

3.8.18 Cycle Parking

Cycle parking is provided within dedicated, secured stores relating to each individual building. Spaces are provided within 2-tier racks within each store, delivering a total of 122no. cycle parking spaces in accordance with Reading's standards (i.e. 0.5 spaces per 1 and 2 bed, and 1 space per 3 bed+).

In addition, a number of on-street spaces are provided adjacent to the proposed cafe.

Cycle Parking Allocation	
Parking Type	Spaces
Secured Resident Parking	122
On Street Parking	12



 Secure, covered, cycle parking areas



3.8.19 Vehicle Parking

Our parking proposals deliver 12 on-street spaces, plus a further 43 undercroft spaces (55 parking spaces in total) to deliver a parking ratio of 26.3%.

Car Parking Allocation	
Parking Type	Spaces
Undercroft Parking Spaces	42
On Street Parking Spaces	10
Disabled Onstreet Spaces	2
Disabled Undercroft Spaces	1



- Parking space
- Disabled parking space



3.8.20 Refuse Collection & Storage

Individual refuse stores have been provided to each building, with sufficient capacity in line with Reading's standards (i.e. 1no. 1100l per 5 apartments for general waste, and 1no. 1100l per 5 apartments for recycling).

These figures have since been updated in line with advice received from the LPA Waste and Recycling Department to include food waste bins and an overall quantum of bins in line with forthcoming policy changes.

Each of the stores are accessed directly from the central street within the scheme.



-  Refuse and recycling store
-  Refuse vehicle location



3.9 Comprehensive Development

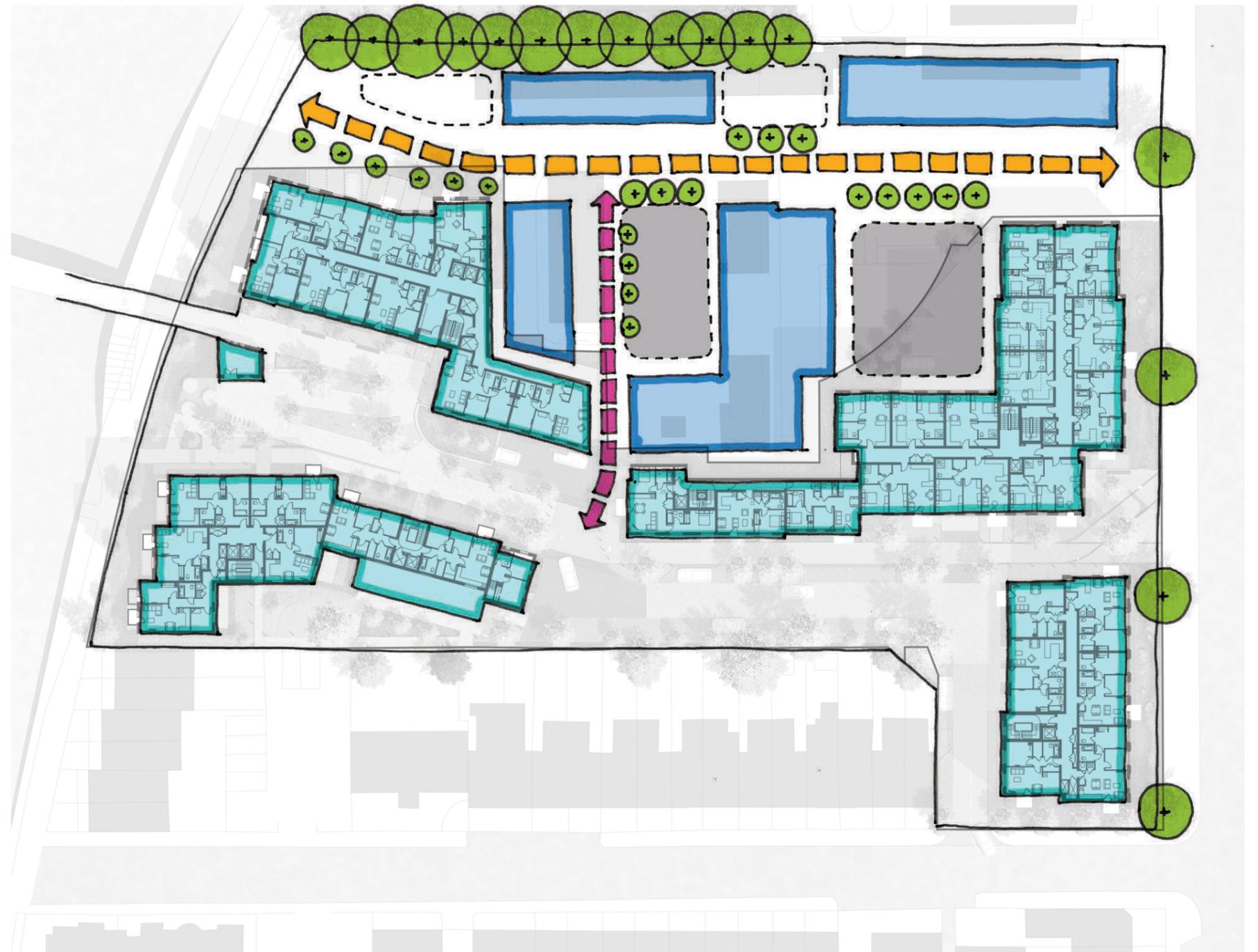
The existing SSE equipment is not proposed to be removed at any stage in the near future. However, for completeness, a comprehensive plan has been developed.

