

## The Echoes / Grays, Thurrock

Client:	Thurrock Council
Appointment:	RIBA stages 1-6 appointed by Thurrock Council
Building contract:	NEC3 contract (Willmott Dixon Housing)
Number of dwellings:	53 (135.9 dwellings/ha)
Dwelling mix:	13x 1-bed 2-person flats 33x 2-bed 4-person flats, 7x 3-bed 5-person flats
Tenure:	100% affordable rent
Contract value:	£12million
Awards:	Architects Journal Architecture Awards 2017 / Shortlisted RIBA East Region Award 2017 / Winner Inside Housing Awards 2016 / Winner Housing Design Award 2017 / Shortlisted

***"It is projects such as these that give you hope for the future of public housing"***

*Robert Bevan, Architects Journal*

Thurrock Council's housing department has set a target to provide 1000 new homes in the next five years. We initially undertook a comprehensive viability appraisal of 76 council-owned sites across Thurrock to establish a league table of potential development sites. The Echoes was selected as the first site to be developed as part of the first phase of achieving this target.

Situated less than 800m away from the main railway station in Grays (the furthest point to which you are able to travel on an Oyster card from London) the site was quickly identified as an opportunity to create a highly sustainable new development in an area badly in need of new high quality affordable housing. Just a stone's throw away from the new community college it is conceived that these two projects will galvanize the rejuvenation and commercial development of the town centre.

The Council appointed us to design this as an exemplar design to establish a benchmark for the quality of new housing in the area as well as providing much needed homes and acting as a catalyst for regeneration.

### *A street-based approach*

The site is situated on the Seabrooke Estate in the centre of Grays, previously occupied by largely disused garages. It is bounded to the north by a railway line but offers south-facing views towards the River Thames from higher levels due to the topography of the estate that falls towards the river to the south. The estate suffers from problems typical of post-war planning; a disorientating layout and a lack of definition between public and private. The design of The Echoes seeks to

address these problems by returning to a street-based design.

Three blocks comprising 53 flats for social rent extend along the boundary of the site, creating an active, two sided street to the existing estate, whilst opening up at the centre to create a generous communal courtyard garden.

The communal garden incorporates a mixture of hard and soft landscaping featuring a number of mature trees, wild flower meadow and other indigenous plants. Seating areas are scattered among the planting, with benches formed of railway sleepers in a conscious nod to the railway line running directly to the north of the site. Communal entrances to two of the three blocks are accessed via the courtyard garden, deliberately bringing residents through the garden to create an active, vibrant and social space.

The three buildings are united with an undulating zinc roof that creates a dynamic appearance and pleasing composition to the new development. This sculptural undulating roof serves the dual purpose of creating a dynamic façade to the new development whilst reducing the impact of light loss to the existing adjacent properties. The roof void created by the rising and falling roof is given over to the flats to provide additional ceiling height resulting in lofty spacious top floor flats. Generous triangular balconies provide private external amenity to all units and panoramic views towards the River Thames. The triangular balconies in perforated aluminium, together with the angled roof create a striking motif for the building.



The development site was a former post-war garage site. A number of mature trees, an electrical sub-station and portakabins serving the local community remained on the site.

### *Working with the local community*

The active participation of residents has been crucial to the development of this scheme. From the early stages of design, where the scheme was met with concern and scepticism from the local community, we have progressed to a stage where a large number of local residents actively participated in the planning committee hearing by speaking in favour of the proposals.

Consultation was undertaken from the earliest stages of the design development and continued through the design process. Listening to the concern of residents, showing how we were responding to their concerns and earning their trust was instrumental in delivering the project.

