

# 9.1 AFFORDABLE HOUSING TENURE MIX

In terms of tenure split, all London Affordable Rent units are contained within Core 1.

Shared ownership units are located in Core 2 and on 1st floor of Core 3.

### TENURE KEY

|  |                        |    |
|--|------------------------|----|
|  | LONDON AFFORDABLE RENT | 21 |
|  | SHARED OWNERSHIP       | 35 |
|  | MARKET                 | 56 |

1st FLOOR



2nd FLOOR



3rd FLOOR



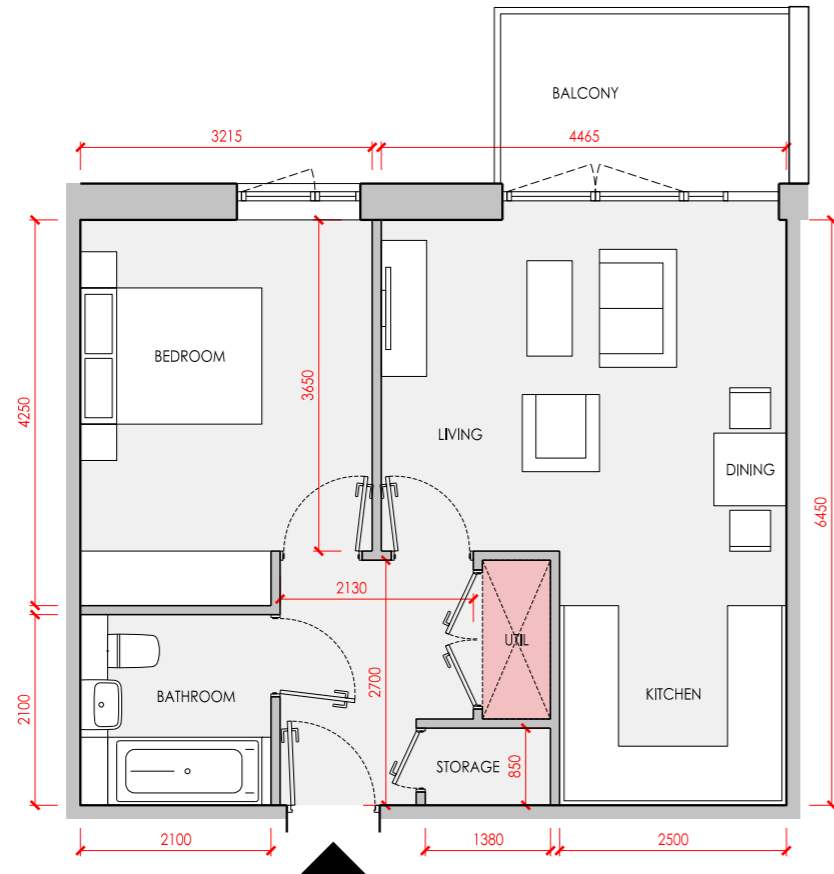
4th FLOOR





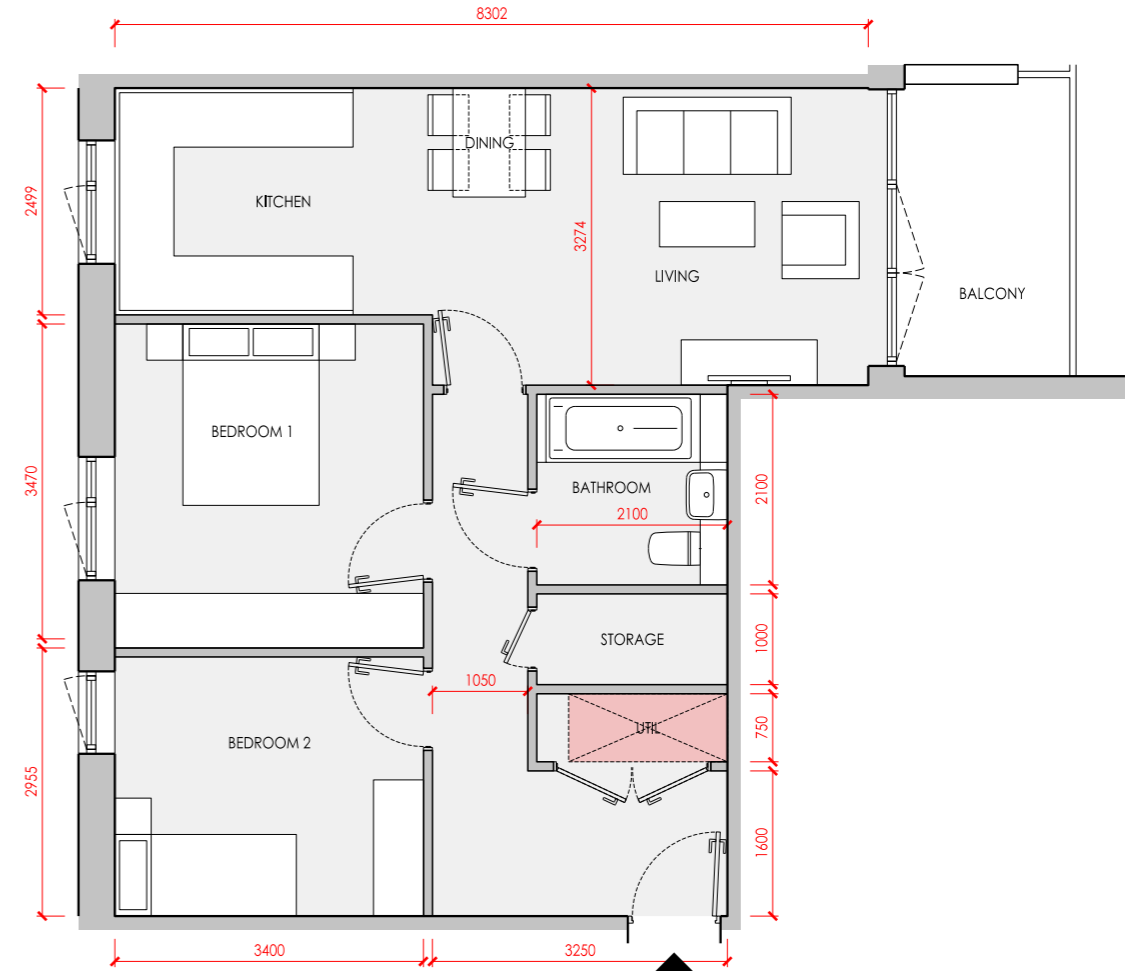
## 9.3 RESIDENTIAL UNIT TYPOLOGY

**1A** 1 BEDROOM FLAT  
TYPE A  
area 50.2 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 23.9 m <sup>2</sup> |
| BEDROOM                   | 13.0 m <sup>2</sup> |
| STORAGE                   | 1.7 m <sup>2</sup>  |
| AMENITY                   | 6.2 m <sup>2</sup>  |