The existing SSE equipment provides a constraint to the proposed development, restricting building positions, and the provision of windows along the boundary between the two sites.

These restrictions allow future development to come forward should this be possible at a later date, as buildings would be able to closely back on to the proposed scheme.

The adjacent image demonstrates how this site could connect in to the proposed development through the provision of interlocking blocks creating a pair of courtyards along the middle of the combined site, and a pair of linear blocks along the eastern boundary.

-  New Towpath Access
-  Connection Between Schemes
-  Proposed Scheme
-  Future Scheme
-  Parking Courtyards



3.10 Wayfinding

A strong wayfinding strategy is about delivering a combination of design moves and signage, to aid navigation through a space or scheme.

As Vastern Road provides a key non vehicular movement route as per the local policy guidance. It is key that this route is clearly defined and provides easy navigation through the scheme, connecting to the wider movement network.

The scheme is proposing to use a combination of wayfinding tools.

Landmark Sculpture

An iconic piece that will be recognised and becomes a landmark for users of the route

Signage

Simple signage that is used to aid users at decision making points.

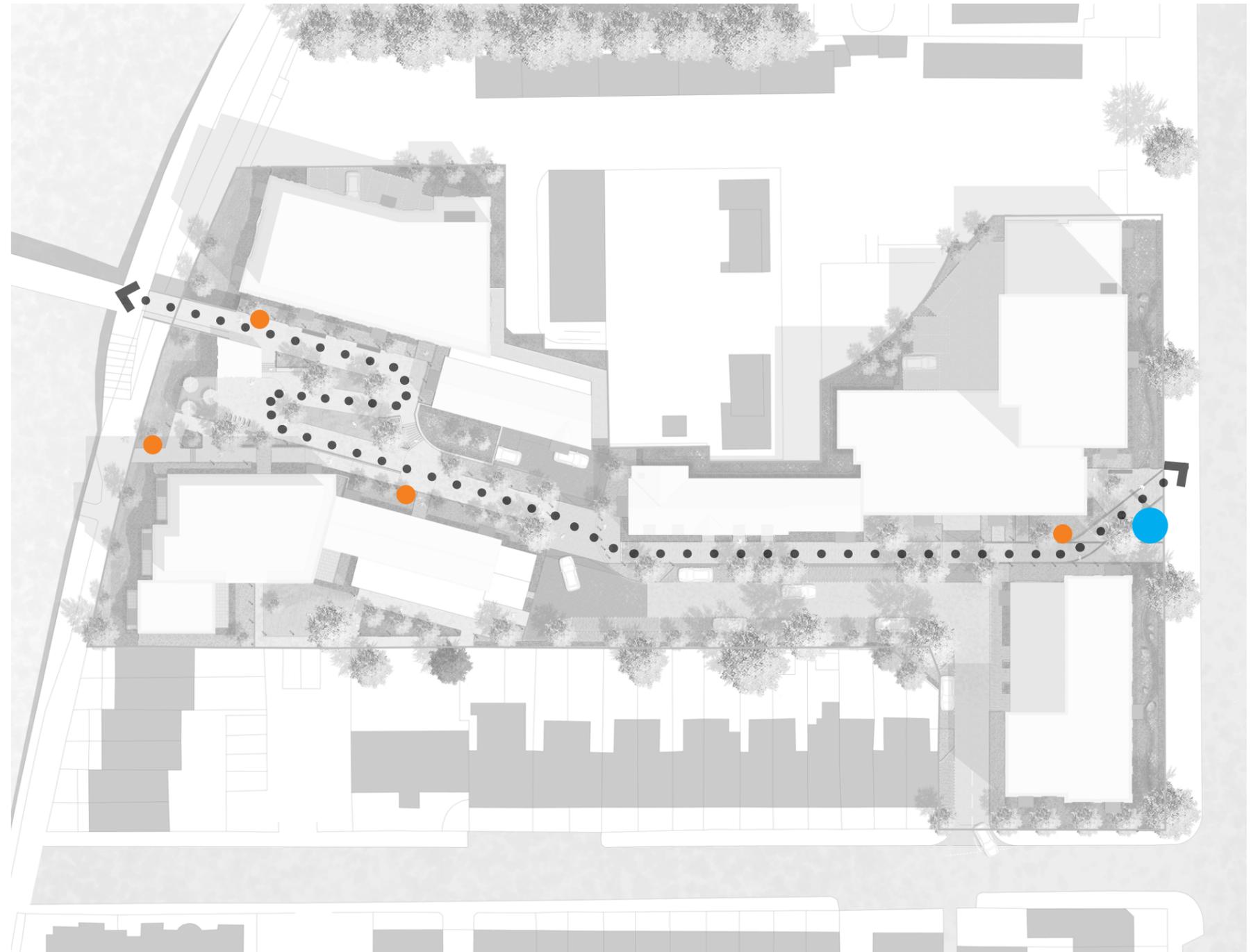
Route Markers

Opportunity to use inlay studs and paving details to reinforce the key route through the site to aid navigation

Design Details

These are elements that make are cues taken from the design of the scheme. For instance, using feature trees along a route; inclusion of details within the paving pattern; and the positioning of buildings to frame and deflect views and movement.

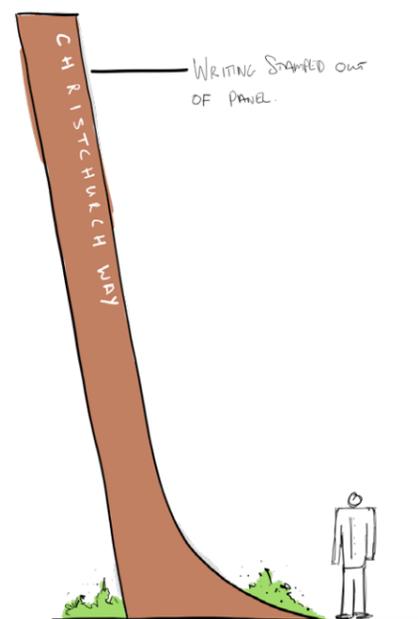
-  Landmark Sculpture
-  Signage
-  Route markers





Signage Post

Low key posts marking locations and directions



Gateway Sculpture

There is an opportunity to create an iconic gateway into the new scheme, that can become an integral part of the wayfinding strategy. The sculpture takes inspiration from the central spine on Christchurch Bridge, referencing the fins at the top and the opportunity to match the lighting scheme in the evenings. The piece could use more industrial materials to tie into the design theme for the scheme.