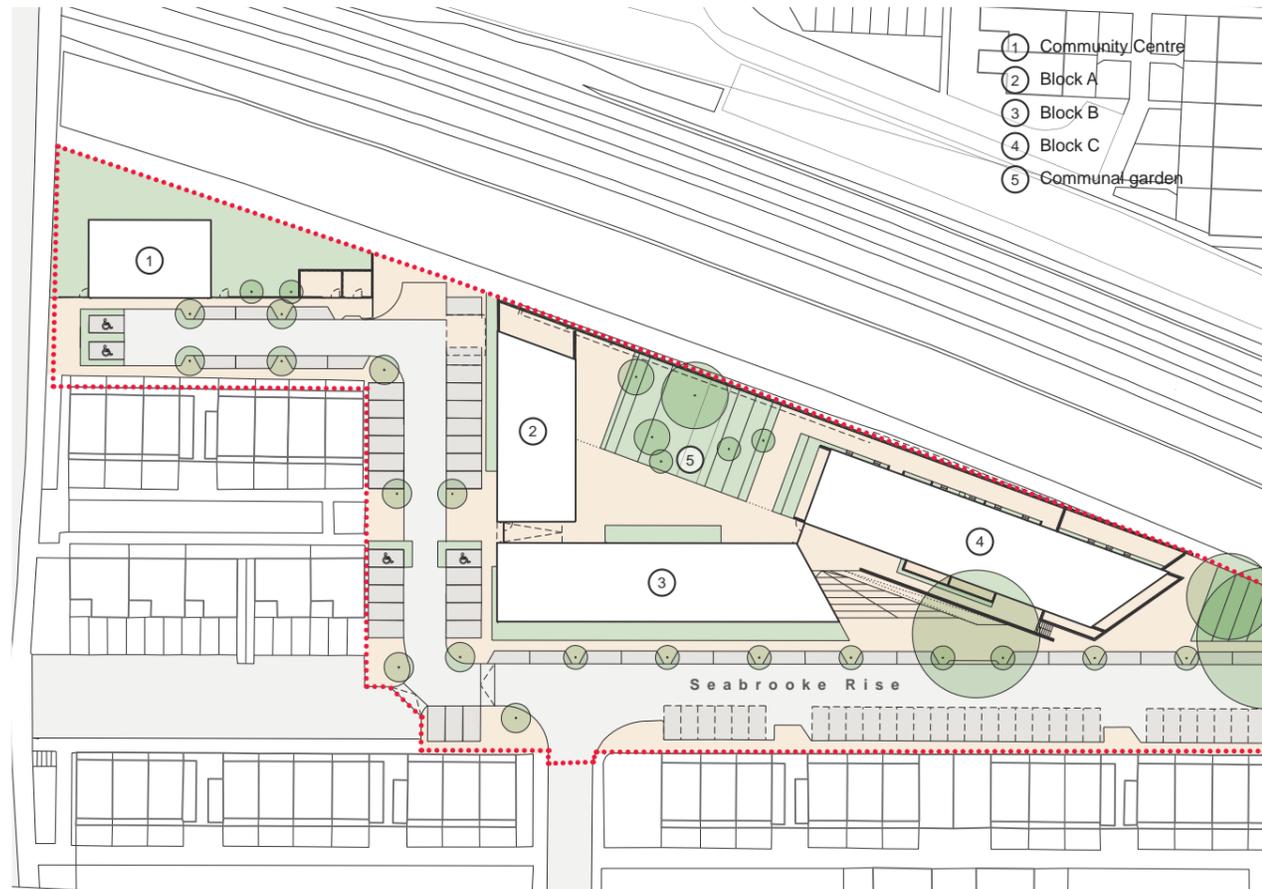
### *A shop window for the estate*

A new community centre (Community House) has been provided to replace the existing centre, formerly housed in Portakabins on the eastern boundary of the site. The work of the centre over the last few years has transformed the estate, creating a cohesive community and virtually eliminating problems of anti-social behaviour. The new centre has been relocated on the north east boundary of the estate, facing towards the town centre, creating a physical and visual connection between the estate and the wider community, with entrances on two levels taking advantage of the topography of the site to create a far stronger visual presence beyond the confines of the estate. This allows the community centre to engage with the town, and allows the activities of the centre to be projected to a wider audience.

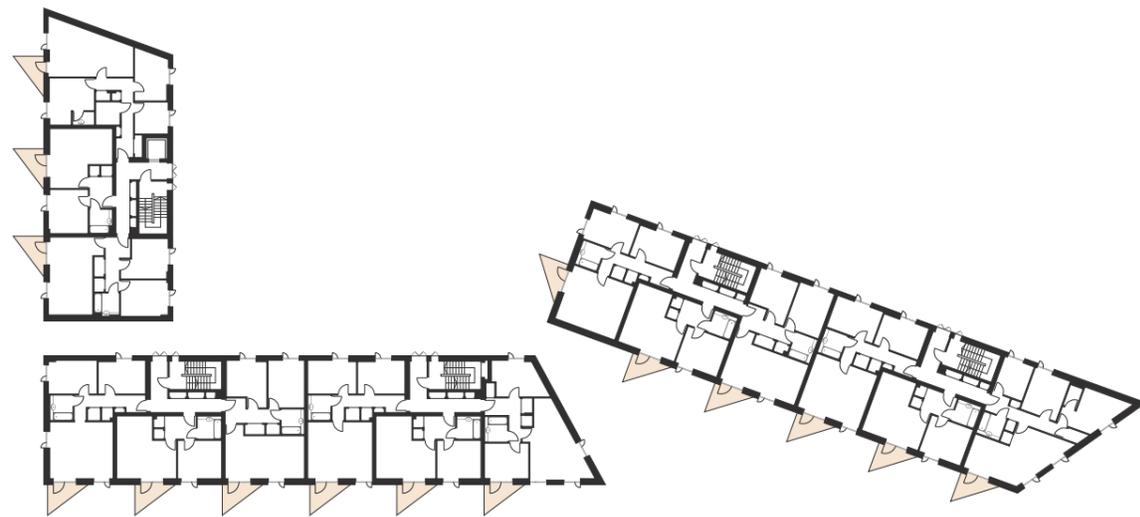
### *Cost effective design*

In order to achieve the required level of quality in a cost-effective manner has required an intelligent and strategic approach. The architecture of the block has been distilled down to a limited number of elements; a well detailed balcony, a carefully-selected brick and well-proportioned windows. Repetition of elements - flat plans are repetitive and stack vertically, doors, windows and balconies are all modular elements that repeat throughout the scheme - has ensured economies of scale, efficiencies and enabled the contractor, Willmott Dixon, to deliver a really high quality and well-constructed scheme.

