

Are award winning social housing schemes able to be used on a larger scale in the United Kingdom?

School of Architecture, Built and Natural Environment

Course: BSc Architecture

Name: Joseph Holmes

Student Number: 2217401

Module code: ACAA6003

Word count 8781

Date: 23/04/2025

Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the regulations of the University of Wales, Trinity Saint David. The work is original except where indicated by special references in the text and no part of the dissertation has been submitted for any other degree.

Any views expressed in the dissertation are those of the author and in no way represent those of the University of Wales, Trinity Saint David.

The dissertation has not been presented to any other University for examination either in the United Kingdom or overseas.

I hereby give permission for my work, if accepted, to be available for photocopying and inter-library loan, and for the title and summary to be made available to outside organisations.

Signed:

Joseph Holmes

Date:

23/04/2025

Copyright statement

The copyright of this dissertation rests with the University of Wales, Trinity Saint David. No information derived from this dissertation shall be published without the prior written consent of the University.

Signed:

Joseph Holmes

Date:

23/04/2025

Abstract

There is a great need for social housing in the United Kingdom as the rising population along with other factors such as the affordability crisis in which house prices are increasing making it difficult for low-income families to buy properties. Or the rising rental cost as private sector and landlords continue to buy property and rent those properties out at increased market values making it difficult for people to buy properties. As well as the increasing amount of

homelessness on the streets of the United Kingdom due to the lack of affordable housing. Another factor is the increased poverty and inequality seen as the divide between the wealthiest and poorest members of society increases. Another group of people who are in need of social housing are people with disabilities and special needs as they often require housing that is adaptable to their specific needs.

This dissertation investigates award winning social housing schemes which relieve some of the burden on the government by providing social housing schemes on a small scale such as, Challenger Court, Chowdhury Walk, Claredale Street and finally Goldsmith Street. These projects are found in the United Kingdom and are all below 150 home schemes in which homes were provided for social rent. An analysis of these projects will explore how the United Kingdom could integrate more of such schemes into similar areas around the country.

This dissertation will use these schemes as case studies to figure out whether it is possible to achieve the Labor governments 1.5 million new home target and whether it is possible to do it sustainably and provide high-quality homes. With each case study bringing different approaches to the social housing problem and how each architect practice provides a different scale of housing.

Acknowledgements

My family and lectures who believed in me though out the process.

Table of Contents

Page Title	Page NO
Author's Declaration	2
Copyright statement	3
Abstract	4
Acknowledgments	5
List of Illustrations	7
Introduction	8
Methodology	8
Chapter 1: Government Policy	9
Chapter 2: Challenger Court	10

Chapter 3: Chowdhury Walk	21
Chapter 4: Claredale Street	30
Chapter 5: Goldsmith Street	37
Conclusion	44
Reference List	45

List of Illustrations

Figure Title	Page NO
Figure 1: Image of Challenger Court (Craig Auckland)	12
Figure 2: Ground Floor Plan (Photo credit Emmett Russell Architects)	13
Figure 3: First Floor Plan (Photo credit Emmett Russell Architects)	14
Figure 4: Image of Challenger Court (Photo credit Craig Auckland)	16
Figure 5: Sketch of Challenger Court (Photo credit Emmett Russell Architects, 2025b)	18

Figure 6 Image of Challenger Court (Photo credit Craig Auckland)	19
Figure 7 Image of Challenger Court (Photo credit Craig Auckland)	20
Figure 8 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)	22
Figure 9 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)	24
Figure 10 The mural, pictured before construction started (Photo Credit Unknown)	25
Figure 11 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)	26
Figure 12 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)	28
Figure 13 Site layout of Chowdhury Walk (Image Credit Al-Jawad Pike)	29
Figure 14 photo of Claredale Street (Photo Credit Tim Crocker)	32
Figure 15 photo of Claredale Street from above (Image credit unknown)	33
Figure 16 View of homes along Teesdale Street (Photo Credit Tim Crocker)	34
Figure 17 Site layout of Claredale Street (Image credit Karakusevic Carson Architects)	36
Figure 18 Photo of Goldsmith Street (Image credit Tim Crocker)	41
Figure 19 Photo of Goldsmith Street (Image credit Tim Crocker)	42
Figure 20 Planes of Goldsmith Street (Image credit Mikhail Riches)	43

Introduction

This dissertation explores the answer to the question 'Are award winning social housing schemes able to be used on a larger scale in the United Kingdom?'. This will be achieved by comparing five different social housing schemes based in the UK, these schemes are 'Challender Court, Chowdry Walk, Claredale Street and lastly Goldsmith Street'. These examples have been selected as they are award winning schemes within the United Kingdom.

The comparison will be based on the topics of 'value, liveability, sustainability, materials, community, landscaping, accessibility and whether the project was a success in the author's

opinion. A final evaluation will be conducted in the final section which will determine which projects would be feasible to be scaled up or used on other smaller plots.

Methodology

1. Comprehensive Research

Through a combination of qualitative and quantitative research methods to be used to explore each of the social housing schemes in depth. This included analysing official reports, architectural reviews and award submissions.

2. Comparative Analysis

A comparative structure was used to compare the similarities and differences across the five selected social housing projects. The schemes were compared based on eight different criteria.

3. Case Studies

Case study methodology was used to conduct a detailed analysis of each social housing project. Each case was analysed individually to identify the key factors to its success.

Aims and objectives

- To review and compare different social housing schemes.
- To examine the current government policy.
- To compare how each scheme has succeeded and failed.
- To compare whether the use of brownfield sites could be used to build more social homes.

Chapter 1: Government Policy

The UK Labor government's plan to reshape the future of social housing was started with a target to deliver "1.5 million new homes" (Noa Hoffman. 2024) by the end of the current parliamentary term. The main point of focus for this target was to create sustainable, high-density communities that would integrate social and affordable housing within planned towns.

Each of these planned developments would comprise of a minimum 20,000 homes and would look to avoid mistakes of past social housing policies, by placing the developments in well-connected areas with a mixed-use environment. The idea for this would be learning from successful post-war projects, the government's strategy was to promote the new towns around public transport hubs, the use of green infrastructure and available community services. This plan aimed to be a more thoughtful and strategic approach to urbanism which focuses on viewing houses as components of thriving neighbourhoods instead of isolated housing estates.

The government emphasises the use of sustainability and liveability is a change from the previous historical mass social housing schemes. For this the government had proposed a £2 billion investment allocated to the Affordable Homes Programme which would fund the construction of around 18,000 homes, with the expectation to meet “higher environmental and design standards” (Melissa York. 2025). The use of new construction methods are being promoted for the new builds such as, modular assembly and off-site fabrication as they speed up the building time while also ensuring the quality of the build. With these construction techniques, it allows for a more flexible design while also moving away from the previous standard designs of social housing that were used on social estates. Which allows the new builds to have a better focus on the quality by ensuring the homes are energy-efficient, climate resistant and adaptable to the needs of the project.

The reason for the government's newfound focus on social housing stems from the economic and social pressure, a combination of increased private renting, homelessness and shortage of affordable homes, has placed pressure on households that are in precarious living conditions. Because of this the governments aims to expand the supply of social housing which would reduce the dependence on temporary accommodation and improve living standards for low- and middle-income families. The need for social housing is seen as a crucial sector for the government as they promote social mobility and economic productivity. This can be seen as stable housing enables individuals to have easier access to education, employment and healthcare which boosts the quality of life for the individuals. The construction of new social houses also benefits the local economy as the building of such homes creates jobs for the local companies which were affected by the pandemic economy crash.