The shape of the sculpture is designed to draw your eye along and into the scheme. This natural movement created by the lower curve ties into the paving details that align with the route. There is also an aspiration to introduce further lighting along the route to create a subtle route marker at night time.

Gateway Sculpture

Sculpture intergrating wayfinding and lighting that responds to Christchurch Bridge



Route Markers

Paving inlays and metal route studs

3.11 Security

3.11.1 Introduction

The design of the scheme has evolved in response to the site characteristics and urban design principles.

The scheme has been assessed against the seven sections of 'Safer Places – The Planning System and Crime Prevention' below.

3.11.2 Access and Movement

'Places with well defined routes, spaces and entrances that provide for convenient movement without compromising security.'

The vehicular and pedestrian movement structure for this development is very simple and legible with a good level of natural surveillance throughout the north-south spine of the scheme. Active frontages, consisting of apartment core entrances, individual front doors and dwellings onto these movement routes and landscape spaces will create a safe environment.

3.11.3 Structure

'Places that are structured so that different uses do not cause conflict.'

The scheme is predominantly a residential-led scheme with ancillary facilities. A cafe is proposed in a stand-alone structure on the River Thames frontage, set away from the residential uses but close enough to benefit from natural surveillance. The cul de sac road format will deter unauthorised or casual traffic. Vehicular and pedestrian movement will be well overlooked so that activity will be readily monitored.

3.11.4 Surveillance

'Places where all publically accessed spaces are overlooked.'

Active frontages have been provided to the public routes and spaces and care has been taken to introduce windows to elevations where possible.

3.11.5 Ownership

'Places that promote a sense of ownership, respect, territorial responsibility and community.'

The boundaries between public, communal and private space are clearly defined to encourage users to feel a sense of ownership and responsibility for their surroundings. High fences, hedging and walls are used where appropriate to create secure barriers to the rear of dwellings and access to private and semi private communal areas will be protected by gates.

3.11.6 Physical Protection

'Places that include necessary well-designed security features.'

The physical security of the buildings will be designed and specified to comply with appropriate security and performance standards.

3.11.7 Activity

'Places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times.'

The provision of a range of apartment and building types and sizes will ensure that the development will comprise a mix of people of different ages, and lifestyles. This avoids a concentration of certain groups and ensures that public areas will be active for the greatest amount of time.

3.11.8 Management and Maintenance

'Places that are designed with management and maintenance in mind, to discourage crime in the present and the future.'

Care has been taken to create a good quality public realm which can be readily managed and maintained. The management company responsible for the public areas will ensure that a high quality of environment is maintained which will deter crime and anti-social behaviour.

-  Principle core entrances
-  Individual doors
-  Secure, gated access to private areas
-  Secure, gated vehicular access to undercroft parking areas
-  Natural surveillance from dwellings
-  Min. 1.8m high enclosure to public-facing boundary
-  Min. 1.8m high enclosure to private-facing boundary
-  Site boundary formed by existing buildings



3.12 Fire Strategy

3.12.1 Introduction

The scheme has been designed in accordance with Approved Document B volume 2, Approved Document Regulation 7 2018, and the detailed guidance within British Standard BS 9991-2015 "Fire Safety in the Design, Management and Use of Residential Buildings".

The following paragraphs set out the intended fire strategy for the scheme, which has been developed in conjunction with a fire engineering consultant.

3.12.2 Evacuation Strategy

Dwellings will follow the evacuation strategy outlined in Approved Document B and BS 9991. Where a fire is within a dwelling, the occupants of that dwelling will be expected to evacuate. Buildings will be constructed so that there is enough fire separation to protect neighbouring dwellings, allowing sufficient time for the fire and rescue service to intervene. Common corridors, stairs and lobbies will be provided with fire separation and smoke ventilation to allow access for fire fighters and the evacuation of residents.

