for of the plinth is usually done by the metalworker, who provides detailed drawings using computer aided design which are then used by the manufacturer of the plinth. The company responsible for design, structural calculations and detailed coordination should hold professional indemnity insurance.

Caulking
Railings were caulked into the stone plinth / base. Pockets were cut into the top of the base to form a square or circular recess. This is still the preferred method of installation and whilst today many of the bases are formed in reconstituted stone as a substitute for stone, this method can still be used. Once each bar (or paling) is in place, molten lead (or caulking) is poured in carefully, and is finished flush with the stone to ensure moisture run off, or filled with stone dust mix.

Painting ironwork
Most railings in the area are painted with black gloss or semi-gloss. In Victorian times railings were not always black, but black has now become characteristic of the Conservation Area and is considered appropriate.

Beware early paint coatings contained lead so precautions should be taken, and cast iron was often protected by red lead as a rust inhibitor. Most modern paint systems for metal include red oxide or zinc phosphate primer as the base coat. Suppliers should provide guidance for safe application and some systems are guaranteed for up to 15 years but ongoing maintenance is required. If well maintained, cast iron and steel railings should last for at least 150 years.

For rusted railings it is necessary to remove all coatings back to bare metal and to treat the rusted area and coat it in protective coatings. Surrounding paint coatings should be removed back to a firm sound edge and then feathered over a distance of 50mm in the region of the affected area. All gaps should be filled, primed and decorated because if water gets into the metalwork, rusting will lead to decay. To redecorate railings it is necessary to rub them down to get a key. It is important to ensure that the work is dry, clean, free from oil, rust and mill-scale, etc. For best results, mild steel or cast iron surfaces can be blast-cleaned or wire brushed thoroughly before painting. Degreaser should be used to remove oil or grease. This will help adhesion and give a longer life before any maintenance is required.

Some modern paints require specialist applications to allow adherence and manufacturers usually provide technical information and recommendations for surface preparation. It is good practice to carry out a trial before determining the specification for redecoration and to approve the finished appearance to use as a controlled approved area.

For painting over galvanised steel, please note that use of galvanised metal is not recommended in the guidance for replacement railings, but if redecorating existing railings that are galvanised, householders should be aware that on galvanised metal it is important not to damage the galvanised surface if removing paint and specialist preparations and paint systems are required to re-coat galvanised steel[12], following manufacturers' instructions for adequate preparation. For further information on galvanised steel see www.galvanizing.org.

[12] such as Vinylast® although we have not tried this product and we cannot vouch for it; metalwork contractors should be able to advise on appropriate coatings that are compatible with their manufacturing techniques.

For new railings, the ironwork suppliers often provide detailed guidance on coatings and many companies can include decoration in their supply and installation service.

2.7 CAST IRON FEATURES, GRATINGS AND GRILLS

Cast iron was used for ventilation grilles, coal hole covers and gratings, sometimes a cast iron decorative railing was installed on the ground floor window sill. Typical examples are illustrated on Sheet 12.

The retention and reinstatement of traditional features, where missing, is encouraged.

Grilles
Properties with semi-basements or coal holes were typically ventilated by a cast iron grille, and floor voids were also ventilated with cast iron grilles (Sheet 6). The casting pattern was sometimes decorative. These details are characteristic of the area and their retention and refurbishment is encouraged. If cast iron features have been lost there may be an opportunity to reinstate appropriate grilles based on the traditional style. Existing examples from adjacent houses should be matched where possible. Specialist metalworkers may hold matching patterns that can be cut to fit and primed in the workshop, with the top coat applied on site. Templates can also be made from original patterns. Alternatively, laser cut steel is now available and traditional patterns can be replicated using computer aided design.

Coal hole covers and gratings
Cast iron coal hole covers and gratings are characteristic of Victorian properties and are still intact in several properties in the Conservation Area and their character enhances the streetscape. They are varied in pattern as illustrated on Sheet 14. Their retention is encouraged. Replacement castings are available in standard patterns and could also be made from a mould of the original castings in the area.

2.8 PAVING AND STEPS

Front areas and front door steps were generally of Yorkstone as illustrated on Sheet 12. Conservation of the original paving is encouraged, and re-use of traditional materials and detailing is encouraged where the original has been lost.

Appraisal
The original paving of the front area and steps are likely to have been Yorkstone. The riser in many instances was an iron ventilation grille as described previously in this document. The door threshold often had a stone sub-sill with a timber sill over, sometimes covered with brass and some examples of this detail remain.