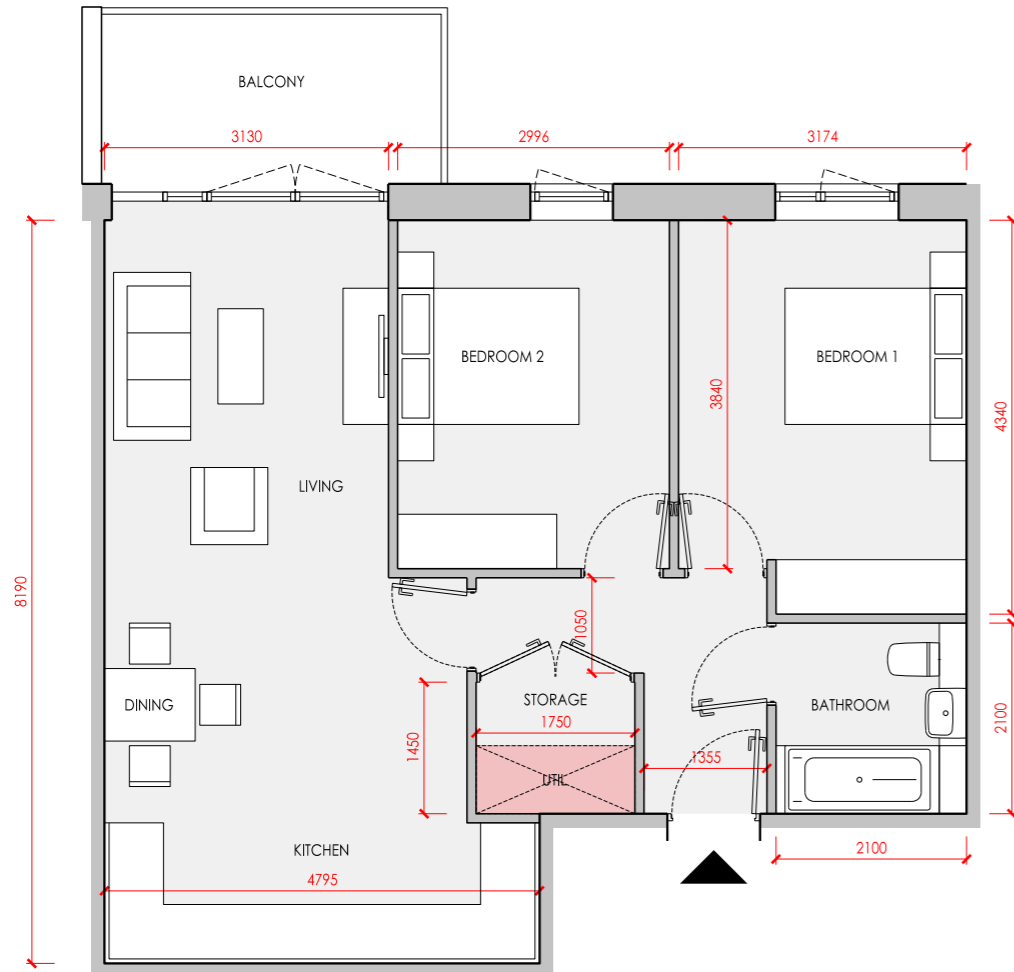
**2C** 2 BEDROOM FLAT  
TYPE C  
area 66.7 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 25.1 m <sup>2</sup> |
| BEDROOM 1                 | 12.0 m <sup>2</sup> |
| BEDROOM 2                 | 10.2 m <sup>2</sup> |
| STORAGE                   | 2.1 m <sup>2</sup>  |
| AMENITY                   | 6.1 m <sup>2</sup>  |