3.12.3 Residential Accommodation

Most of the dwellings have been designed to be open plan. These dwellings follow the guidance of paragraph 9.7 of BS 9991 for open plan flats.

Automatic fire alarm and detection systems will be installed within each dwelling to Grade D LD1 BS 5839-6: 2019. Automatic sprinkler systems will be installed within each dwelling in accordance with the requirements of BS 9251.

The introduction of a residential sprinkler system allows for increases in travel distances from the dwelling entrance to the protected stair core from 7.5m to 15m and reduce the period of structural fire resistance to cores D and E from 90 to 60 minutes in accordance with BS 9991 tables 2 and 4.

3.12.4 Common Areas

BS9991 allow apartments to be served by a single stair accessed by a common lobby or corridor. As the top storey of most of the blocks are over 11m, the guidance in BS 9991 Figure 6 will be followed (see below).

Single Stair BS9991 Figure 6	
No Sprinklers	Single Direction
Unvented (separate vented stair lobby)	7.5m
Natural Smoke Ventilation	7.5m
Mechanical Smoke Ventilation	15.0m
Sprinklered Apartments	Single Direction
Unvented (separate vented stair lobby)	7.5m
Natural Smoke Ventilation	15.0m
Mechanical Smoke Ventilation	15.0m

Cores B2 and C are small single stair buildings with more than 2 apartments per floor, with open plan layouts. An unvented lobby will be provided where travel distances are less than 4.5m, and ventilation will be provided where travel distances are between 4.5m and 15m as sprinklers are provided within the apartments.

Core F is designed as a small single stair building with 2 apartments per floor accessed directly from the stair. Therefore, the guidance on travel distances does not apply.

There are no travel distance limitations within the stairs, or within ventilated stair lobbies. Natural smoke ventilation is described in BS 9991 section 14, and is provided by automatic or manual openings in external walls, smoke shafts or roofs.

3.12.5 Access and Facilities for Fire and Rescue

There will be a dry rising main located within each block, with the inlet being within 18m of a suitable fire-fighting vehicle parking area.