Stone paving
The flagstones inside the entrance porch, paving the entrance area and on the steps were very large slabs of Yorkstone and sourcing replacement slabs today can be problematic, but it is still possible but smaller slabs are considered to be acceptable. Stone can be

either new or reclaimed, from a reliable source. When selecting stone or reconstituted stone it is important to ensure slip resistance in dry and wet conditions; traditional Yorkstone paving had a riven finish and on steps the front surface was dressed to form a rounded nosing, but square edged nosings would also be acceptable.

When maintaining stone surfaces avoid using household detergents and solvents as these can encourage growth of moss and lichen that can become slippery. Surfaces can be scrubbed with a bristle brush and water; specialist stone cleaning products can be used if health and safety precautions are followed.

3.0 DELIVERY OF FAÇADE ENHANCEMENTS

The enhancement works set out in this document are intended to identify public benefits that will help to justify the harm caused by a mansard roof extension. In order to meet the government's definition of a public benefit for this purpose, the enhancements should arise as a result of the proposed development. That is, they should be delivered alongside the proposed roof extension as a single development scheme. Unfortunately, if enhancement works have already taken place they cannot be said to arise as a result of a proposed mansard roof extension and cannot be used to mitigate any harm that they will cause.

Planning applications will be expected to demonstrate that, as well as featuring an appropriately designed mansard roof extension, they will also provide sufficient façade enhancements to effectively mitigate the harm caused. The guidance in this document provides advice about what enhancements could be included to mitigate harm. Each case will be different, and it is not possible to say exactly which façade enhancements will be required to mitigate the harm caused by the proposed addition of a mansard roof extension. Much will depend on the existing condition of the property and whether any recent façade enhancement works have already been carried out. This should be discussed on a case-by-case basis with the council's Development Management and Place Shaping officers through the pre-application process. Details of this service can be found on the council's website.

In order to ensure that harm is properly mitigated, the council will use planning conditions to ensure that the proposed enhancement works are delivered alongside mansard roof extensions. This means that planning permission for a mansard roof extension will be granted, but once constructed, the extension cannot be occupied until the enhancement works have been satisfactorily completed.

In some cases, buildings have been subdivided into flats, and it would only be the upper flat that would benefit from a mansard roof extension. Where this is the case, the planning applicant in the upper flat will need to identify enhancement works that could be undertaken to the whole building façade. If the enhancement works do not directly relate to parts of the property that are within the applicant's ownership, the applicant will be encouraged to work with the owner of the other parts of the building to deliver a comprehensive façade enhancement scheme.

As well as demonstrating how they will deliver façade enhancements, planning applications for mansard roof extensions will also be required to help to deliver off-site streetscape enhancements though a financial contribution.

Note on guidance documents
The design guidance is not prescriptive for all properties because it is acknowledged that there are variations from street to street, terrace to terrace and house to house. The Conservation Area Map on page 37 indicates which properties have been excluded from the guidance as they are atypical. Every house will need to be assessed individually. The guidance is not exhaustive, but is intended to provide background information and general information for key items that would need to be considered.

The drawings included in this guidance document are diagrammatic only and are used to illustrate general principles. The guidance sheets and drawings are not intended to be used for the purposes of construction. Older buildings need to be evaluated individually to assess the most suitable design and form of construction based on a wide variety of possible variables and safety considerations should be addressed for each project. **The London Borough of Tower Hamlets and Kennedy O'Callaghan Architects do not accept liability for loss or damage arising from the use of this information.**

4.0 ILLUSTRATED FAÇADE ENHANCEMENT SHEETS

Sheet 1 Medway

Architectural characteristics of the Medway Conservation Area

The following features are positive attributes of the Conservation Area -

- Continuous line of parapet wall to conceal London roofs
- Cornice (decorative horizontal moulding on parapet)
- Mouldings or brick borders to first floor windows
- Timber sash windows with arched tops and delicate glazing bars
- Embellished stucco surround to recessed front doors
- Decorative mouldings or bay window to ground floor
- Cast iron railings on stone plinth
- Cast iron grilles
- Stone paving

The photographs illustrate where one or more of these characteristics has been lost from each of the properties

There is an opportunity to reinstate lost features when proposing a mansard roof extension as illustrated on the following sheets

Loss of render band and cornice and cast iron railings

Loss of render band and cornice and cast iron railings

Removal of features and rendering the façade can result in a significant change of character

Loss of console brackets on bay window; railings lack traditional details

Replacing cast iron railings with brick wall changes relationship of house to street

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Enhancement of cornices and parapets Medway Conservation area

Definitions The numbers correspond to the numbers on the first photo

Copings
1. The Coping is the top course of the wall. Some incorporate a damp proof course such as a creasing tile

Parapet
2. The Parapet is the portion of of the wall above the roof or concealed gutter