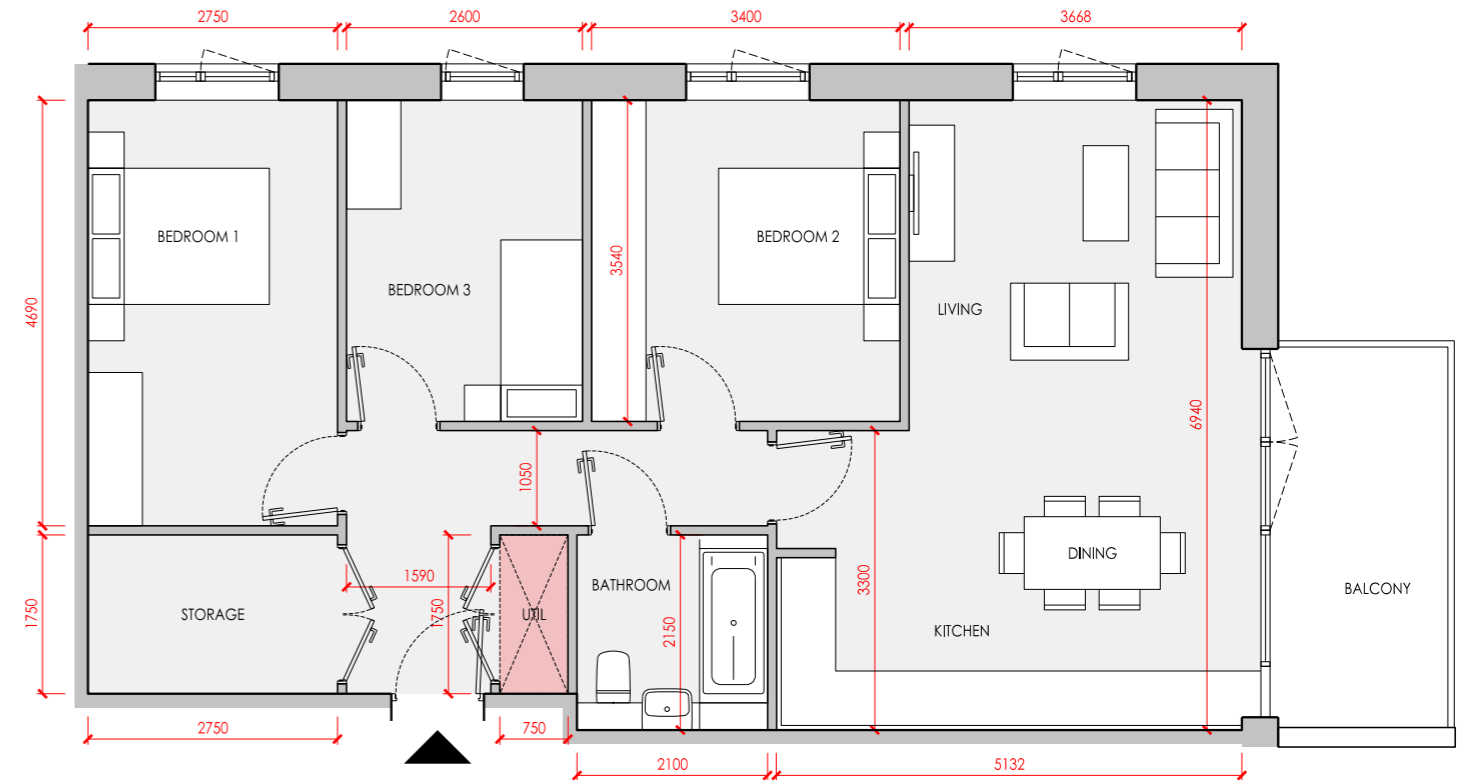
### 9.3 RESIDENTIAL UNIT TYPOLOGY

**2A+** 2 BEDROOM FLAT  
TYPE A+  
area 70.0 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 31.2 m <sup>2</sup> |
| BEDROOM 1                 | 13.2 m <sup>2</sup> |
| BEDROOM 2                 | 11.5 m <sup>2</sup> |
| STORAGE                   | 2.5 m <sup>2</sup>  |
| AMENITY                   | 7.1 m <sup>2</sup>  |

**3A** 3 BEDROOM FLAT  
TYPE A  
area 86.1 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 31.1 m <sup>2</sup> |
| BEDROOM 1                 | 12.9 m <sup>2</sup> |
| BEDROOM 2                 | 12.0 m <sup>2</sup> |