Chapter 2: Challenger Court

Location: Challenger Court, Bristol, BS10 7FS, United Kingdom

Introduction

Challender Court is a social housing “development on a former garage site on the Northern fringe of Bristol. It was part of a larger project undertaken for Bristol City Council” (Emmett Russell Architects, 2025a). The project was designed with the surrounding in mind as the “site is sandwiched between the rear gardens of the houses to the north and south and has resulted in a more elongated run of two storeys of one-bedroom flats,” (Astbury, 2018) which has resulted in 8 units in total. It was completed in January 2018 but work first started in April 2016 with a cost of £12.5 million.

“Challender Court received two awards at the RIBA South Awards 2018” (EH Smith, 2018) the awards attained were “the Sustainability Award and a RIBA South West Award” (EH Smith, 2018) as well as the “Bristol Civic Society Award” (Bristol City Council, 2022). The architects behind the award-winning project are Emmett Russell Architects who are based in Bristol, with the main lead of the project being Tom Russell. The focus of Emmett Russell Architects work “is framed by the need to address the challenges of the climate emergency” (Emmett Russell Architects, 2025b) as well as to “respond to the particular context of each site” (Emmett Russell Architects, 2025b).

Value

Challender Court is considered an important project as the development was used to “test the viability of Passivhaus in social housing” (Royal Institute of British Architects [RIBA], 2018) this was proven with a “central plant (located in common stairwells to facilitate maintenance access) and heat metering to individual units” (Royal Institute of British Architects [RIBA], 2018). This is also shown in the design process as the developments are “highly insulated” (Royal Institute of British Architects [RIBA], 2018) with the use of “triple glazed flats” (Royal Institute of British Architects [RIBA], 2018). The use of Passivhaus in housing is on a rise as they are “buildings created to rigorous energy efficient design standards so that they maintain an almost constant temperature” (Energy Saving Trust, 2022). Which in turn means that the development of Challenger Court “can be sustained in the long-term” (Kuhn, 2024), as well as making use of otherwise wasted space while keeping the units at a constant temperature. In the author's

opinion Challenger court works in this space as it is a small-scale development of only 8 units which are surrounded by housing, which would otherwise be a brownfield space.



Figure 1 Image of Challenger Court (Photo credit Craig Auckland)

Liveability

Challender Court “provides an excellent reference for the sensitive redevelopment of brownfield sites” (Royal Institute of British Architects [RIBA], 2018), Challender Court contains 8 separate units and “a parking area has been placed directly at the entrance” (Astbury, 2018). While “internally the 50m² units achieve a surprising generosity (designed to Lifetime Home standards) and every opportunity has been seized upon to create variety in the layout and fenestration” (Royal Institute of British Architects [RIBA], 2018). A major issue of Challender Court was the privacy challenge, as the site is surrounded by other houses which back onto the Challender court site. To get around this issue a strategy of louvred screens and rooflights was used, while “The louvred screen is angled inwards to allow light in while reducing downwards views” (Astbury, 2018), the rooflights were used instead of standard “windows to the north of the building (over the kitchen and bathroom)” (Astbury, 2018). The upper units contain balconies with metalwork screens “which prevent overlooking of adjacent properties” (Astbury, 2018), which in the author's opinion helps relax the homeowners of surrounding properties and the residents of Challender Court.

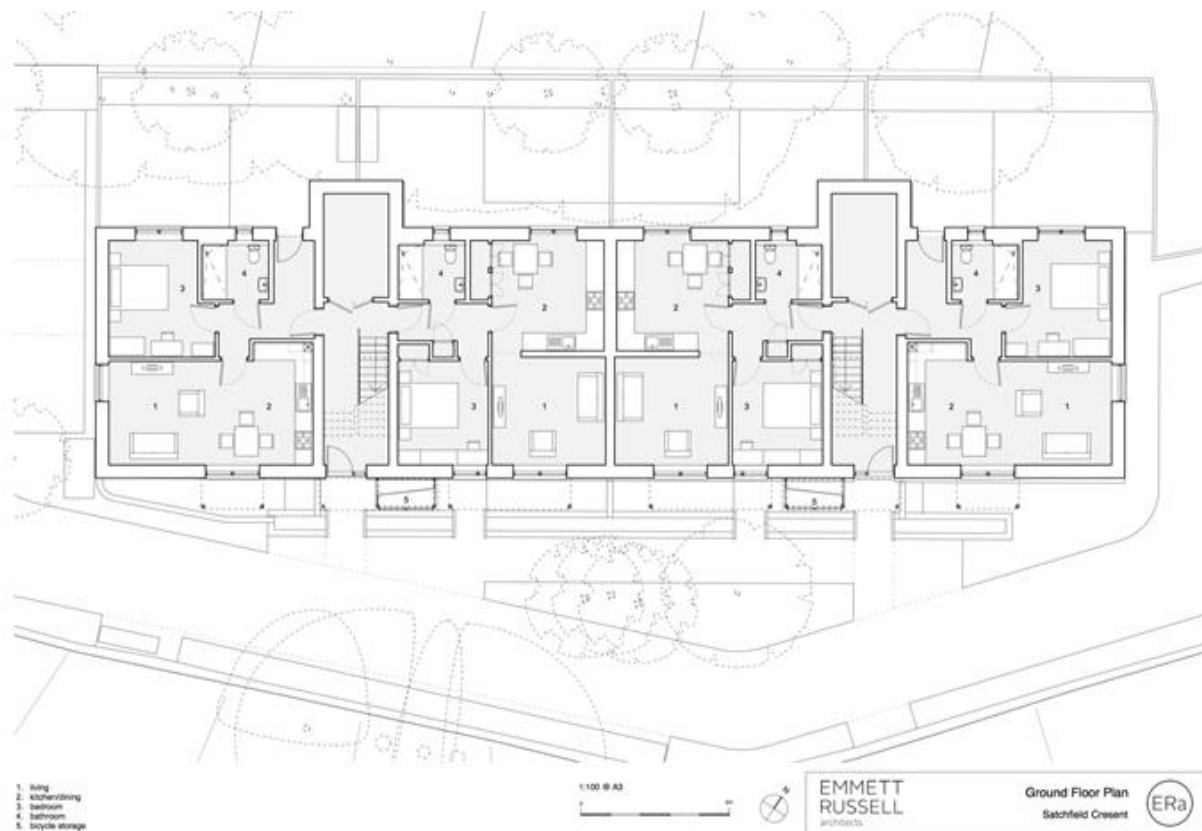


Figure 2 Ground Floor Plan (Photo credit Emmett Russell Architects)