Cornice
3. The Cornice is the horizontal decorative moulding made from stucco

Stucco Band
4. The stucco or render band is the flat surface applied to the front of the brick parapet, originally made from lime render and painted

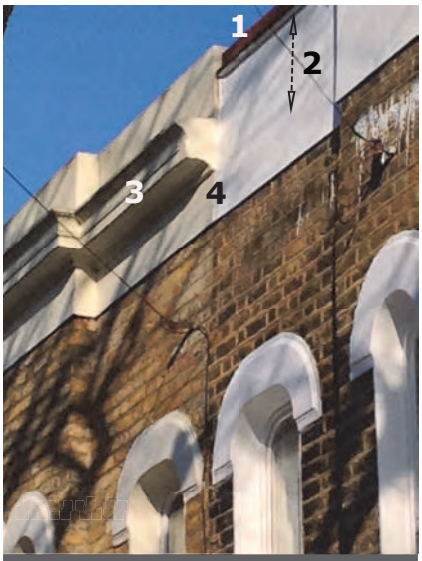
Maintenance and repair

Parapet
Parapets are exposed on both sides and prone to weathering. Stucco requires regular painting to prevent water penetration and a breakdown of the surface or bulging of the stucco. The rendered band should be checked for cracks and tapped to make sure that it is not loose. Repairs should be carried out to match the existing (or in a stiff lime mortar) prior to any work to the cornice.

Cornice
If running a new cornice, the new render band should include a scratch coat on the line of the cornice to provide a key. Cornices can be repaired or reinstated where missing by running a moulding on site. The profile should match the original and the top surface should be sloped to allow water run-off. A template can be made from an adjacent property with an original moulding by mutual arrangement between owners, by a specialist contractor, who then makes up a runner. Fixings are resin fixed into the brickwork at regular intervals and runner guides are temporarily fixed. The moulded profile is run using the guide and is built up in several layers. The ends should be neat enough for a neighbouring property to continue the moulding in the future. Ends of terrace and changes of level require 90-degree angles. Once sufficiently dry, the moulding is painted.

Gutter
Gutters should be swept regularly and biological growth should be removed and treated.

Pointing mortar
Repairs should use lime-rich mortar to allow the bricks to move and breathe and the pointing should not project beyond the face of the brick.



Missing cornice could be renovated using the adjacent cornice as a template


Loss of cornices reduces the architectural character

Post-war image shows the cornices intact
Picture archive http://collage.cityoflondon.gov.uk/


The same street in 2016 - the majority of cornices are missing

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Sheet 3 Medway

Window and door surrounds in Medway Conservation Area

Definitions - The numbers correspond to the numbers on the first photo

1. Stucco door surround
   Decorative feature around the door made from stucco, incorporating flat or embossed panels

2. Cornice
   Horizontal moulding above the doorway, made from stucco

3. Console (bracket)
   Decorative bracket made from moulded stucco

4. Recess
   The depth of set back from the façade to the door frame

Characteristics
The photographs indicate some of the common characteristics of the Medway Conservation Area. There is a strong characteristic of paired doors with stucco hood mouldings and embellished surrounds, and moulded consoles. The doors are recessed in the openings, providing depth and visual interest. The profiles vary from terrace to terrace as the construction of the properties in the Conservation Area spanned over 3 decades (c.1860-1893). The detailed embellishment enhances the character of the Conservation Area.

Maintenance
Stucco architectural features require maintenance and redecoration to protect them from rain and frost. Signs of staining or plant growth are indicators that excessive moisture is present. This can lead to bulging, cracking and premature failure.

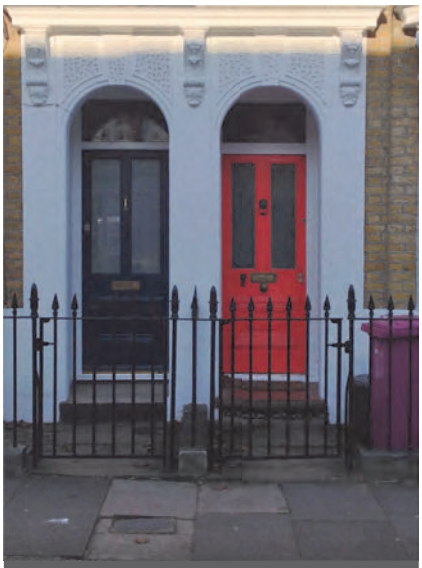
Repair
Stucco features can be repaired or re-run to match the existing by specialist contractors. Casts can be made from nearby mouldings by mutual consent with neighbours.