| BEDROOM 3                 | 9.2 m <sup>2</sup>  |
| STORAGE                   | 4.8 m <sup>2</sup>  |
| AMENITY                   | 8.2 m <sup>2</sup>  |

## 9.4 WHEELCHAIR ACCESSIBLE UNITS

The proposal is providing 11 wheelchair accessible flats (which is 10% of overall number of residential units in the scheme).

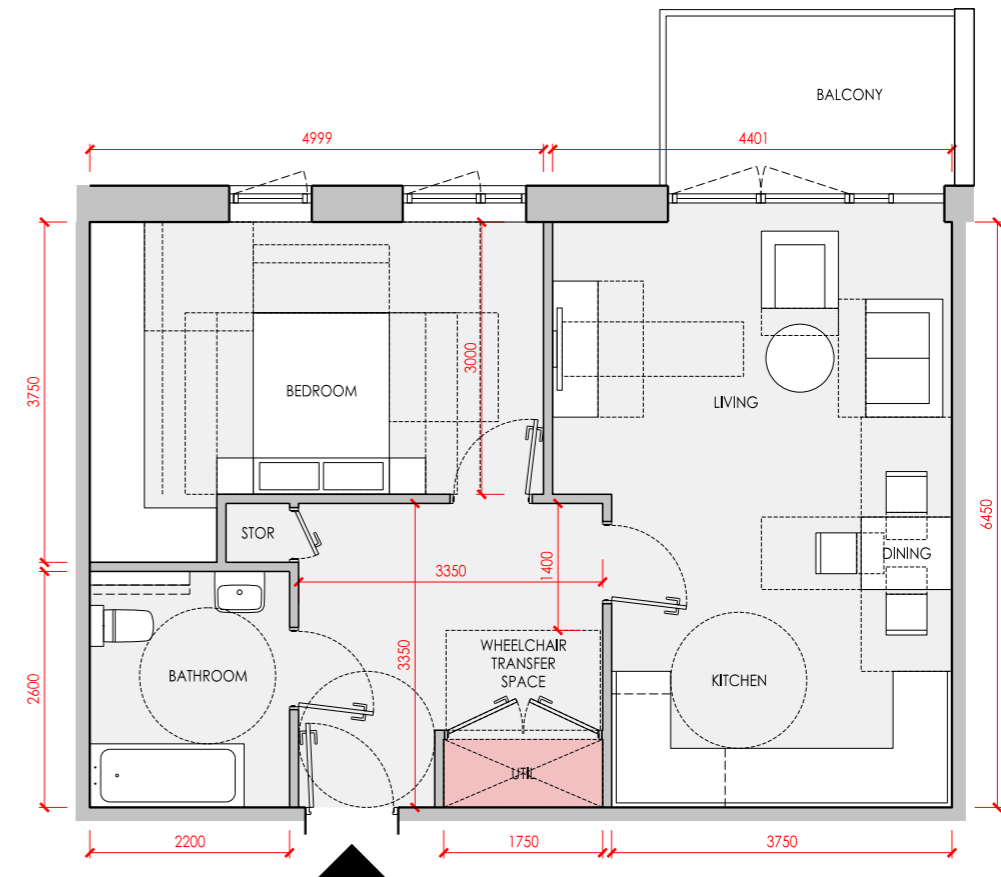
All accessible flats are located on the 1st floor of Block 1 and have level access to the podium deck. This way, they can take advantage of podium access to lifts in other cores, in the event that a lift in their core is out of service.