# The Echoes / Grays, Thurrock



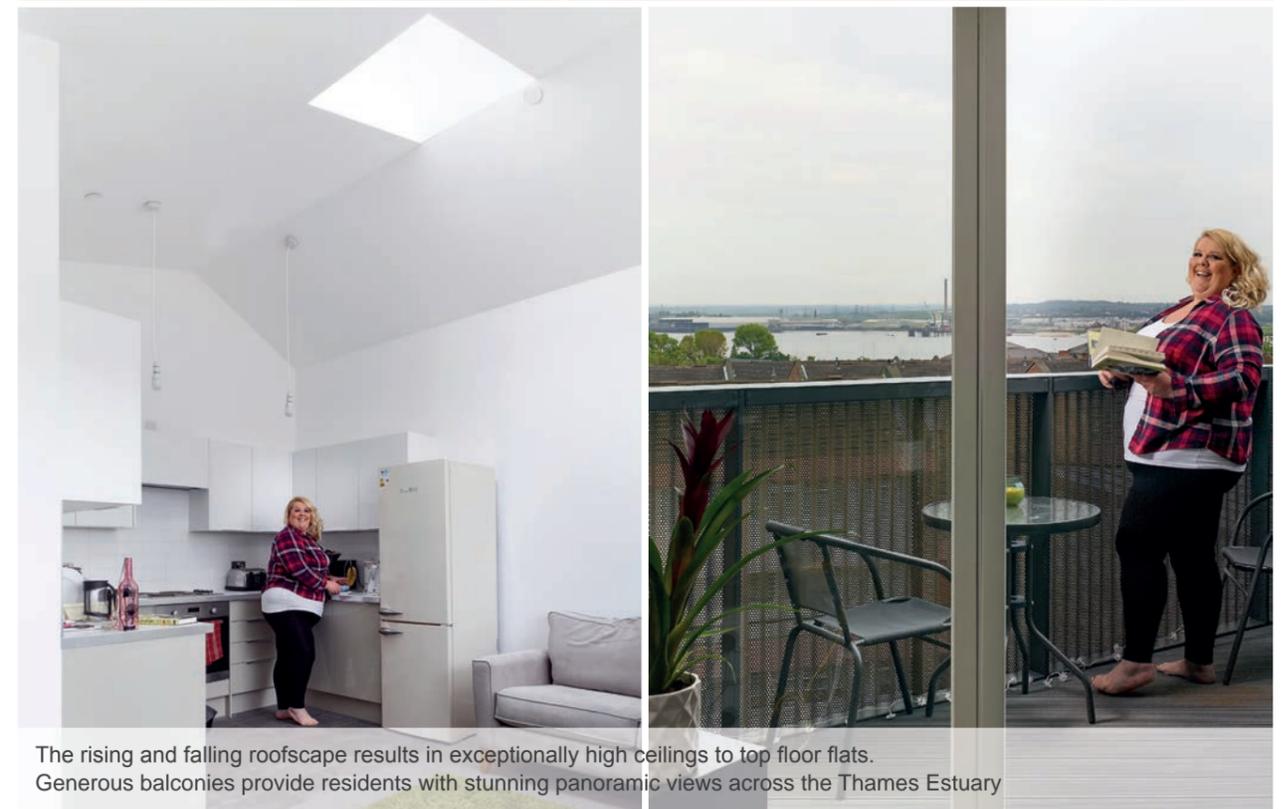
Site plan



Typical upper floor plan



A new community centre provides an important focal point for local residents as well as linking the estate to the centre of Grays. The large window acts as a 'shop window' for the range of activities that the centre accommodates.



The rising and falling roofscape results in exceptionally high ceilings to top floor flats. Generous balconies provide residents with stunning panoramic views across the Thames Estuary