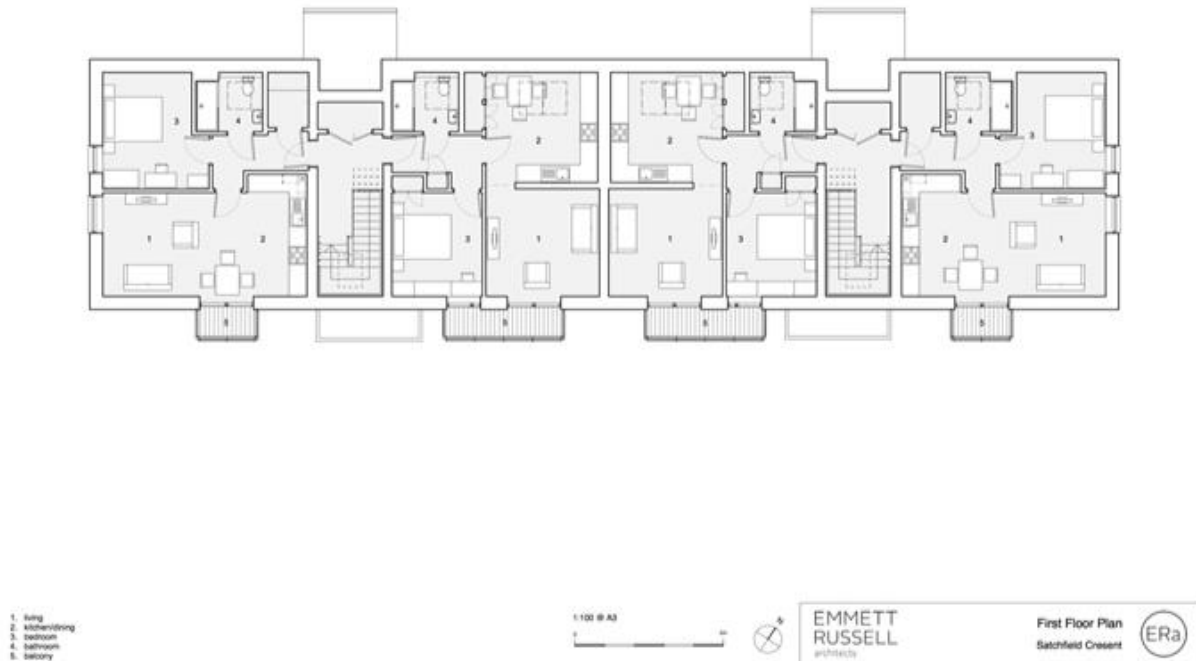


Figure 3 First Floor Plan (Photo credit Emmett Russell Architects)

Sustainability

Challender court was a major success and was known for its sustainability as show by it winning the RIBA South West Award 2018 and the “RIBA South West Sustainability Award 2018” (Royal Institute of British Architects [RIBA], 2018). The brief for the project was “to be robust, low maintenance and low energy” (Royal Institute of British Architects [RIBA], 2018) which was achieved using materials, location and Passivhäuser design. The location itself was a brownfield site, much like the rest of the United Kingdom there are many brownfield sites which have no use like the site in Bristol, but this site was revitalised with the help of Bristol Council and Emmett Russell Architects, this “provides an excellent reference for the sensitive redevelopment of brownfield sites” (Royal Institute of British Architects [RIBA], 2018) all over the United Kingdom, where “so much of the industry effort is so focused on large scale development” (Royal Institute of British Architects [RIBA], 2018) that they overlook the small brownfield sites. The developments themselves where “built to Passivhaus standards, which explains the incredibly thick walls, and the use MVHR units” (Astbury, 2018) which is a system of mechanical ventilation with heat recovery systems, “that extracts stale, moisture-laden air from “wet” areas, recovers heat from it, and then uses that heat to warm fresh filtered air before distributing it through-out a home, improving air quality and energy efficiency” (Google AI, 2025).

Materials

The materials used in this development was carefully considered from “the external palette of brick and powder coated aluminium” (Royal Institute of British Architects [RIBA], 2018) to the “prefabricated timber-frame cassette system with factory fitted insulation” (Astbury, 2018), each part of this projects design was carefully selected. The material palette was carefully selected by “Martyn Pursey, from Bristol City Civic Council, and Tom Russell of Emmett Russell Architects” (Bristol Civic Society, 2019), featuring a limited selection for cohesion and durability. The palette they decided on was a “palette of materials consisting of: variegated brickwork, slate roof tiles, powder coated aluminium, block paving and timber fencing” (Bristol Civic Society, 2019), in the author's opinion these were used as they are reliable, easily acquirable and aesthetically pleasing whilst used together. The prefabricated timber frame had an additional “layer of cavity insulation - fixed outside the frame to minimise cold bridging and bring the U-value for the walls down to 0.12W/m²K.” (Astbury, 2018).

The development also contained a large metalwork section which were in the form of “metalwork screens” (Astbury, 2018) which provided “balconies for the first-floor flats as well as privacy screening to prevent overlooking of adjacent properties” (Astbury, 2018). The screens themselves were “DeltaWing” which is a “steel louvered panel system” (Lang + Fulton, 2025) which were custom made to fit the dimensions for the restrictive site location. Also, another metalwork section provided bike storage and entrance canopies to the build, but “to avoid any thermal bridging it was important that the balconies were self-supporting and not connected back to the main timber-frame structure.” (Astbury, 2018).

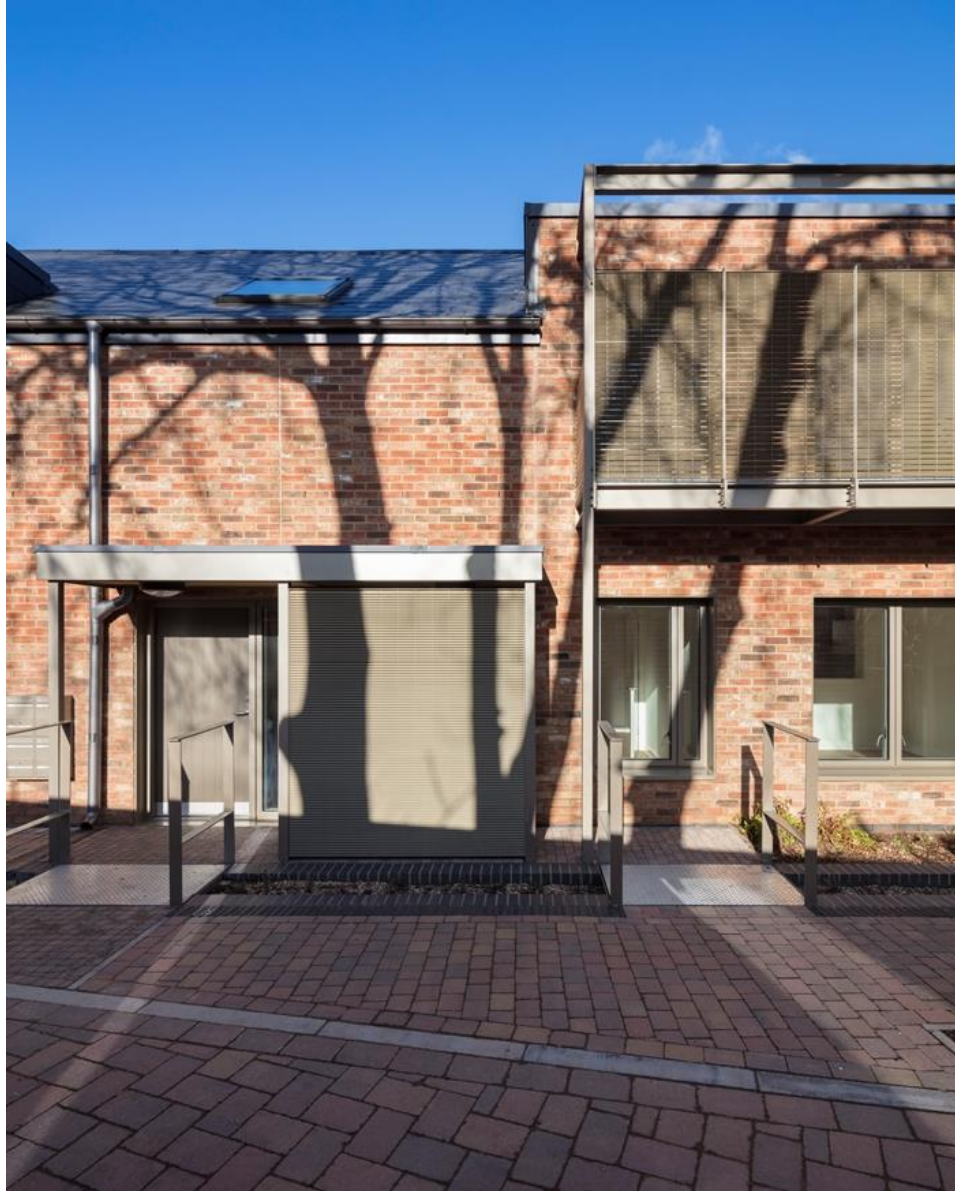


Figure 4 Image of Challender Court (Photo credit Craig Auckland)

Community Engagement

To minimise the disruption to the surrounding properties the development conducted a community involvement statement which involved two events the “First Information Event (Wednesday 28th January 2015)” (Bristol City Council, 2015a) which contained a “Summary of the first information event, Points raised by the Community, How the design was revised to take account of the community response” (Bristol City Council, 2015a), while the second “Pre-Application Information Event (Wednesday 3rd June 2015)” (Bristol City Council, 2015a) which consisted of “Pre Application Information Event Summary, Points raised by the Community,

How the design was revised to take account of the community response". In these meetings the points raised by the community were;

"Development - pleased the site is being developed, very good.