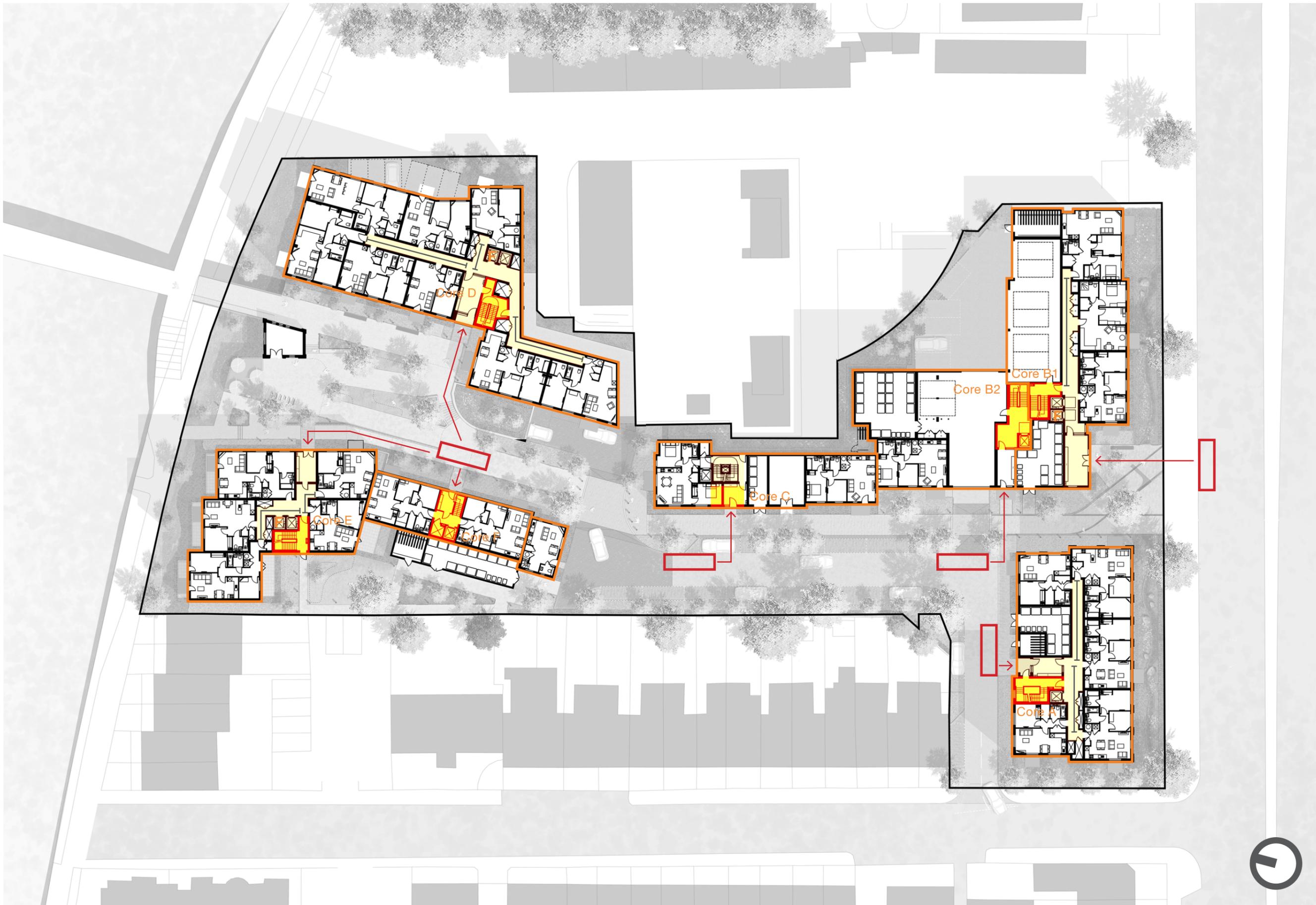
Fire-fighting stair and lift shafts will be provided to cores B1, D and E as the highest floors are greater than 18m from the ground floor.

Natural smoke shafts will be installed in accordance with BS 9991 to ventilate the common corridors. Ancillary accommodation and non-residential uses are at ground floor and will have external doors to provide ventilation and access. The car parking areas will be naturally ventilated.

A residential suppression system will be installed to all apartments in accordance with BS 9251.

Signage will be installed internally to aid the navigation of fire fighters in the event of an emergency.





3.13 Sustainability

Our goal is to create high quality homes with low environmental impact and great places where residents can enjoy a good quality of life, now and in the future. The proposed design and construction of the scheme at The Old Power Station, will incorporate many sustainability initiatives that will make a valuable contribution to the quality of life of new residents, the existing local community and the wider environment.

3.13.1 Sustainable Homes

For us environmental sustainability means managing and minimising the environmental impact from our operations and delivering homes and communities that are environmentally sound, as well as being designed and built to a high quality. We will be committed to sustainable and energy efficient development from recycling of construction and office waste to the use of sustainably sourced materials. The cornerstone of our approach is to reduce the resources used at the development during construction and occupation and enhance the site's ecological features and assets.

- Energy; we adopt a 'fabric first' approach, this is about designing new build homes with energy efficiency and sustainability in mind - from heating and lighting, down to the insulation used. 'Fabric First' includes an enhanced insulation which is used for the floors, walls, roofs and windows, which keeps more heat in. Each new build home has a high air-tightness target which means less heat is lost, making the home more energy efficient. Thereby, reducing the long term energy demands of the development and the carbon footprint of the site.
- Waste; all homes will be provided with internal recycling bins within the kitchen areas to encourage the segregation of waste, in addition to the required external bins. We commit to minimising the impact that development has on its surroundings. As a continuation of this professional view in construction we aim to reduce construction waste by 10% and re-use or recycle at least 90% of total waste produced on site.
- Water; water reduction methods will be implemented, such as dual flush WC's and flow regulated taps and showers.