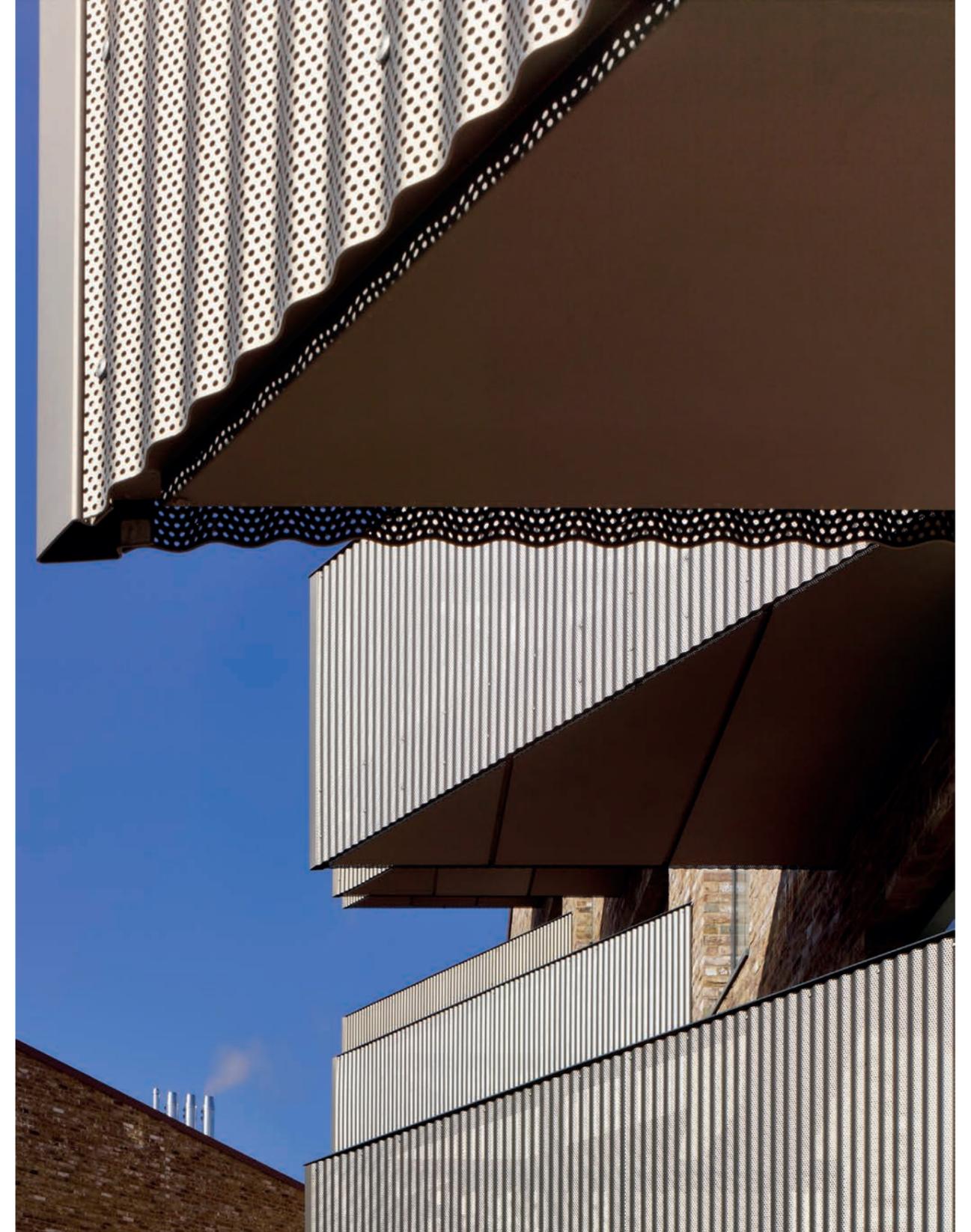
## The Echoes / Grays, Thurrock



Three blocks with a repetitive layout extend along the site. The folding roof - designed to maintain light to existing dwellings - generates dynamism and interest between the blocks.



The new development seeks to repair the failings of the post-war estate by re-establishing a street-based arrangement with activation and animation creating a vibrant streetscape.



The distinctive triangular balconies extending towards the panoramic views across the Thames Estuary are a repetitive element. By working closely with the contractor we were able to achieve a high quality.

## St. Chad's / Tilbury, Thurrock

Client:	Gloriana (Thurrock Council)
Appointment:	RIBA stages 1-6 appointed by Willmott Dixon Housing
Building contract:	NEC3 contract (Willmott Dixon Housing)
Number of dwellings:	128 (39 dwellings/Ha)
Dwelling mix:	57no. 2-bed 4-person 55no. 3-bed 5-person 8no. 3-bed 6-person 8no. 4-bed 7-person
Tenure:	20% affordable/80% private rent
Contract Value:	£28million
Awards:	Civic Trust Award 2019 / Winner RIBA East Region Award 2018 / Winner Inside Housing Development Awards 2018 / Winner Brick Awards 2018 / Shortlisted Housing Design Award 2018 / Shortlisted Housing Design Award 2015 / Winner

***“They could show the housebuilders a thing or two about placemaking, even in areas of low house values and little investment. These are houses that would be prized and pampered in more privileged parts of the UK”***

*RIBA judging panel citation, 2018*

Located in Tilbury, Essex, St Chad's is a development of 128 new homes for Thurrock Council, which fulfills the council's aims of regenerating the town as well as providing new subsidised housing. The homes which are for a mix of private and affordable rent were completed in 2017.

This was the first development undertaken through Thurrock's new Wholly Owned Company, Gloriana. We were appointed after winning a design competition at the end of 2013. We provided a full scope of work, from concept design, all the way through detailed design and construction. We have all the required technical expertise for a project of this type and scale. The estate is the first component of a larger masterplan that we have undertaken that includes the nearby Broadway Estate.

The scheme at St Chad's shows that we can design beautiful neighbourhoods, to a stringent brief and successfully deliver these projects to completion.

This project is one of many that we have worked with in collaboration with Thurrock Council that demonstrates the value that they place on our approach.

### *Placemaking approach*

Tilbury docks are London's main container port, and the town of Tilbury was expanded in the mid-20th century to accommodate growth brought about from the expansion of the docks. These references have been a key element of the design proposals.

The design is structured around three key 'place making' concepts:

- A grid pattern of streets that links with the existing mid-20th century street layout.
- A sequence of public spaces arranged diagonally through the street layout, connecting with surrounding farmland.
- A diagonal linear park angled to focus on the distant views of Tilbury Docks, so that the new development is strongly linked to the identity of Tilbury.

The development comprises a hierarchy of avenues, streets and mews each carefully considered in terms of width, proportion, materials and housing typologies to imbue each with a distinct character and strong sense of place. Houses, either terraced townhouses or courtyard houses, have been designed with reference to historic models that make them at once contemporary yet familiar.