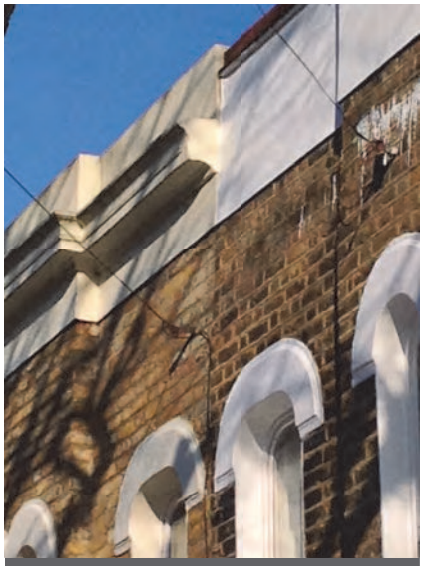
Horizontal surfaces on mouldings were slightly angled to shed water.

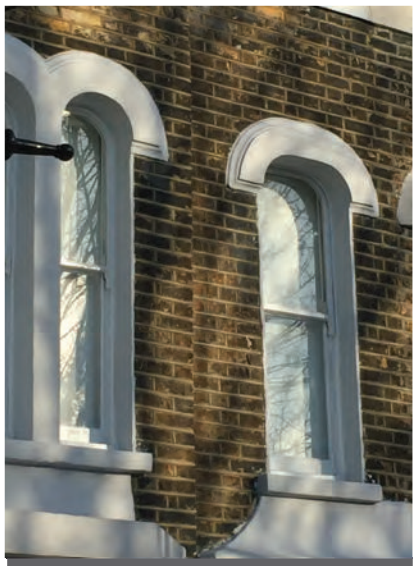
Restoration
Where mouldings have been lost, their restoration is encouraged. Like-for-like reproduction can be achieved using materials to match the existing. Specialist contractors may need to investigate the original details and may need to take a cast of original mouldings from an adjacent property, by mutual consent.

The cornices over doorways were often formed over projecting tile courses to provide support but the detail may vary from property to property.
Modern replacement mouldings usually use metal straps epoxy fixed into the brickwork and non-ferrous wire to provide support for mouldings that are run on site.

Door surround (the numbers refer to definitions to the left)


Restored door surrounds


Typical curved stucco moulding over first floor windows in Meday Conservation Area


The curved stucco over the bay window was a typical detail but many are lost


Decorative consoles deteriorate when not well maintained


A typical bay window surround (although window horns are missing)

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Sheet 4 Medway

Timber sash windows in Medway Conservation Area

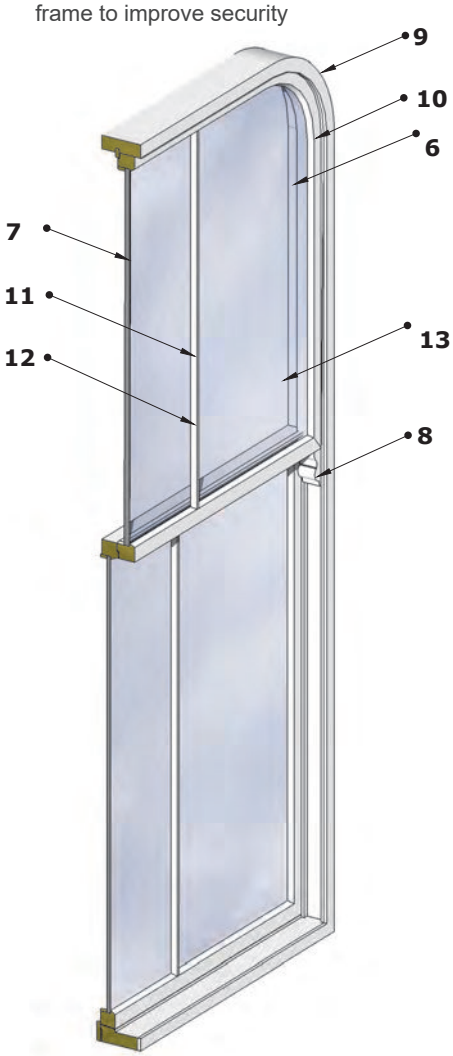
Features
The numbers correspond with the numbers on the drawing to the right

1. Stucco surround with arched head, painted
2. Curved timber window head and frame
3. Horn integral with top window sash
4. Meeting rail
5. Stone sill