Encouraging all residents to reduce their environmental impacts by providing information on how to use water and energy as efficiently as possible, and outlining the recycling services both within the homes, the local community and other facilities in the Borough.

- Materials; we believe longevity and quality of appearance are key to any development and therefore we choose high-quality natural materials that require reduced maintenance.

3.13.2 Sustainable Places

- Ecology and Biodiversity; we have a commitment to create a net biodiversity gain on the site. A specialist ecologist has been appointed to calculate the site baseline from the existing habitats present following a phase 1 habitat survey. To ensure that the site design will generate a net gain for biodiversity. The designs have been discussed with the ecologist and appointed landscape architect to determine what habitat can be incorporated. We will improve existing habitat features via supplementary planting and introducing new habitat features, such as bird and bat boxes. Our methodology is based on the Warwickshire County Council and Environment Bank calculator and uses the Defra biodiversity offsetting metrics. It has been compiled by Waterman Consultants Ltd.
- Facilitating Thriving Communities; we have developed a methodology for measuring and increasing people's quality of life. Our tool-kit, Creating Successful Places, has been referred to during the design of this development with a focus on amenities and infrastructure, voice and influence and social and cultural life. A workshop has been undertaken with an external consultant to make further improvements to the plans for the site and specific actions have been developed to try and facilitate a thriving community at this site.
- Climate Change Adaptation; we also focus on the long-term, considering future climate change impacts and incorporating appropriate climate change adaptation measures in the development. This includes the use of infiltration trenches and both wet and dry Sustainable Urban Drainage Systems to naturally attenuate and infiltrate any surface water run-off.

The use of these drainage systems will help to improve water quality, enhance the biodiversity and provide new amenity and recreation spaces.

- Sustainable Transport; good access to public transport is key to creating a sustainable place. By improving the safety of adjacent junctions and introducing pedestrian crossing will improve the sites connectivity and therefore encourage residents to use more specifically the public bus that route follows the perimeter of the site. Electric car charging will be provided on site, including one visitor and one private space. In addition cycle storage will be provided as previously stated.

3.13.3 Sustainable Operations

In addition to specific features being incorporated into the homes and wider development, we have a commitment to operating as a sustainable business.

The Old Power Station will be registered with the Considerate Constructors Scheme, which aims to improve the image of construction. Registering the site with the scheme throughout construction is our commitment to promoting and achieving best practice in the following areas; Enhancing the Appearance, Respecting the Community, Protecting the Environment, Securing everyone's Safety and Caring for the Workforce. The project team will work to achieve a minimum of 38/50 points in every site audit.