The dwellings and streets are positioned to allow the majority of the houses to have an east-west aspect with a minority of houses having a north-facing garden.

### *Maximising density in a suburban context*

There are two principal types; a terraced townhouse and courtyard house. Each urban block has been designed to achieve a high density by reducing the distance between the rear of houses. This has been



The development site was formerly the site of the local secondary school. This became obsolete when the local Academy School was constructed.

achieved without loss of privacy between houses by pairing town houses with courtyard houses which are oriented at 90 degrees to the townhouses as shown on the diagram above.

We worked closely with the client's brief, which stated a requirement for houses rather than flats. We developed house typologies that allowed for a dense site layout without compromising the privacy of residents. We also created a grid of streets of differing types which allowed for variation in the site layout.

### *Sustainable landscaping*

As noted in Question 6 below sustainable urban drainage presented a particular challenge on this site given its low-lying location. This challenge was dealt with by turning this challenge into an opportunity and creating a swale that doubled as an amenity space for local residents. This swale, planted with wildflowers and integrated with opportunities for play, is aligned on distant views of the cranes of Tilbury docks tying the development to the history and industry of Tilbury and giving it a real sense of place.

The landscaped linear park provides both soft amenity for children and natural rainwater attenuation, in heavy rainfall. This engineering solution offers a low maintenance, cost effective and visually attractive amenity which negates the need for any expensive underground drainage system.

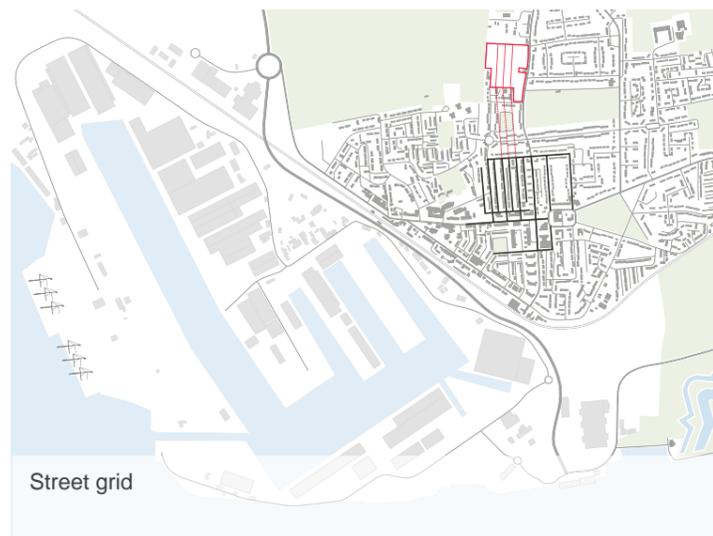
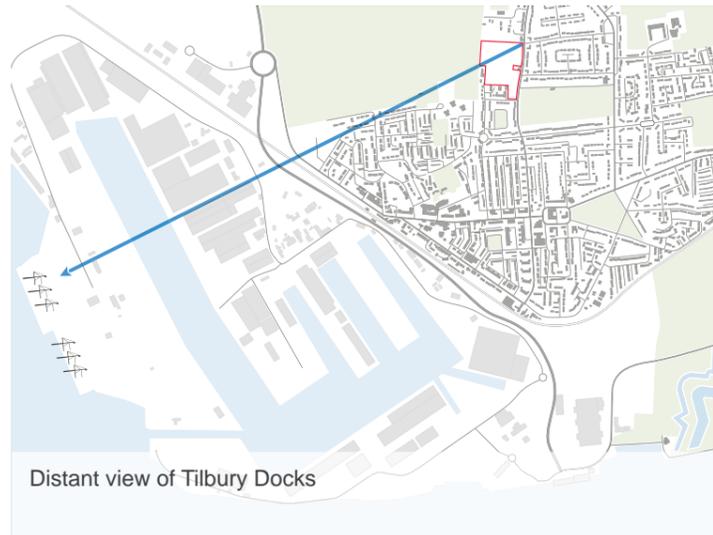
### *Cost-effective design*

The site presented a number of challenges including the requirements to integrate extensive sustainable urban drainage in this low-lying area. The cost of this work impacted heavily on the viability of the project and therefore it was imperative that the cost of the houses were minimised whilst maintaining the quality of the project.

Working collaboratively with the contractor we were able to optimise the design to find value engineering solutions from the outset of the project. These included;

- Reducing the number of house types.
- Simplifying and standardising construction details across the project.
- Using colour-coated UPVC windows but carefully detailed to conceal frames behind brick reveals.
- Utilising a combination of a cheaper red brick interspersed with a more expensive white brick to generate visual interest and variation.
- Reducing the different types of windows and doors.
- Using standard products and details - such as the roof tiles.