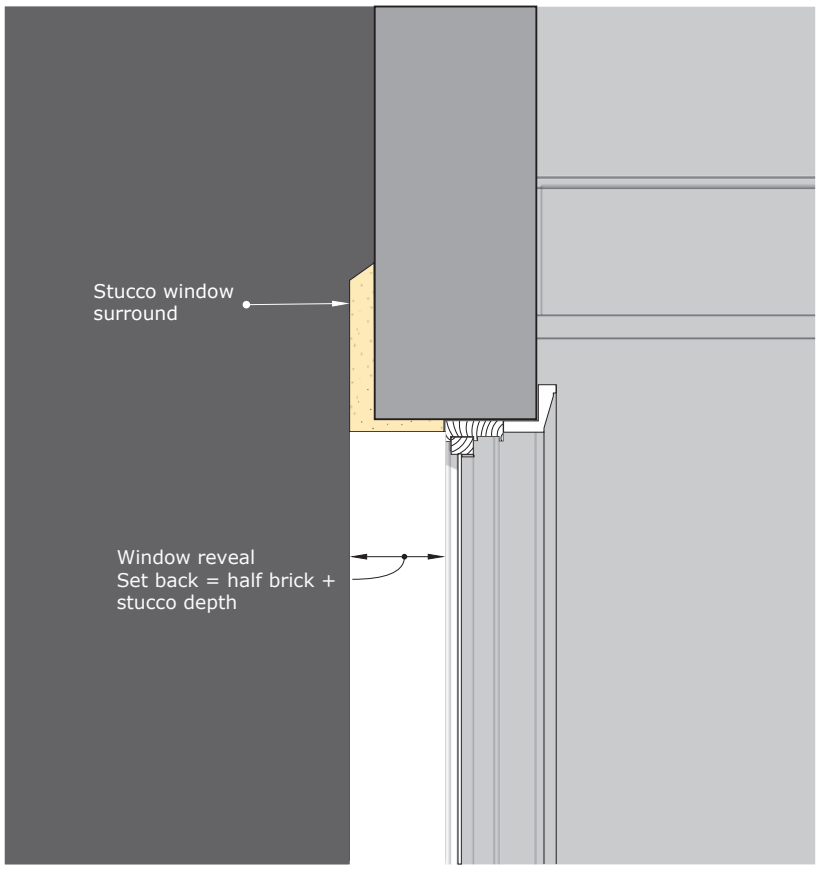
Timber boxed sash window
The numbers correspond with the numbers on the drawing below

6. Staff bead & parting bead may be replaced with timber bead incorporating a concealed draught excluder brush or rubber strip
7. Original glass looks uneven and should be retained
8. Horns provide strength; these are characteristic of late C19th windows and are often curved
9. Curved heads should be retained / reinstated
10. Box sash timber frame with lead weights; the weights may need adjusting to suit the weight of glass
11. Timber glazing bead with Victorian style profile; it is important to retain the slim profile to suit the Victorian character
12. Linseed oil putty externally
13. Concealed sash locks can be fitted to the internal frame to improve security

Typical timber sash windows in Medway Conservation Area. It is important to retain the curved head. The numbers are explained in the text



Typical timber sash window components



Section through window showing position of window in reveal

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Sheet 5 Medway

Doors in the Medway Conservation Area

Appraisal
The original Victorian doors were characteristically recessed in behind ornate stucco surrounds.

The stucco is likely to have originally been painted off-white to resemble stone.

The original doors had two glazed panels and one solid panel beneath with a generous timber moulding. The threshold was often Yorkstone.

The ironmongery is likely to have been brass or cast iron.

Loss of character
Some of the replacement doors have not incorporated the original characteristics.

Bringing doors forward in the surround can lose the depth and modulation of the street.

Adding steel grills or gates in front of the door alters the character of the street by reducing the modelling of the façade.

Repairs
Original doors should be retained and repaired. If glass is broken it can be replaced with laminated glass for added security. Damaged timber can be patched with new timber pieced in. Hinges can be upgraded for improved security. Draught seals can be installed within the frame where they cannot be seen.

Replacement
If an inappropriate door is to be replaced, traditional Victorian style timber doors that match the original surviving doors are encouraged as these are considered the most appropriate.

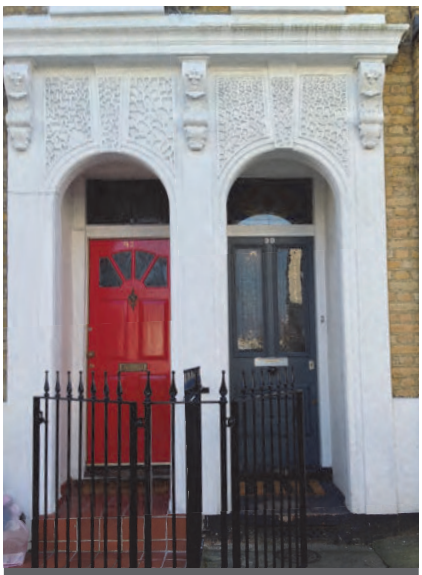
If the original frame and architrave remain they should be retained. Recesses for old locks can be in-filled with timber if required.