Trees – comments received on various trees across the site which are blocking sunlight, overgrown, request for trees to be cut down/or cut back. Several trees at rear of my property cut out the natural sun light in my garden. The roots of these trees have damaged my wall. In summer these trees have affected my satellite dish where i have had to move the dish to my chimney. Fed up of cleaning up leaves every Autumn. Strongly object to the keeping of the Apple Tree at the rear of 10 Challender Avenue. The crab apples fall in my garden every year.

Lighting – can the lighting in the parking area be redesigned so as not to impact on the adjacent gardens.

Access – aware that access onto the site will be blocked for owners during the building works for health and safety reasons." (Bristol City Council, 2015a).

Landscape

In response to the points raised by the community the design for the land and build was revised, for the trees "to be removed with exception of an apple tree adjacent to the rear of no.10. The smaller trees are to be replanted elsewhere on the site." While some of the talked about trees raised by the residents were "not on council housing land" (Bristol City Council, 2015a) but one tree, "an Ash is deemed to be of merit by the Arboriculturist." (Bristol City Council, 2015a). Whilst the lighting points were "assessed by the designers to provide suitable and sufficient lighting to the parking bays" (Bristol City Council, 2015a). This was "provided by energy efficient LED lamps on 6m columns, considering light spill to the area" (Bristol City Council, 2015a). The final point was the access which was resolved by restricting access to the site to construction personnel only for health and safety reasons but, "access will be restored following the completion of the build" (Bristol City Council, 2015a).

The landscape architects who resolved these issues were "Roundfield" who tackled the difficult site dimensions and made use of the brownfield land in Bristol to be revitalised into the units that they are now. The main task of Roundfield in this project was a "SuDS Courtyard" (sustainable urban drainage system) which was expanded to include "16 new low energy homes on the site" (Roundfield, 2023) as seen in the image below.



Figure 5 Sketch of Challenger Court (Photo credit Emmett Russell Architects, 2025b)

Accessibility

The site of Challenger court is surrounded by “post-war housing” (Emmett Russell Architects, 2019) that back onto the site, originally the site was “occupied by garages” (Emmett Russell Architects, 2019) which were demolished for the development, but because being behind housing a relatively narrow lane was used as the main entrance to the site which is large enough for one vehicle at a time. While the building itself is designed in a way “for an older demographic” (Astbury, 2018), as the need to downsize for an older generation has increased due to them being “forced out of larger properties by the bedroom tax” (Astbury, 2018), this has resulted in a design which is easy to move around within the units.



Figure 6 Image of Challender Court (Photo credit Craig Auckland)

Conclusion

In the author's opinion this project was a success and would be viable to scale the size up to include more units or to place similar units on more brownfield sites that are currently disused or occupied by abandoned structures. Firstly, the author likes the design layout for the units as they are spacious and welcoming to the residents who use the units. Secondly the author likes the materials used in the design and construction as they used light colours to brighten the interior while keeping to the natural colour scheme of the surrounding homes.



Figure 7 Image of Challenger Court (Photo credit Craig Auckland)

Finally, the author liked how the build was designed with Passivhaus in mind to make it sustainable and long lasting. Unfortunately, one of the downsides in the author's opinion is the long narrow driveway which sits between two occupied spaces which opens to a limited spaced carpark, this is unfortunate as there is no space for visitors to park or if a large vehicle accidently drives onto the site. But overall, the author believes that this project was a success

which could influence future council housing developments in, and this is also backed up by the fact that the project won multiple awards.

Chapter 2: Chowdhury Walk

Location: Chowdhury Walk, Daubeney Road, E5 0FZ - E5 0EG, London, United Kingdom

Introduction

Chowdhury Walk was a scheme that delivered “11 new high quality affordable and social rent homes that replace the garages and ad hoc car-parking previously located on the site” (Al-Jawad Pike. 2017). This development was designed between two sets of existing terraced houses and gardens which back onto the site of Chowdhury Walk. It was designed to “be an alternative to standard terraced housing, with each home rotated slightly to create a varied streetscape”, with “seven of the houses available for social rent” (Tom Ravenscroft. 2024) with four for private sale and “a new mews through route connecting Redwald Road and Daubeney Road” (Hackney Council. 2024).

The project won several awards including “RIBA London Award 2024, RIBA National Award 2024, and the Neave Brown Award 2024 and shortlisted for the RIBA Stirling Prize 2024” (RIBA. 2024). The project was commissioned by Hackney Council as “part of the Hackney Council’s Housing Supply Programme” which was focused on using “smaller sites across the borough” (Periscope. n.d.) and delivering affordable housing. This project had an unknown value as it was confidential but was commissioned in late 2017 and construction began in summer 2022 and completed in October 2022.

Value

Chowdhury Walk is considered a successful social housing project as it is recognized as a successful example of an affordable housing scheme as seen by the project winning the “Neave Brown Award for Housing” 2024. An award which is given to social housing schemes in recognition of “the UK’s best new affordable housing” (RIBA, b. 2024). The project itself is part of “Hackney Council’s programme to build new council homes on small sites”, the project “provides both informal space to play and a well-used new public route. (A. Smitham. 2023).

This route provides great value to the area of Hackney as it created a pedestrian street in which reduces the environmental impact of the area by reducing the impact of cars and increasing the use of bikes and walking to the area. The space also increased the locations value as it was originally “occupied by garages and ad hoc car parking” (RIBA, a. 2024) which was a brown site but is now a site used for housing.



Figure 8 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)

Liveability

Chowdhry Walk provides 11 houses which have been arranged “in a two-story staggered terrace, set along a newly created public thoroughfare for pedestrians and cyclists, with private patio gardens to the rear.” (RIBA, a. 2024). The use of the thoroughfare in the design allows the public and the community to easily move between and through the site whilst the private patio gardens allow the residence of the home to have their own private outdoor space which has been shown to increase the levels of liveability in properties as it allows the residence to go

outside and get fresh air without being in public. The use of the staggered design in the build allows the neighbours to have privacy as they do not directly overlook each other. The build is comprised of a “mix of two- and three-bedroom houses and one fully accessible four-bedroom home” (RIBA, a. 2024). For the size of the site the author believes that the amount of housing provided was impressive as the design made use of a disused space allowing these homes and walkway to be built.

Sustainability

The site in which Chowdhury Walk resides on was a “formerly neglected urban space” (Property London. 2024), which has now become a thriving communal social housing scheme without the need for urbanisation of greenfield development. The project was designed with the use of cross-laminated timber which is a sustainable material as it reduces the carbon footprint of the builds construction but also creates a warm and durable finish to the structure. The idea of using cross-laminated timber was decided early in the design as both Hackney Council and the architects wanted to adopt “a sustainable approach” which resulted in the architects having “to do quite a lot of research into it and other schemes that had used it, to justify its inclusion” (RIBA Journal. 2024).

Other parts of the project which were sustainable were the use of double-glazed windows which are efficient in keeping the build well insulated. The use of solar panels was used in the design of Chowdhury Walk which provided energy to each home, which “minimises energy use and environmental impact” (Potter Raper. 2024).