The proposed accessible units are spread across all three tenure types.

All wheelchair accessible flats comply with Building Regulations Part M4(3).



**W1** 1 BEDROOM WHEELCHAIR ACCESSIBLE FLAT  
area 61.3 m<sup>2</sup>

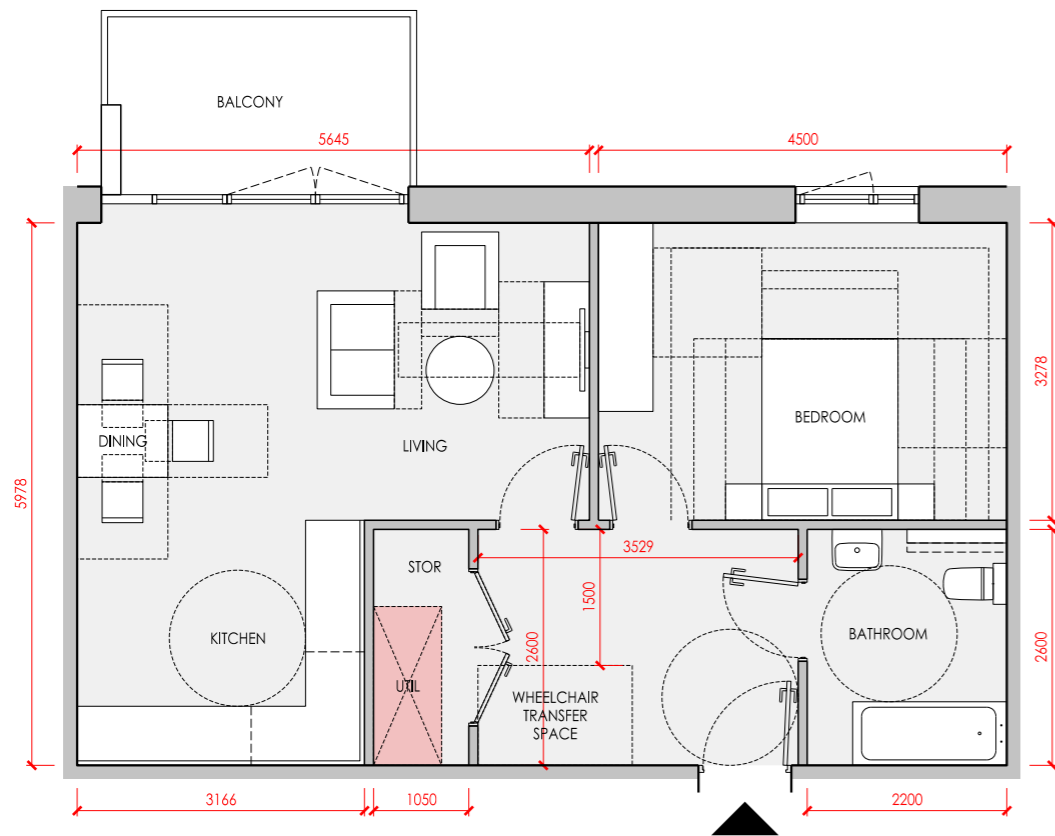


| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 26.1 m <sup>2</sup> |
| BEDROOM                   | 16.0 m <sup>2</sup> |
| STORAGE                   | 2.5 m <sup>2</sup>  |
| AMENITY                   | 6.2 m <sup>2</sup>  |