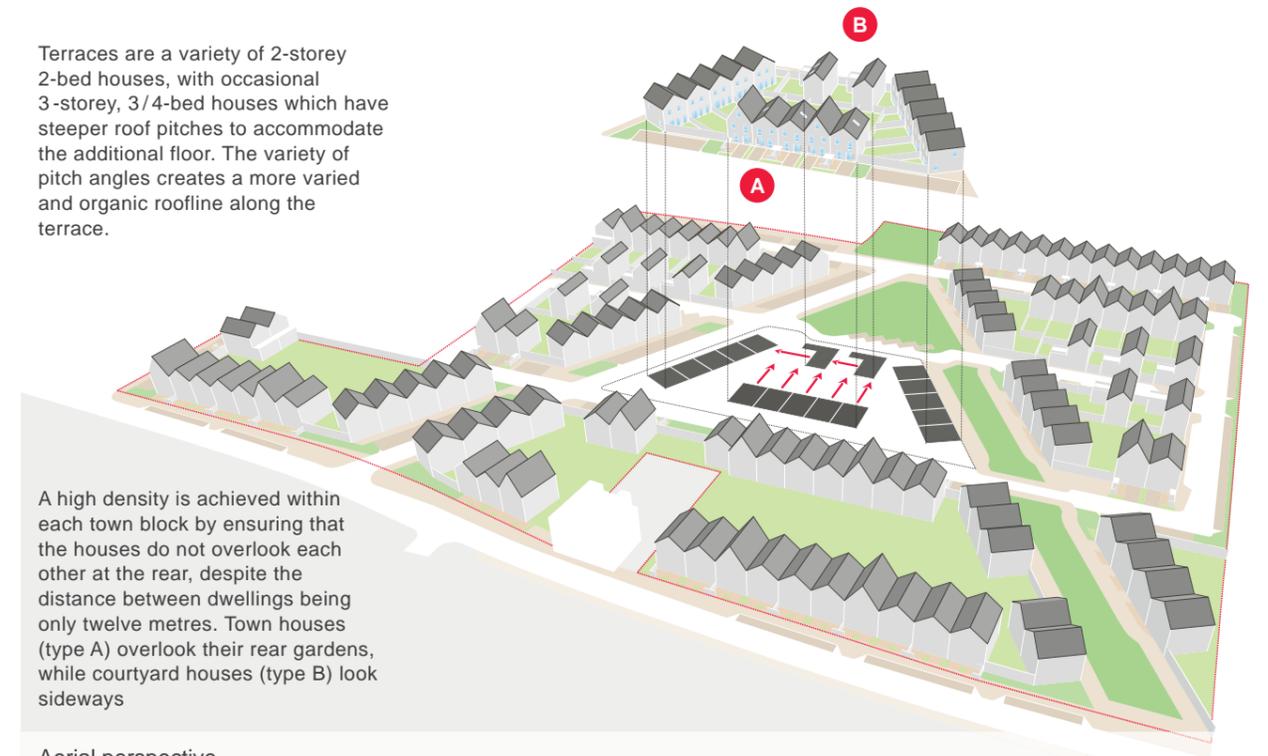
# St. Chad's / Tilbury, Thurrock



The layout of the site is underpinned by three key placemaking concepts;

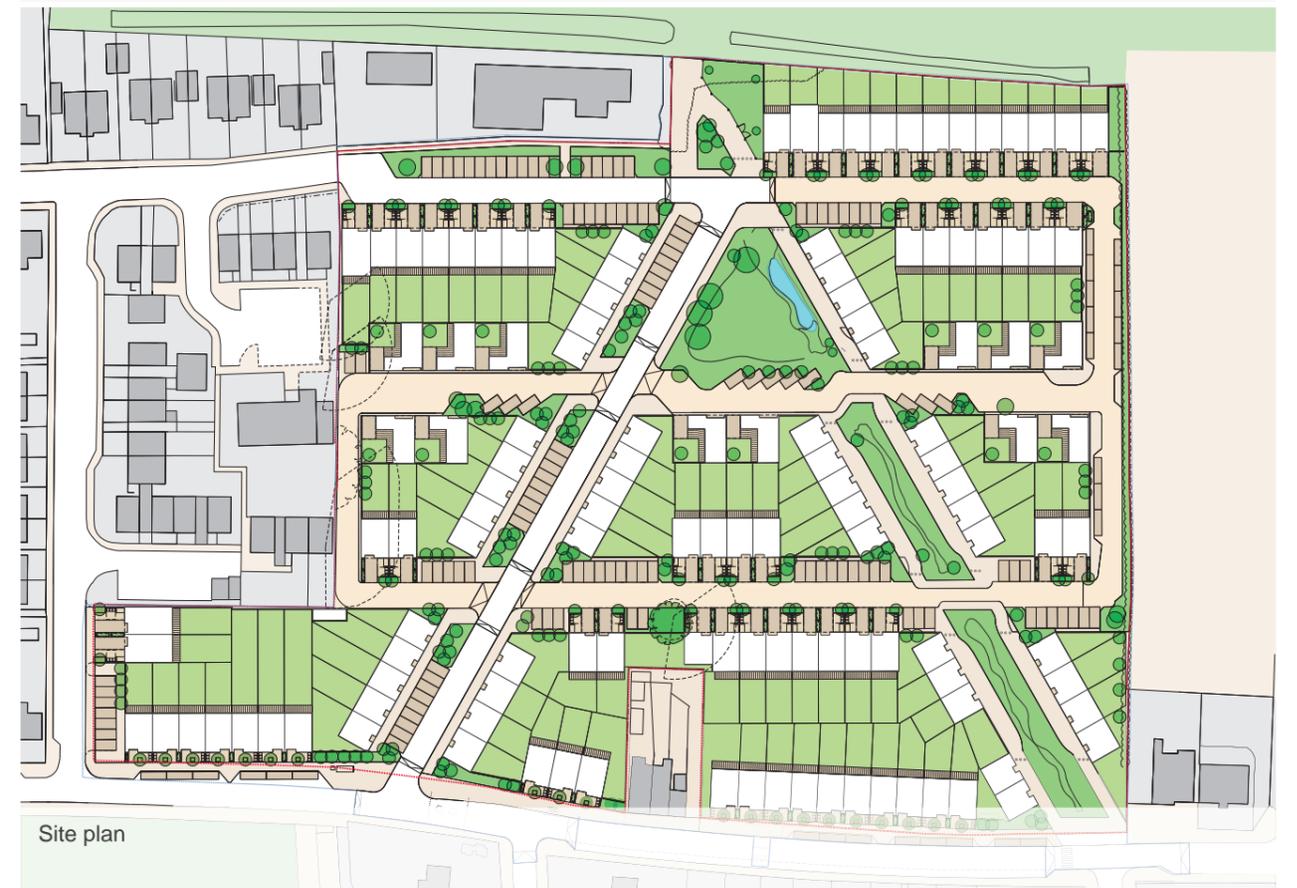
- A diagonal linear park angled to focus on the distant views of Tilbury Docks, so that the new development is strongly linked to the identity of Tilbury.
- A sequence of public spaces arranged diagonally through the street layout, connecting with surrounding farmland.
- A grid pattern of streets that links with the existing mid-20th century street layout.