Figure 9 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)

Unfortunately, the once brownfield site which was describe as being a “neglected urban space” (Property London. 2024) was in fact a community garden where the “residence tried but failed to keep” (Hackney Citizen. 2024). But “a 44-year-old wall mural made by children is still on display” (Hackney Citizen. 2024), as in the author's opinion out of respect to the original site.



Figure 10 The mural, pictured before construction started (Photo Credit Unknown)

Materials

The use of materials in the design was decided early on with a main idea being a base in which the houses would sit on which connected to the ground which was granite blocks and granite cobbles. The use of granite was looked at early in the project as the architects “were asking suppliers, ‘How much does this cost relative to brick?’. We found it was almost comparable, or even cheaper in some respects.” (RIBA Journal. 2024) this was due to the influence of the budget on the design in which the architects had, therefore some of the materials were reclaimed materials such as the paving.

Whilst other aspects of the design were inspired from traveling, “Madrid has cobbles and granite; there’s red brick and grey mortar in Belgium” (RIBA Journal. 2024), these aspects can be seen in the design of Chowdhury Walk but the project itself in the author's opinion does not feel out of place in the London borough of Hackney.

Internally cross-laminated timber was used as the “primary construction material” (Property London. 2024) as it was a sustainable option which had a warm durable finish which the architects were looking for whilst designing the build.



Figure 11 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)

Community

A major aspect of Chowdhury Walk was the pedestrianised walkway alongside the front of the housing, which gave back to the community. The pedestrianised street is made up of the houses to one side with a “wilder planting” (RIBA Journal. 2024) on the other next to the northern boundary wall which contains bike storage. The design of the site according to the

architects turned out well stating; “Standing there, there’s the silhouette of the houses, the small gesture of twisting them and tapering. It works well and feels like a mini community”. (RIBA Journal. 2024).

The design of Chowdhury Walk had received a lot of criticism from the public with one person (Firas Modad from X) stating that “the lines and corners are very unpleasant and hurt the eyes, the colours are dull and sickly, it doesn't fit well with the vernacular, and it generally looks like it came from a three year olds Lego set. Its hideous”. With the Treasurer, Stephan Wigmore, stating that it was “utterly hideous. Why do you hate beauty”.

But a current resident of Chowdhury Walk, Amina, 36, had expressed the delight of the build telling an interviewer from MailOnline, “it’s been really nice living here. Before I felt like I was living in a cupboard.” as well as stating that “I like the design and what I like most is the privacy it offers.”. with other residence from the surrounding area state that they are in favour of the design which brings the community together.

But the author believes that the original community garden could be kept in the form of small plots on the northern boundary wall as it is currently granite paving with some greenery split up by walls. But this was resolved by the council as the community garden was moved to “land close by in Redwald Road” (Hackney. 2018) which was marked as land for a permanent community garden.

Landscape

The landscape architect for Chowdhury Walk was Periscope who are based in London. These architects had great influence on the design of the project as they impacted the design of the pedestrian walkway. The site was originally blocked off on one side with an end wall which was removed “creating a new landscaped pedestrian route through the scheme that tapers and connects with another former dead end behind” (RIBA Journal. 2024). The design of the “granite sett paving become scattered towards the perimeter wall, also giving way to informal wild grassy planting” which was designed by Periscope “to recall the overgrown look of what was there previously” (RIBA Journal. 2024).

The layout of the projects has a modern influence but keeps to an “urban grain of terraced rows” as “it is laid out on a staggering plan” (Al-Jawad Pike. 2017). It was designed in this way to increase the privacy of the residences and be different from the standard terraced housing.



Figure 12 Photo of Chowdhury Walk (Photo Credit Rory Gardiner)

Accessibility

Chowdhury Walk in the author's opinion is a very accessible scheme as in a statement by resident Amina, who is a full-time carer for her disabled son, describing her previous housing situation "my son has so much equipment it felt like, our living room was a waiting room", but once moved in to Chowdhury Walk she states, "Now when we're up and about, he can just be in his walker and just following us around. So there's no restriction on where he can go". This

proves that the project is viable for people of disability with how the layout of the project was designed.



Figure 13 Site layout of Chowdhury Walk (Image Credit Al-Jawad Pike)

Conclusion

In the author's opinion Chowdhury Walk is a successful scheme for where it is located, the author does not believe that if this project was scaled up it would be practical. The design of the staggered terrace is elegant but unnecessary with larger builds. Although the build has won multiple awards such as the Neave Brown Award 2024, the author believes that this was due to its small scale and use of location.

Overall, the build is a great showcase of how the use of cross-laminated timber can be used in a social housing scheme and be well designed for the location it is in. It also shows how brownfield sites can be transformed into social housing sites which are successful.

Chapter 4: Claredale Street

Location: Claredale Street and Mansford Street, Bethnal Green, London, E2 6PE, United Kingdom

Introduction

Claredale Street was “part of a programme of infill housing schemes in an area defined by a disparate collection of 1960s high-rise towers and slab block estates and between them a patchwork of unused green spaces, ill-defined public/private areas and misused walkways” (Karakusevic Carson Architects. n.d.). The project itself consisted of 77 homes with “50% social rent, 50% shared ownership/market sale”, with the project aimed at humanising and repairing “the fabric of the area through the creation of an intimate mini neighbourhood” (Karakusevic Carson Architects. n.d.).

It was “designed in close collaboration with a local resident steering group” which took guidance from the English Heritage as the site is in close proximity to a Grade II listed building, “Keeling House by Denys Lasdun (1957)” (Karakusevic Carson Architects. n.d.). With an application being submitted on 15 January 2007 and was completed in 2010 with a cost of £10.5 million.

The project has won several awards including “RIBA National Award 2011, Evening Standard Awards 2011 - Best Affordable Housing, Civic Trust Award 2011, CABI Lifetime Homes Gold Standard, Housing Design Award 2010 - Richard Fielden Prize for Best Affordable Housing presented by The Homes and Communities Agency, Evening Standard Award 2010 - Best Family Homes” (Karakusevic Carson Architects. n.d.). The architects behind this project were Karakusevic Carson Architects who are based in Hackney, London, while the client was Tower Hamlets Community Housing.

Value

Claredale Street was part one of a “mixed tenure housing scheme on a clearance site between Keeling House and The Mansford Estate” by the Tower Hamlets Community Housing group, the site was originally “an eight story system building” (Architizer. 2025). The build was called Bradley House and was part of Denys Lasdun scheme from 1957, but it was unsuited for the

area which is surrounded by Victorian/Edwardian neighbourhoods. The Claredale streets housing scheme has greatly increased the value of the surrounding area by providing “77 new homes of mixed tenure, 40 of which are social rented family homes” (Architizer. 2025). The project reinstated a historic street (Teesdale Street) which was demolished and covered for Bradley House but was part of the urban revision of the site. The Teesdale street was revitalised and made as a pedestrian only space which provided an open space where “people can gather and play” (Karakusevic Carson Architects. n.d.). This project was described by GLA Planning Department as “One of the best examples of estate regeneration”, this was also show by it winning the Housing Design Awards 2010 – Richard Feilden Prize for Best Affordable Housing.

Liveability

The design of Claredale Street was carefully considered as seen by how it responded to the surrounding area as it “sought to humanise the Estate and create a smaller, more intimate mini neighbourhood” as seen by its design of having “an urban courtyard with inhabited edges” (Architizer. 2025). This reinstated “the grain of the pre-existing Victorian terraces that characterised the wider area” (Architizer. 2025). Claredale Street was influenced by the local Victorian streets and terraces found near to the site as it had to be considerate of them, a carefully considered “approach to height, massing and materiality, the project provides a sensitive approach to density with a wide range of innovative dwelling types and creation of private and public amenity spaces” (Karakusevic Carson Architects).