# 9.4 WHEELCHAIR ACCESSIBLE UNITS

**W2**

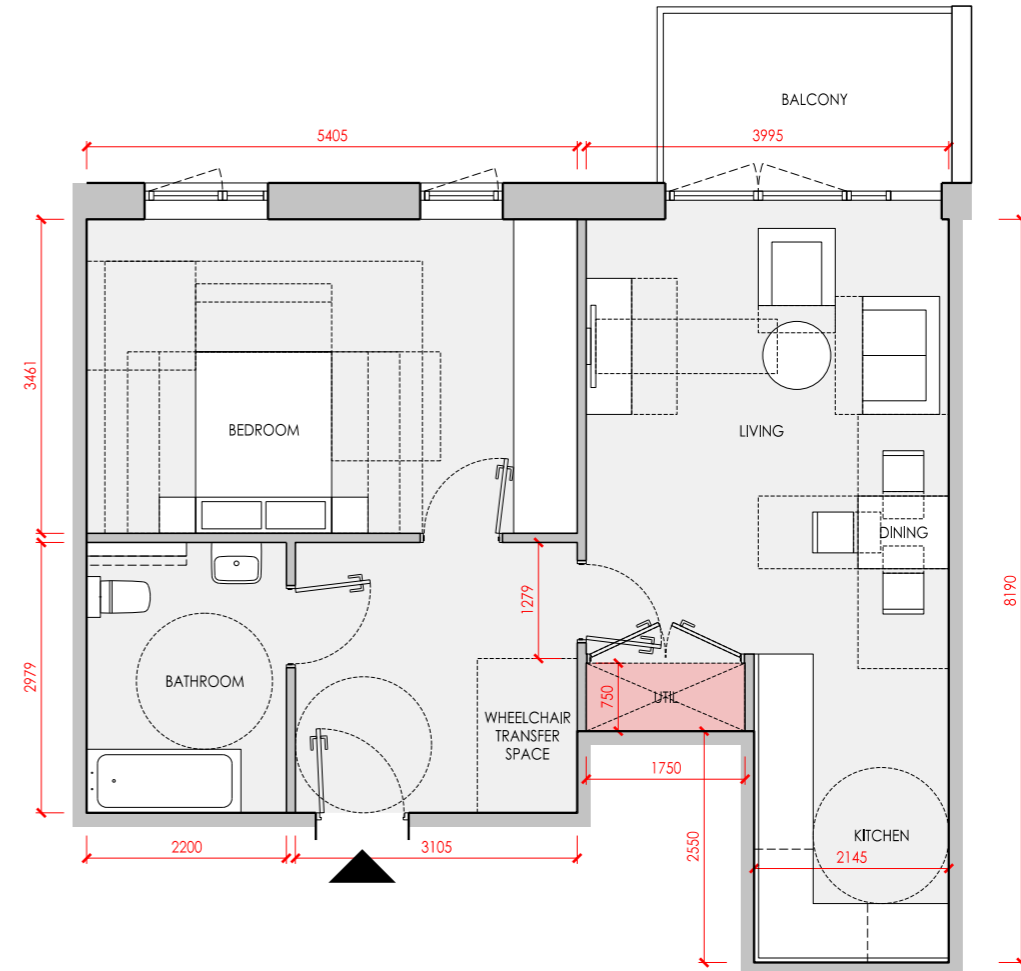
1 BEDROOM  
WHEELCHAIR ACCESSIBLE FLAT  
area 61.2 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 27.0 m <sup>2</sup> |
| BEDROOM                   | 14.7 m <sup>2</sup> |
| STORAGE                   | 1.9 m <sup>2</sup>  |
| AMENITY                   | 6.3 m <sup>2</sup>  |