Terraces are a variety of 2-storey 2-bed houses, with occasional 3-storey, 3/4-bed houses which have steeper roof pitches to accommodate the additional floor. The variety of pitch angles creates a more varied and organic roofline along the terrace.



A high density is achieved within each town block by ensuring that the houses do not overlook each other at the rear, despite the distance between dwellings being only twelve metres. Town houses (type A) overlook their rear gardens, while courtyard houses (type B) look sideways

Aerial perspective



# St. Chad's / Tilbury, Thurrock

Using a simple, repetitive palette of house types and materials, the development nevertheless manages to establish a clear hierarchy and variety of urban spaces



The new avenues successfully connect spaces and have become well-used routes in the local area. Residents on the local traveller site can often be seen taking their horses to graze on the adjacent farmland.



## Bracelet Close / Corringham, Thurrock

Client:	Thurrock Council
Appointment:	RIBA stages 1-3 (Thurrock Council) RIBA stages 1-3 (Willmott Dixon)
Building contract:	NEC3 contract (Willmott Dixon Housing)
Number of dwellings:	12 (70.6 dwellings/Ha)
Dwelling mix:	6no. 2-bed 4-person houses 6no. 3-bed 5-person houses
Tenure:	100% affordable rent
Contract Value:	£4.4 million
Awards:	Civic Trust Award 2018 / Commendation RIBA East Region Award 2018 / Shortlisted RICS Award 2017 / Winner RIBA East Region Award 2017 / Shortlisted Architects Journal Architecture Award 2017 / Shortlisted Blueprint Award 2017 / Shortlisted Housing Design Awards 2017 / Shortlisted Sunday Times British Homes Awards 2016 / Shortlisted Housing Design Awards 2014 / Shortlisted



Bracelet Close is part of the first phase of a five-year social housing development in Thurrock. Bracelet Close was selected as a great opportunity to utilise unused space in the most efficient and practical way for the community.

Comprising 12 new homes, the scheme brings life to a mostly disused two-storey concrete garage at the centre of a post war housing estate. The new homes create a memorable and well-functioning space which has been designed around the community's needs, this being the demand for houses rather than flats. With this in mind, the development comprises of new 2 and 3 bed homes.