The architrave is an important feature of the door assembly and timber mouldings can be reproduced to match the original.

New doors can be made to suit the site dimensions and to match the original architectural details. Paint charts are available that include Victorian door colours.

Traditional Victorian style ironmongery in brass or cast iron would be the most appropriate.


Steel gate reduces façade modelling


The style of door to the left is inappropriate


Good quality doors in Victorian style


Good quality door, grille & coal hole cover


The door to the left has lost its timber architrave

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Doors in the Medway Conservation Area

Characteristics of typical doors
The numbers below correspond to the numbers in the illustration.

1. Stucco door console bracket
2. Glazed fanlight
3. Timber architrave moulding
4. Timber glazing bead
5. Glass may be laminated for enhanced security and may be stained or obscured glass
6. Timber panel with heavy moulding; the style as illustrated is typical of the original doors in Medway Conservation Area
7. Traditional Victorian style ironmongery was typically in brass or cast iron
8. Timber or brass threshold
9. Yorkstone stair treads
10. Cast iron grille in stair riser to ventilate timber floors or coal hole

Typical door in Medway Conservation Area. The numbers are explained in the text

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Railings in the Medway Conservation Area

It is likely that the original terraces would have had railings defining the property boundary, with front gates, although some streets have no remaining evidence of railings. It is thought likely that the railings may have been removed wholesale in the war. Photographs available from http://collage.cityoflondon.gov.uk/ from the 1960s show low level plinths but no railings.

Some properties have replacement railings that were installed post-war and whilst these provide some streetscape enhancement, they are less embellished than Victorian cast iron railings and provide less architectural interest.
9 Selwyn Road has a traditional railing style that enhances the character of the street and the details are a good example of appropriate detailing and are characteristic of the Victorian style (although the gate is missing).

Strahan Road - inconsistent boundaries

Strahan Road- loss of character

Replacement railings
In Medway all or most of the railings appear to have been lost during the war and there is no precedent for restoration. Therefore a generic style is proposed in the guidance, which is sympathetic to the period style and which would enhance the character of the Conservation Area. Details should match traditional cast iron detailing with no visible welds. The bars should be a minimum of 20mm in diameter with rail heads at least 170mm high. There should be no bottom rail.

Lead caulking of bars into the plinth
Bars were caulked into the stone plinth / base. Pockets were cut into the stone to form a circular recess. This is still the preferred method of installation but cast stone is an accepted alternative to stone. Once each bar is in place, molten lead (or caulking) is poured in carefully, flush with the plinth or filled neatly with stone dust mix to ensure moisture run off.

Antill Road replacement railings

Selwyn Road traditional detailing

Rail heads Rail heads to match Victorian railings that are prevalent in the wider area are available in cast iron from specialist foundries or metalworkers*.

James Hoyle & Son* 7/6/205 or Britannia MN151

Cheaper mild steel rail heads were mass produced post-war. The image below left matches the post-war replacement railings but this rail head is not as characterful as the Victorian rail heads in the area.

Metalcraft MN129 or F H Brundle London style*

Cast iron is preferred because it is easier to achieve the traditional details without visible welds, but steel is cheaper and with careful detailing steel can be acceptable, subject to approval of detail.

Medway Road traditional detailing

Lyal Road The plinth lacks the character of stone

*eg. Ballantine, Britannia, Brundle, James Hoyle and Son, Metalcraft, Topp & Co and others but please note, we cannot vouch for any supplier or their products

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Railings in the Medway Conservation Area

Non-traditional materials or features designed out of character with the existing buildings will not normally be acceptable. The replacement of existing non-traditional features with traditional alternatives will be encouraged.

There are several specialist ironwork companies that can supply, install and decorate railings using traditional methods and materials to closely match the traditional pattern, details and methods of installation. They would be able to match the details and reproduce rail heads and features to match the original examples that remain in the wider neighbourhood. There would be an economy of scale if metalworkers were to produce the same design for multiple properties, especially if bespoke details were to be produced.