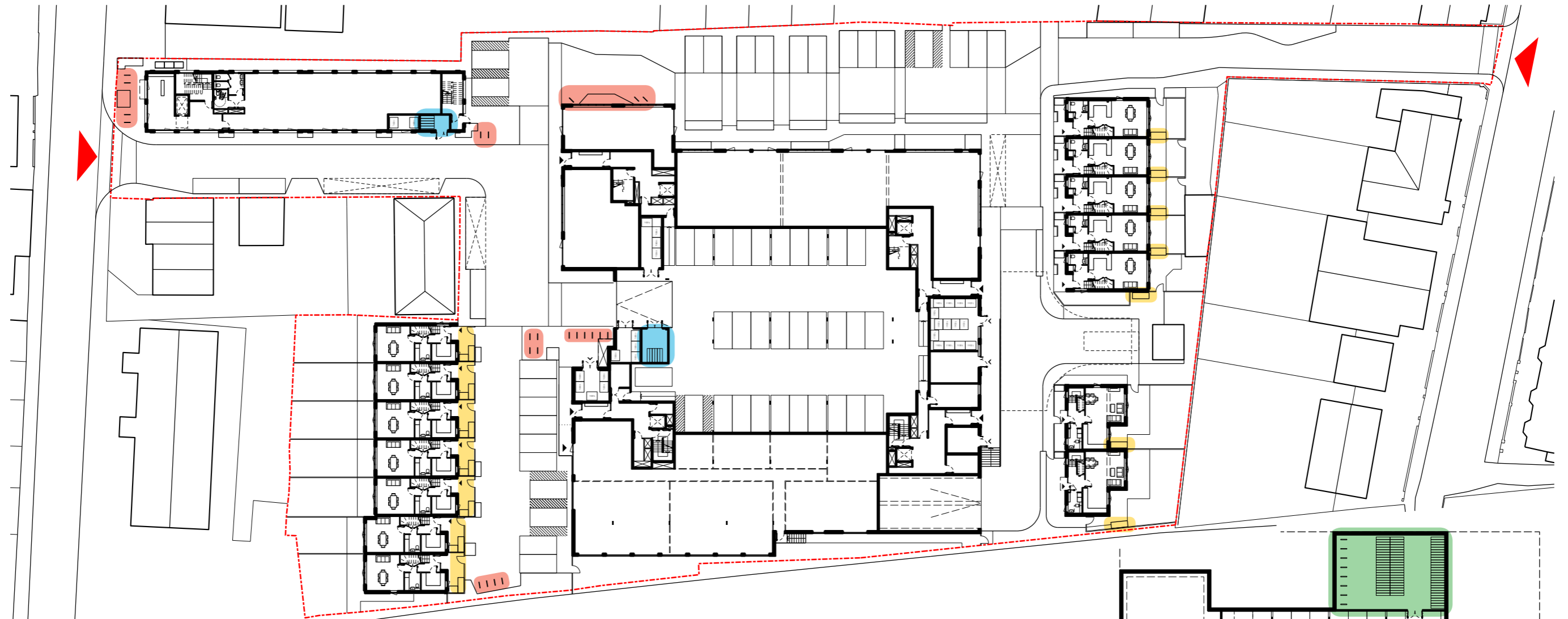
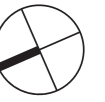
**W3**

1 BEDROOM  
WHEELCHAIR ACCESSIBLE FLAT  
area 63.9 m<sup>2</sup>



| ROOM                      | AREA                |
|---------------------------|---------------------|
| LIVING + DINING + KITCHEN | 26.4 m <sup>2</sup> |
| BEDROOM                   | 18.7 m <sup>2</sup> |
| STORAGE                   | 1.6 m <sup>2</sup>  |
| AMENITY                   | 6.2 m <sup>2</sup>  |

# 9.5 CYCLE STORAGE STRATEGY



### Long-stay

Residential long-stay cycle storage is located within basement car park, in separate lockable storage rooms, utilising double-stacking storage racks as well as standard Sheffield stands. There are 172 spaces in total, 8 of them are accessible.

Cycle storage for houses is provided within private gardens in dedicated storage sheds, providing two bike spaces for each house.