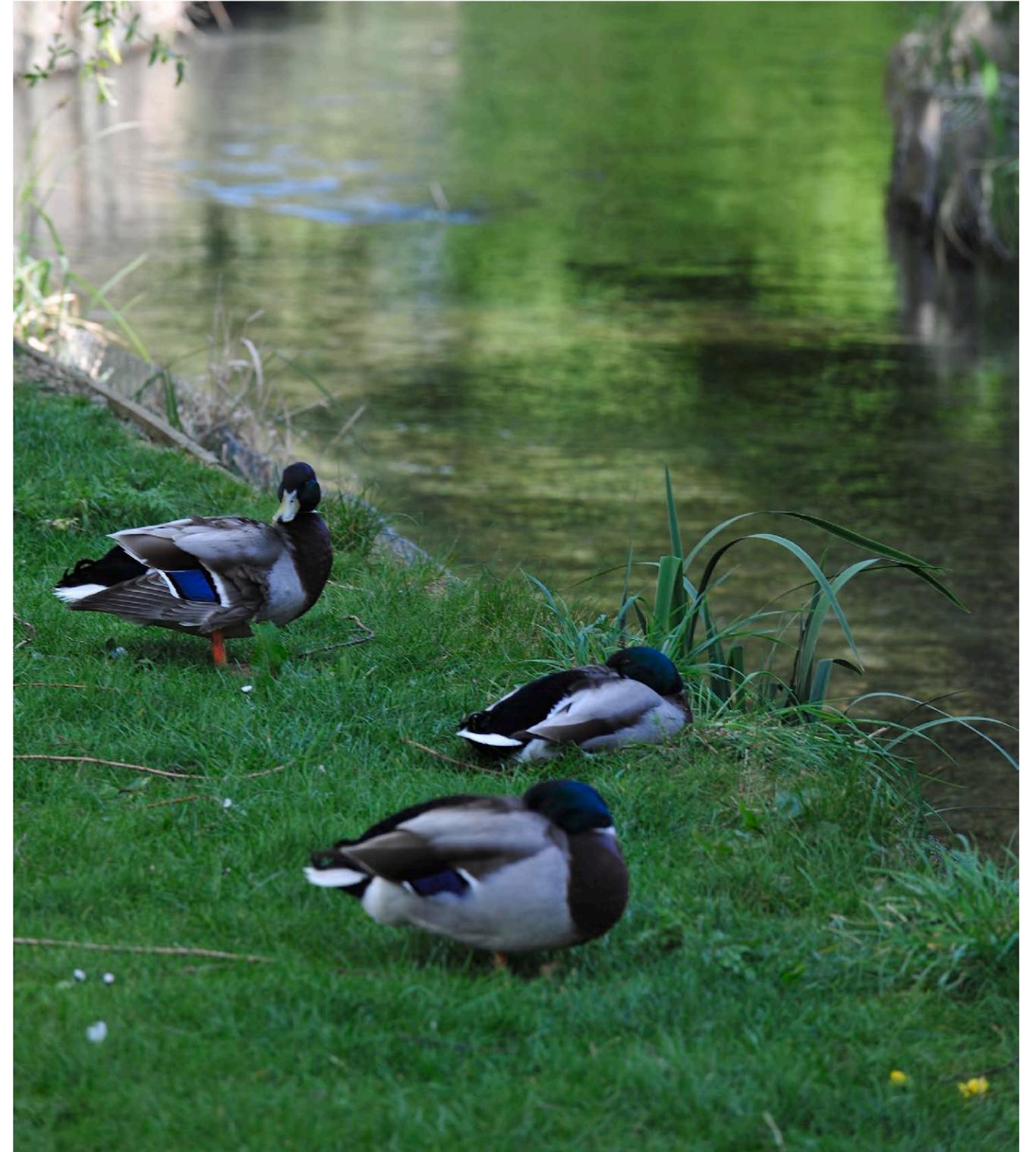
Our internal team of dedicated sustainability practitioners will undertake regular site sustainability audits, at least one every three months.

The site will use resources efficiently, in line with our internal Sustainability Management System procedures. This includes ensuring the site set up is efficient and completing check-lists during the construction phase on energy minimisation. This supports our broader corporate aim of becoming a Carbon Positive company.

Materials used within the development will be procured in accordance with our Sustainable Procurement Policy, including the use of certified timber.

There will be a focus towards apprentices and training. We promote and encourage apprenticeships and training from the initial set up of our sites. Below are some key points of how this process is managed:

- We promote youth employment and apprenticeships through the tender process. This information is requested to appointing a contractor. Companies not currently training or employing apprentices are given negative feedback on their tender returns.
- Relationships with on local schools, colleges and employment agencies have been built through various meetings and engagement events such as careers fairs and guest presentations from volunteers in our division.
- We monitor apprentice and training numbers on a monthly basis for our directly employed staff and contractors. Where numbers are below site targets, we work hard to engage with our supply chain and increase numbers.



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