The building was designed so that “front gardens lead to individual private front doors and active frontages” (Karakusevic Carson Architects) these private spaces created a scene of privacy and made the home “feel safer and more personal” (Karakusevic Carson Architects) which in the author's opinion separated the feelings of being led out strait onto the street and being home.



Figure 14 photo of Claredale Street (Photo Credit Tim Crocker)

Sustainability

Claredale Street was designed so that all “blocks have green roofs, with southward tilted solar panels for hot water” (Manchester History), the use of green roofs in the project allows for a natural habitat to be created for wild insects and birds whilst absorbing rainwater creating a slow release system reducing the risk of flooding and improving the quality of air. The green roofs also benefit the design by creating an urban heat island reduction which helps insulate the properties by absorbing heat and providing natural insulation.



Figure 15 photo of Claredale Street from above (Image credit unknown)

Whilst it also extends the roofs lifespans by protecting against UV rays and extreme temperatures. Whilst the solar panels on the roof allow for the less need for the national power grid as the electrical system in the building runs off of solar energy.

Materials

The main material used on Claredale Streets facade was “copper sheeting which was fixed with an irregular pattern of joints that make it look man-made” (Housing Design Awards. 2010) in the author's opinion this facade creates a distinct change compared to its surrounding, but it also does not look out of place as it gives acknowledgment to the area's artisanal history. The “selection of quality brick, roofing tiles, window and balcony openings referencing to the Victorian proportions” (AJ Buildings Library. 2010).

Community

Claredale Street had a close collaboration with the local community which influenced the design as it was “Designed in close collaboration with a local resident steering group, the design and planning of Claredale takes into account guidance from English Heritage to maintain the setting of the grade II listed Keeling House by Denys Lasdun (1957) as a stand-alone building in the local townscape.” (Karakusevic Carson Architects. n.d.).

The communal aspect of the project was a major point for Claredale Street as the architects wanted to create a “vibrant mixed community.” (Architizer. 2025) which is shown by the use of a communal courtyard within the design. In the author's opinion these courtyards allow for a greater feeling of community as they are open spaces which allow for the community to get together.



Figure 16 View of homes along Teesdale Street (Photo Credit Tim Crocker)

Landscape

The project made use of the previous street that was there by reinstating it and making use of it by creating a car free walkway between the houses on either side. The buildings themselves were designed in a way so that the taller apartments were placed to the west of the “site and buildings then step down in sequence to the east” (Karakusevic Carson Architects. n.d.). In the author's opinion the use of the stepping down design allowed for a greater influence on the solar gain of the properties as well as responding to the surrounding area as to the west is the grade II listed Keeling House. The corners of the build were also carefully thought out as “each corner, gable ends become principal elevations to create a layout which is brought to life on all sides” (Karakusevic Carson Architects. n.d.).

Accessibility

The design of Claredale Street was influenced by the growing population as “dwellings range from ground-floor courtyard flats and stacked maisonettes, to townhouses and lateral dwellings for residents aged 60+.” (Karakusevic Carson Architects. n.d.). This showed that whilst designing Claredale Street the thought of it being accessible to all ages was considered in the author's opinion.



Figure 17 Site layout of Claredale Street (Image credit Karakusevic Carson Architects)

Conclusion

In the author's opinion this project was a highly successful scheme but is let down in some areas. Whilst it provides a great number of social housing units it was let down by it not being very sustainable, the use of green roofs was a great addition to the design, but the internal composition of materials was a let-down as the author was unable to find what kind of construction methods were used and the author believes that it is a steel framed construction.

But whether the build can be easily replicated, the author believes that it is possible as it was an award-winning scheme for it winning the Evening Standard Awards 2011 – Best Affordable Housing, in recognition in its design and social impact on the area.

Chapter 5: Goldsmith Street

Introduction

Goldsmith Street is a social housing scheme based in Norwich City Center consisting of 105 homes for social rent “spread across 7 blocks aligned in 4 simple rows on a traditional street pattern” (Passivhaus Trust). The project was designed by Mikhail Riches with Cathy Hawley and commissioned by Norwich City Council in 2007 with a construction cost of £14.7 million and was completed in 2019.

Goldsmith Street has won multiple awards for its scheme including; “RIBA Stirling Prize 2019, RIBA East Regional Award 2019, RIBA East Sustainability Award, RIBA Neave Brown Award, Housing Design Award 2019 (Overall Award), Housing Design Award 2019 (Good Neighbour), AJ Award 2019” (Mikhail Riches. 2025). The design of the project was “based on a Victorian terraced community” (Matt Milton. 2024) with a southerly orientation to maximize the daylight, this was decided early on by the architects as they “embedded a solar strategy into the masterplan” (Matt Milton. 2024).

Value

Goldsmith Street was an important project for Norwich City Council as it was the “first new social housing development undertaken by Norwich City Council in 20 years” (M. Milton. 2024). This project was of great importance to the council as it provided 93 sustainable homes made of timber framing with Passivhaus certified construction which greatly increases the lifespan of the houses, allowing the residence to use the properties for longer durations at a cheaper cost. The project has shown how it was the best scheme of its time by winning the Neave Brown Award 2019 which is only provided in recognition of the “best new affordable housing in the UK” (RIBA, a. 2019) but have “10 or more homes completed and occupied between 1 November 2016 and 1 February 2019; and have one third of the housing be affordable and demonstrate evidence of meeting the challenge of housing affordability.” (RIBA, a. 2019). The design used a 14-meter-wide street rather than the usually required 21-meter-wide streets which “made it possible to achieve the housing density required, while also sacrificing less space to cars” (N. Barker. 2025) increasing the use of sustainable travel for the local residence.

Liveability

Goldsmith Street was “inspired by the nearby Victorian row houses of Norwich’s Golden Triangle” (P. Keskeys) with the terraced nature of the project creating a clear boundary with the use of its street front, which is framed by communal green spaces. Each of the houses have some form of outdoor space whether it is a balcony or a small garden which allows the residence to have access to fresh air whilst also being in their own private space enriching the quality of life. The placement of bin storage was also considered in the design as a vital point as it was placed in the “front gardens to create buffer zones between the public footpath and the front doors, giving a humane gradation of public to private territory” (RIBA, b. 2019). Each of the units in the scheme (end-of-terrace flats and central terrace houses) have high specification interiors which was mostly due to the high standard of workmanship overseen by the architects. This was shown in how each unit is Passivhaus as well as having a Mechanical Ventilation Heat Recovery unit (MVHR) which are all intelligently controlled, and in case of services needing to be repaired, “each dwelling has a range of providers’ services pre-wired, so that they can be connected on demand” (RIBA, b. 2019) allowing the residence to feel more at ease.

Sustainability

Goldsmith Street is one of the most significant projects of 2019 for the use of its sustainability as shown by it winning the RIBA East Sustainability Award 2019. With the use of Passivhaus and timber frame construction, the frame itself was “designed, manufactured and installed by specialist timber frame subcontractor Cygnum”, the frame was designed comprising of a “twin-wall, sheeted on both sides, with a membrane on the inside forming an airtight layer” (M. Milton. 2024). The air tightness of the build was tested throughout the build and “before handover, ensuring the required quality was met” (M. Milton. 2024).

The insulation used in the walls was Warmcel blown cellulose, which is comprised of recycled newspaper, the insulation was inserted in the external wall cavity. The wall was made to be thermal bridge free with the use of “89mm internal load-bearing studs and a secondary 67mm stud” (M. Milton. 2024) which provided 350mm cavity for the insulation to go in, whilst the roof joists are “typically 400mm deep, providing plenty of space for additional insulation” (M. Milton. 2024).