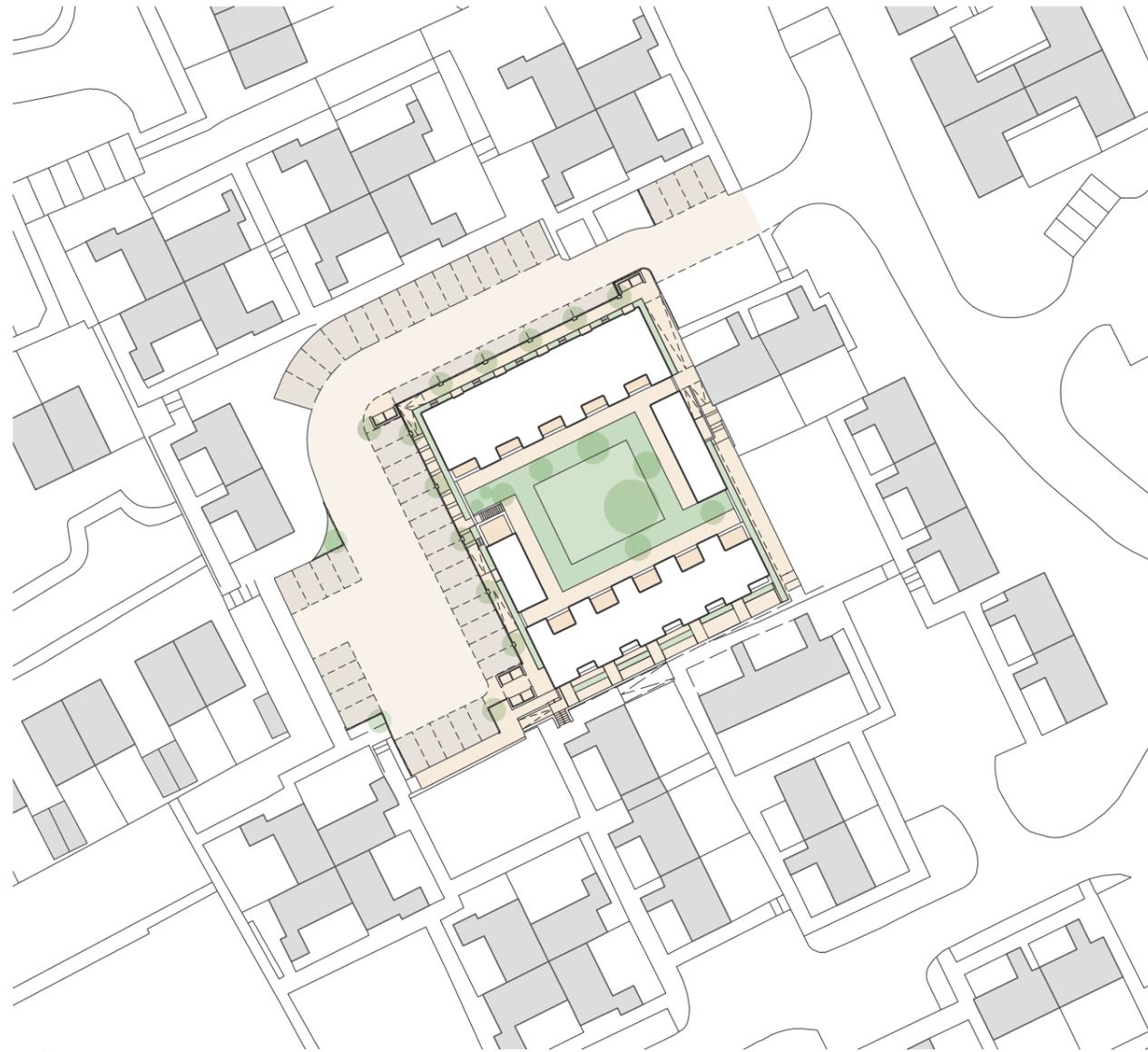
The houses have been designed to make the most of the sloping site, with views to the countryside beyond and outstanding levels of amenity and light. Each building has a private ground floor patio, an upper floor terrace, access to a large communal courtyard along with sufficient parking for existing residents. All the houses give on to a shared courtyard that help to establish a real sense of community. All facades have windows looking towards the street or pathways to ensure good active frontages and improved passive surveillance of existing public areas around the side of the development.

The principal material is brick, with a wide variation of colour and texture to give richness and visual interest. Large picture windows are set within deep reveals, providing excellent daylighting to each dwelling.

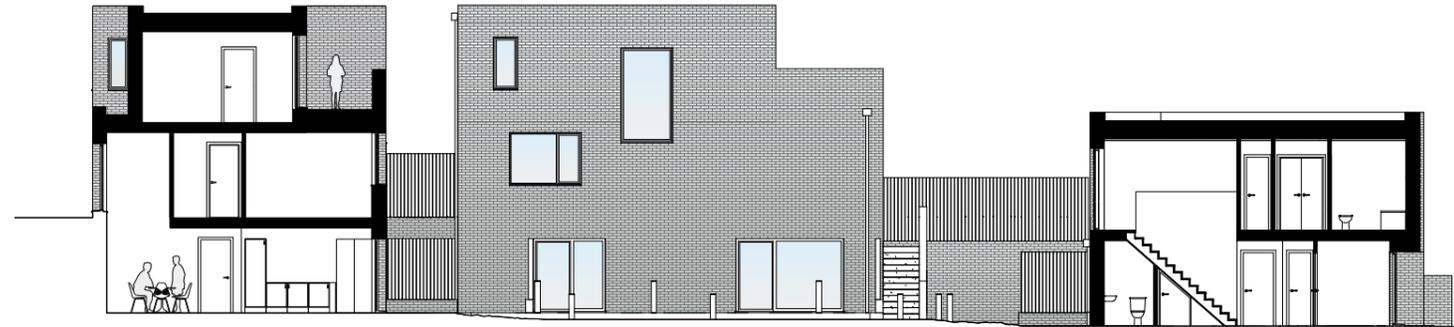
Windows, rainwater goods, terrace screens and wall copings share the same dark grey colour, emphasizing the scheme's elegant simplicity.

Communal interaction was prioritised in the design and at the centre of the development a shared space has sought to enhance a community feel. Residence can socialise, relax and play amongst a variety of hard and soft landscaping, seating areas and a number of deciduous trees.

Bracelet Close / Corringham, Thurrock



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Site plan



Site section



First floor plan

## Bracelet Close / Corringham, Thurrock

All of the houses give on to a central courtyard designed to create a social, vibrant community. The courtyard arrangement seeks to bring greater coherence to the adhoc layout of the surrounding estate.



Houses along the northern edge have been carefully designed to avoid overlooking adjacent properties. The simplicity of massing and form gives the development a strong identity.