Traditional features

- Cast iron bars set out 150mm from centre to centre
- Ornate cast iron rail heads
- Bars caulked (leaded) into the stone plinth (base) with no bottom rail
- Cast iron gates with rail heads to match the railings, fixed to the gate post on pins.
- Some gate posts have decorative cast iron finials on top
- Decorative cast iron stays (support brackets)
- Cast iron boot scrapers
- Cast iron round bars minimum 20mm in diameter, or fluted bars, or barley sugar pattern. Reinformecement bars are not an acceptable profile
- Top rails let into the stucco door surround rather than surface fixed
- Stone plinth (base) with square or curved profile

3d view of railings

Prototype model drawing of acceptable railings, with 20mm bars caulked into the plinth

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Reconstruction of typical house in Medway Conservation Area

Reconstruction of typical house

Original architectural features include:

1) Parapet wall to conceal London roof
2) Cornice (decorative horizontal moulding on parapet)
3) Stucco mouldings around curved first floor windows
4) Timber sash windows with delicate glazing bars and curved heads
5) Embellished stucco surround to recessed front door
6) Bay window rendered and painted off white
7) Cast iron railings on stone plinth
8) Stone steps and paving
9) Cast iron ventilation grilles

This is how a typical property in the Medway Conservation Area might have looked when new

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Typical contemporary elevations in Medway Conservation Area

Over time many properties in the Conservation Area have lost architectural features for a variety of reasons.

Cornices need regular redecoration and if neglected they deteriorate quickly requiring extensive repairs. Many properties have lost their cornice.

Replacement windows did not always match the original timber sliding sash windows and frequently top hung or casement replacement windows in timber or plastic were installed, which has detracted from the character of the Conservation Area. In some cases the replacement windows no longer have their curved head.

The cumulative effect of loss of original features reduces the character and integrity of the area

Typically properties in Medway Conservation Area have lost some of their architectural features

Prototype model Elevation Medway

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Sheet 11 Medway

Typical extended house with restored features in Medway Conservation Area

When extending properties in the conservation area with a mansard roof, potential harm could be offset by restoring lost architectural features as illustrated below.

Prototype elevation of typical properties in Medway Conservation area with roof extensions and architectural features reinstated

Prototype model Elevation Medway

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Miscellaneous features in Medway Conservation Area

Pointing

Lime mortar
The original soft London stock bricks would have been bed and pointed using lime mortar. The pointing can be susceptible to damage, particularly when bricks are cleaned, and needs periodic replacement.

Cement pointing
Many properties have suffered from inappropriate pointing in hard cementitious mortar. The problem with this is that it is harder than the soft bricks and so any moisture absorbed by the bricks cannot evaporate out through the joints. Trapped moisture builds up behind the face of the brick and frost-thaw action can accelerate deterioration of the brickwork.

Re-pointing
Most of the properties have been re-pointed using mortar that projects beyond the face of the brick. This does not match the original lime pointing, which was more recessive and therefore less visible than projecting mortar.

Cast iron grilles and coal hole covers
Some properties have coal bunkers ventilated by cast iron grilles placed at the base of the bay window and in the front step riser. These details are characteristic of the area and their retention, refurbishment and restoration is encouraged. Cast iron grilles should be decorated to prevent decay.

Steps and paving
Most of the steps up to the front door have lost their original detailing or it has been covered over to waterproof the steps, or they have been replaced with concrete. The original paving and steps are likely to have been riven Yorkstone and the steps would have had a projecting nosing. The top riser in some cases was an iron grille to provide ventilation as described above.

The flagstones inside the entrance were large. Indent repairs can be carried out to damaged areas. If the original stone flags are missing, replacement with Yorkstone flags to match the original is encouraged. If necessary, smaller slabs would be acceptable.