The use of Passivhaus in the design of the building was tasked by the council to the architects, this was seen as a brave move because it meant “a very high bar of thermal efficiency” was needed as the standard for Passivhaus meant “buildings require only minimal energy to heat and cool” (N. Barker. 2025). Passivhaus construction estimates that energy bills would be 70% cheaper than the average UK household according to Deezen due to the reduction in heating and cooling. Whilst the timber frame meant that there was a low carbon footprint estimated to be 311 kg CO₂/m².

Materials

The choice of materials used in Goldsmith Street was decided by the design team of Mikhail Riches, the use of timber was decided in the build as it was “the optimal way to meet the projects’ aims”. “Whichever flavour of timber you want to work with, Mikhail Riches’ associate director James Turner explains, whether it is Propassive OSB board or CLT, there are lots of case study projects that demonstrate that you can deliver Passivhaus levels of airtightness robustly and with confidence.” (M. Milton. 2024). The decision for the use of prefabricated timber frame was decided early in the project as it was a low-cost way to achieve the goals of the project being Passivhaus.

Brick and tiles were used for the skin of the buildings as it was in keeping with the local Norwich area, the “gloss black pan tiles” were used as they are “a historic vernacular material in

Norwich" (F. Mies van der Rohe. 2025), which was "a nod to the city's Dutch trading links" (BBC. 2019). The bricks are a "creamy clay" colour as seen with similar Victorian terraces within Norwich.

Due to the design being Passivhaus there was a need for smaller windows in comparison to the standard Georgian or Victorian terraced windows. To make up for this the windows were used in the design were in a setback panel to enlarge the feel of the window. Additionally, "panels of textured brick have been introduced into the main elevations, again to balance the feel of the fenestration along the terrace." (E. Hopkirk. 2019)

Community

Goldsmith Street had a great impact on the area of Norwich as the social housing scheme has seen by its tenants stating that "they do not need to turn on their heating" (M. Weaver. 2022) during the coldest day of the winter, with one resident stating "it's like summer" according to Jayed Abdas Samad, 32. Whilst other residence such as Jayed says "we don't have to put the heating on so it's cheaper. We feel very lucky.", Jayed was part of the first family to move into the housing scheme in 2018. Other residence claim that it improved their health telling the guardian "I've reduced some of my medications since coming here. Our previous flat had damp issues. It was depressing to be told by the landlord that it was our fault. Here we can dry clothes with no heating on." this statement was by "Peter Osborne, 37, who suffers from an illness" (M. Weaver. 2022).

The design of Goldsmith Street has greatly changed the view on social housing as one of its residence (Peter) states that "before coming here I would have been embarrassed to say I live in council property because some of the blocks around here feel left behind, whereas here you feel cared for. It would be really good if more council places were built like this."

The parking for the residence was designed to be on the perimeter of the development "so the streets feel safe and 'owned' by pedestrians rather than cars" (RIBA, b. 2019). This deliberate design in the author's opinion allows for a greater feeling of community as well as the green space pathways which allows the residence to get together and allow children to play together as seen in the figure below.



Figure 18 Photo of Goldsmith Street (Image credit Tim Crocker)

Landscape

The landscaping of Goldsmith Street was designed by BBUK who were appointed by Mikhail Riches to “design all areas of public realm, communal amenity spaces and private rear and front gardens for 105 new homes” (BBUK). The overall design of the project was a “series of seven terrace blocks arranged in four lines.” (RIBA, b. 2019) with narrow roads and “numerous car-free walking paths through the development” (P. Keskeys).

The layout of the project has links traceable to English housing tradition while the rest of the project had a modern concept with pathways that run along the backs of the housing but does not give the “sense of a ‘back alley’ and gives a welcome curving foil to an otherwise rectilinear scheme” (RIBA, b. 2019).

The proposal for the sites landscape did not end with just the Goldsmith Street site as the proposal also “involves the development of two landscape zones around St Barnabas Church and the mature existing Catalpa trees at the heart of the scheme.” (Housing Design Awards)

Accessibility

The site has four entrances accessible by car with two off of Midland Street and two off of Goldsmith Street. The distance from car to house is a short distance for most of the properties for people of low mobility, whilst all the homes have a pathway connecting them as seen in the figure 19. Whilst the interior of the units have been designed so that they are easily manoeuvrable with large spaces as seen in figure 20.



Figure 19 Photo of Goldsmith Street (Image credit Tim Crocker)

Block A

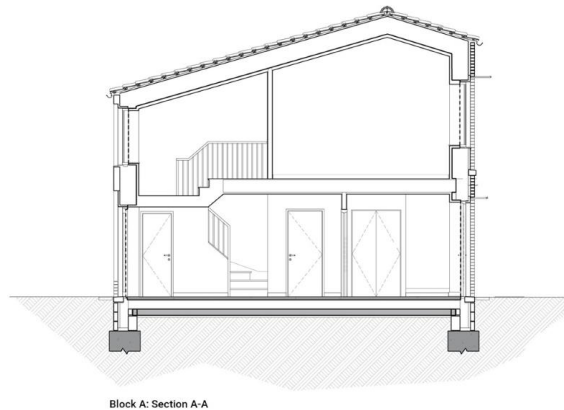
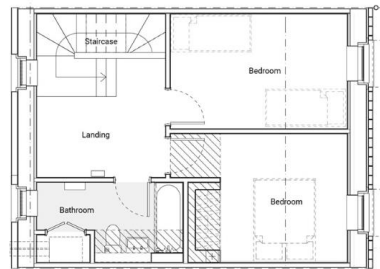
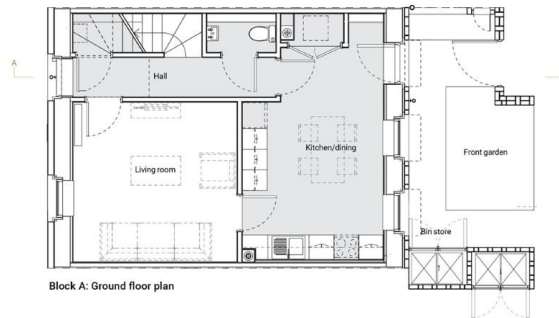


Figure 20 Planes of Goldsmith Street (Image credit Mikhail Riches)

Conclusion

In the author's opinion this project was very successful as it shows that medium sized social housing schemes that look good and are designed to a high standard are possible due to the fact that it has won multiple awards. The use of Passivhaus in social housing schemes can take precedents from Goldsmith Street as it has woven the use of timber frame structures into the restricted area and within the budget allocated by the council. The use of green space within the project increases the identity of the site, instead of the site being one large block of flats which is not pleasant to look at in comparison to the surrounding area, Goldsmith Street blends in with its unique two- and three-story homes. But the only downside in the author's opinion was that there

were no sustainable energy sources on the site such as solar panels but other than that the author believes that this was a very successful project.

Conclusion

In conclusion the author believes that these schemes have shown that social housing can come in all sizes and be implemented in many different sites across the United Kingdom. From the small scale 8-unit flats of Challenger Court to the large 105 homes of Goldsmith Street. As long as there is space whether it is a brownfield site located behind other houses or a large site located near the city center.

The use of brownfield sites within this dissertation has shown that there is not always a need to create new land for housing, the use of brownfields are a viable option for creating small scale social housing schemes that can be copied and placed on disused sites.

While the need for larger scale social housing projects are needed it does not mean that greenfield must be taken for it, while these case studies show that projects are viable at a small scale they are viable at scaling up the size to be placed on other brownfield sites.

Taking inspiration from sustainability of Goldsmith Street, the timber framed construction could work well on a smaller site whilst the material choice of Challenger Court or Claredale Street could be combined and used to create an even better scheme for the future.

As to the question of “Are award winning social housing schemes able to be used on a larger scale in the United Kingdom?” the author believes that it is possible.

Reference List

Al-Jawad Pike (2017) *Chowdhury Walk*. Available at: <https://aljawadpike.com/projects/047-daubeney-road> (Accessed: 2 February 2025).