Weather-struck cement pointing

Re-pointing in lime mortar that exposes the edge of the brick

Cast iron grilles to cellar

Cast iron ventilation grilles to coal bunkers

Yorkstone paving

Front areas were typically paved in Yorkstone

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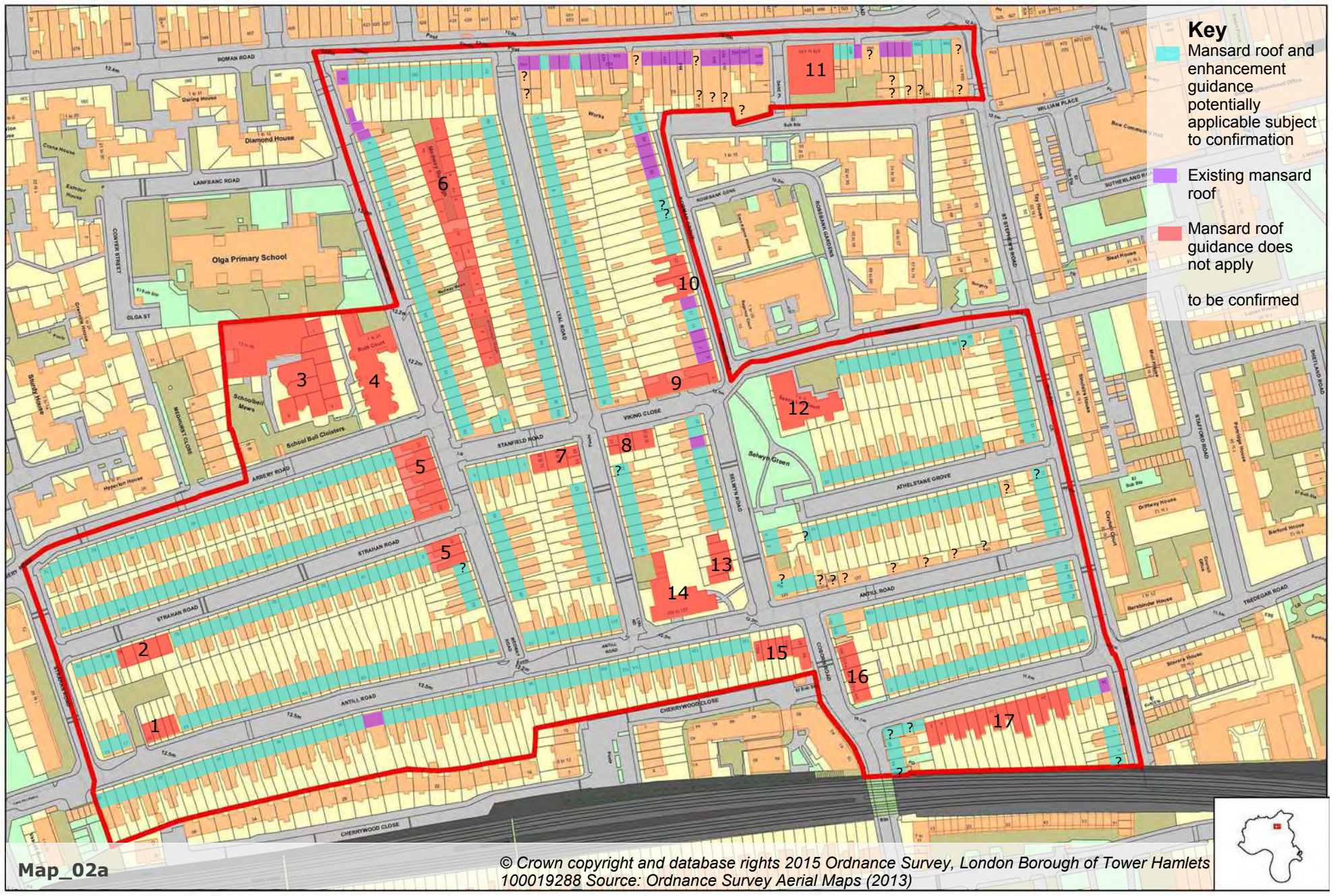
5.0 CONSERVATION AREA MAP



Medway Conservation Area
Properties where the Mansard Foof and Enhancement Design Guidance is potentially applicable

Mansard roof guidance is suitable for terraced properties with London roofs and parapet walls, to reduce the visual bulk of a mansard roof extension. The design guidance for enhancement is likely to apply where indicated, but each property needs to be assessed individually.
The following properties differ and the guidance is not applicable:

1. 19-27 Antill Road: 20th Century double pitched roof with overhanging eaves

2. 54-62 Strahan Road: 20th Century double pitched roof with overhanging eaves

3. Schoolbell Mews: Victorian school

4. 1-24 Roth Court: Late 20th Century hipped double pitched roof with overhanging eaves

5. 37-55 Medway Road: Victorian terrace double pitched roof with overhanging eaves

6. Mainly 20th Century infill development with double pitched (some hipped) roofs with overhanging eaves

7. Stanfield Road on corner of Lyal Road: 20th Century double pitched roof with overhanging eaves

8. Viking Close on corner with Lyall Road: 20th Century double pitched roof with overhanging eaves

9. 1 Norman Grove: Redeveloped property with flat roof structure unknown

10. 17-23 Norman Grove: Victorian terrace double pitched roof with overhanging eaves

11. 470-480 Roman Road: Redeveloped property with flat roof structure unknown

12. 1-9 Saxon Lea Court: Victorian property double pitched roof with overhanging eaves

13. 1-5 Selwyn Road: 20th Century double pitched roof with overhanging eaves

14. 109-127 Antill Road: 20th Century double pitched roof with overhanging eaves

15. Antill Road on corner with Coborn Road: 20th Century double pitched roof with overhanging eaves

16. 102-106 Coborn Road: 20th Century double pitched roof with overhanging eaves

17. 2-28 Tredegar road: Victorian terrace double pitched roof with overhanging eaves

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