Archinect (n.d.) *Claredale Street & The Mansford Estate*. Available at: <https://archinect.com/firms/project/149983730/claredale-street-the-mansford-estate/149984475> (Accessed: May 2 2025).

Architizer (2025) *Claredale Street Housing*. Available at: <https://architizer.com/projects/claredale-street-housing/> (Accessed: 26 February 2025).

AJ Buildings Library (2010) *Claredale Street*. Available at: <https://www.ajbuildingslibrary.co.uk/projects/display/id/3898> (Accessed: May 1 2025).

Astbury, J. (2018) 'Transforming Bristol's garage land', *The Architects' Journal*. Available at: <https://www.architectsjournal.co.uk/buildings/transforming-brisstols-garage-land> (Accessed: 1 November 2024).

Birch, S. (2019) '2019 Design Awards', *Bristol Civic Society*. Available at: <https://www.bristolcivicsociety.org.uk/2019-design-awards/> (Accessed: 10 October 2024).

Bristol City Council (2015a) *Community Involvement for Major Planning Developments*. Available at: https://pa.bristol.gov.uk/online-applications/files/40F685A07323CC1FC8FE1550CD5DBD4E/pdf/15_03408_F-COMMUNITY_INVOLVEMENT_STATEMENT-1296410.pdf (Accessed: 15 November 2024).

Bristol City Council (2022) *Project 1000: Affordable Housing Delivery Plan 2022–2025*. Available at: <https://democracy.bristol.gov.uk/documents/s69579/Appendix%20A1-Project%201000%20Housing%20Delivery%20Plan-2022-25.pdf> (Accessed: 15 November 2024).

EH Smith. Architectural Clay Products (2018) *Challender Court & Suffolk Close*. Available at: https://ehsmithclayproducts.co.uk/case_studies/challender-court-suffolk-close/ (Accessed: 7 November 2024).

Emmett Russell Architects (2019) *Challender Court*. Available at: <https://find-an-architect.architecture.com/emmett-russell-architects/bristol/challender-court> (Accessed: 15 November 2024).

Emmett Russell Architects (2025a) *Challender Court*. Available at:
<https://emmettrussell.co.uk/projects/challender-court/> (Accessed: 13 January 2025).

Emmett Russell Architects (2025b) *Emmett Russell Architects*. Available at:
<https://emmettrussell.co.uk/> (Accessed: 13 January 2025).

Energy Saving Trust (2022) *What is Passivhaus? The gold standard in energy efficiency*. Available at: <https://energysavingtrust.org.uk/passivhaus-what-you-need-know/> (Accessed: 10 November 2024).

Google (2025) *AI Overviews and your website*. Available at:
<https://developers.google.com/search/docs/appearance/ai-overviews> (Accessed: 2 February 2025).

Hackney (2018) 'Council homes and community gardening – Clapton plans approved', *Hackney News*, 5 July. Available at: <https://news.hackney.gov.uk/council-homes-and-community-gardening-clapton-plans-approved/> (Accessed: April 10 2025).

Hackney Citizen (2024) 'Council block built on former community garden in Clapton wins architecture prize', *Hackney Citizen*, 22 May. Available at:
<https://www.hacknecitizen.co.uk/2024/05/22/council-block-former-community-garden-clapton-architecture-prize/> (Accessed: April 9 2025).

Head of Housing, Bristol City Council (2015b) *Memorandum of Understanding in Respect of Planning Application 15/01309/FB*. Available at: https://pa.bristol.gov.uk/online-applications/files/08A2E325D0381804FB4F4841DC9060BA/pdf/15_03408_F-MEMORANDUM_OF_UNDERSTANDING-1332136.pdf (Accessed: 2 November 2024).

Hoffman, N. (2024) 'Huge change for millions of social renters announced in Rachel Reeves' £500m plan to build homes - how it'll affect you', *The Scottish Sun*, 30 October. Available at: <https://www.thescottishsun.co.uk/money/13779905/huge-change-for-millions-of-social-renters/> (Accessed: 10 November 2024).

Housing Design Awards (2010) *Claredale Street*. Available at:
https://hdawards.org/archive/2010/winning_schemes/completed_winners/claredale_street.php (Accessed: April 1 2025).

Karakusevic Carson Architects (n.d.) *Claredale Street*. Available at: <https://www.karakusevic-carson.com/projects/claredale-street> (Accessed: March 19, 2025).

Kuhn, R. (2024) *What is the Difference Between a Feasibility and Viability Study?* [BOP Consulting]. Available at: <https://www.bop.co.uk/articles/%2Farticles%2Fwhat-is-the-difference-between-feasibility-and-viability> (Accessed: 8 November 2024).

Lang + Fulton (2025) *DeltaWing Louvre Screening*. Available at: <https://langandfulton.co.uk/product/balcony-balustrade-deltawing-louvre-screening-bb/#1655833115104-46004705-1f3c> (Accessed: 11 January 2025).

Manchester History (n.d.) *Claredale Street, Bethnal Green, London*. Available at: <https://manchesterhistory.net/architecture/2010/claredale.html> (Accessed: April 9 2025).

Periscope (n.d.) *Chowdhury Walk is an eleven home mews project in Hackney, London*. Available at: <https://www.periscope.uk/projects/chowdhury-walk> (Accessed: 5 February 2025).

Potter Raper (2024) 'Chowdhury Walk Named Winner of the Neave Brown Award for Housing 2024', 18 October. Available at: <https://www.potterraper.co.uk/chowdhury-walk-neave-brown-award/> (Accessed: April 11 2025).

Property London (2024) 'Chowdhury Walk: A Visionary Housing Development by Al-Jawad Pike in Hackney', 17 October. Available at: <https://www.propertylondon.co.uk/articles/chowdhury-walk-a-visionary-housing-development-by-al-jawad-pike-in-hackney/> (Accessed: April 11 2025).

Ravenscroft, T. (2024) 'Chowdhury Walk social housing design not to be "a monolithic block"', *Dezeen*, 30 September. Available at: <https://www.dezeen.com/2024/09/30/stirling-prize-shortlist-chowdhury-walk-social-housing-al-jawad-pike/> (Accessed: 5 February 2025).

RIBA (2024a) *Chowdhury Walk*. Available at: <https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-regional-awards/riba-london-award-winners/2024/chowdhury-walk> (Accessed: 2 February 2025).

RIBA (2024b) *Neave Brown Award for Housing*. Available at: <https://www.architecture.com/awards-and-competitions-landing-page/awards/neave-brown-award-for-housing> (Accessed: 6 February 2025).

RIBA Journal (2024) 'Stirling Prize 2024 shortlist: Chowdhry Walk, Hackney. London, by Al-Jawad Pike', 30 July. Available at: <https://www.ribaj.com/buildings/riba-stirling-prize-2024-shortlist-al-jawad-pike-chowdhury-road-hackney> (Accessed: April 9 2025).

Royal Institute of British Architects (RIBA), Emmett Russell Architects (2018) *Challender Court*. Available at: <https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-regional-awards/riba-south-west-award-winners/2018/challender-court> (Accessed: 23 November 2024).

Roundfield (2023) *Bristol SuDS Courtyard*. Available at: <https://roundfield.co.uk/project/bristol-suds-courtyard/> (Accessed: 23 November 2024).

Smitham, A. (2023) *Neave Brown Award for Housing winner*. Available at: <https://www.architecture.com/awards-and-competitions-landing-page/awards/neave-brown-award-for-housing> (Accessed: n.d.).

York, M. (2025) 'Affordable homes: what you need to know about the £2bn boost', *The Times*, 26 March. Available at: <https://www.thetimes.com/life-style/property-home/article/affordable-housing-new-spring-statement-x08qllmkg> (Accessed: 10 April 2025).