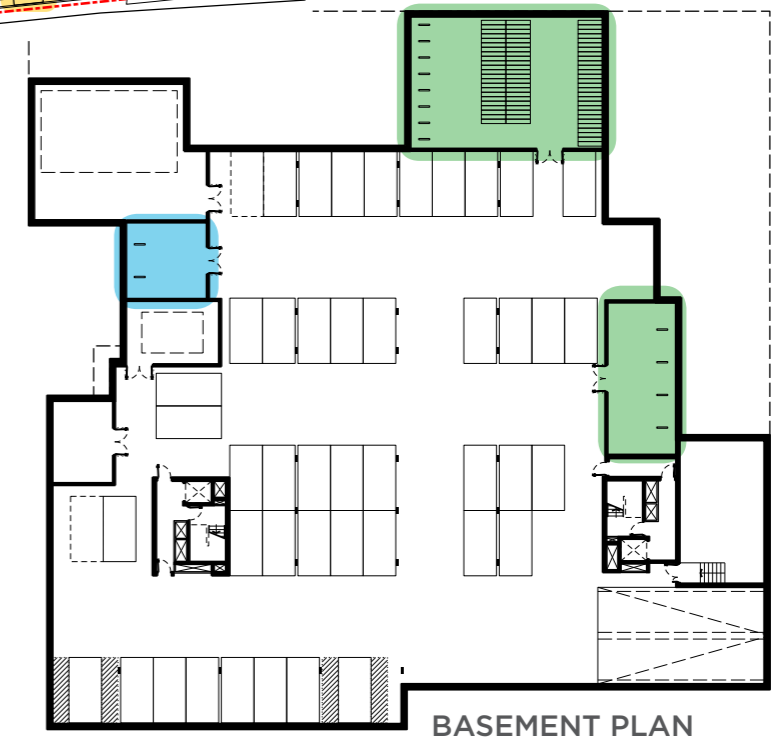
There are 26 commercial spaces located in dedicated stores on the ground floor level of Blocks 1 and 2, as well as in the basement of Block 1. 12 of them utilise double racks, 4 are accessible.

### Short-stay

There are Sheffield stands located throughout the site catering for residential and commercial short-stay requirements. For details, refer to section 6.5

### KEY

| LONG-STAY CYCLE STORES          | STD | ACC | SUM |
|---------------------------------|-----|-----|-----|
| RESIDENTIAL - HOUSES            | 56  | -   | 56  |
| RESIDENTIAL - FLATS             | 164 | 8   | 172 |
| COMMERCIAL                      | 22  | 4   | 26  |
| <b>SHORT-STAY CYCLE PARKING</b> |     |     |     |
| SHEFFIELD STANDS                |     |     |     |



# 9.6 REFUSE AND DELIVERY STRATEGY



**KEY**

- SUB-STATIONS SERVICING BAYS
- FLATS REFUSE STORES
- HOUSE REFUSE STORAGE
- COMMERCIAL REFUSE STORES
- COMMERCIAL AND RESIDENTIAL SERVICING BAYS

### Refuse and recycling

There are three residential refuse stores within Block 1 to minimise travel distances from each core.

Additionally, there are two separate bin stores in each block dedicated to commercial refuse.

Each house has an individual refuse storage located in the front garden.

### Council Requirements

(LBRuT Refuse and Recycling Storage Requirements SPD, April 2015)

#### HOUSES (3 BED)

Refuse - 240 litres  
 Recycling - 2x 55 litres | these will be provided in each front garden

#### FLATS

Refuse - 70 litres per bedroom  
 Recycling - 2-6x 1100 l bins depending on number units using bin store

#### COMMERCIAL

Refuse - 1300 litres per 1000 m<sup>2</sup> GIA  
 Recycling - 1300 litres per 1000 m<sup>2</sup> GIA

### Servicing

There are two loading/servicing bays on each side of Block 1 to cater for commercial and residential requirements.

Additionally, dedicated servicing zones have been provided for the existing and proposed sub-station.

### BINS CALCULATION

#### FLATS

|          | units | beds | refuse   | recycling |
|----------|-------|------|----------|-----------|
| Core 1   | 21    | 44   | 3x 1100l | 2x 1100l  |
| Core 2+3 | 61    | 85   | 6x 1100l | 6x 1100l  |
| Core 4   | 16    | 25   | 2x 1100l | 2x 1100l  |

#### COMMERCIAL

|         | GIA [m <sup>2</sup> ] | refuse   | recycling |
|---------|-----------------------|----------|-----------|
| Block 1 | 1172.2                | 2x 1100l | 2x 1100l  |
| Block 2 | 892.6                 | 1x 1100l | 1x 1100l  |



1100 litre wheellie bins will be used



## 9.7 SERVICING STRATEGY

This strategy has been produced in order to demonstrate how the site will be served in order for residents to live comfortably and ensure that the development is kept in good repair.

The strategies outlined below have been formed on the basis that the development will be unmanned, with the costs incurred with servicing the site being recovered from residents, via payment of the annual service charge.

### Postal

Individual externally secure post boxes for all 98 flats will be located within the ground floor lobby of each core.

In line with the guidance provided by the Crime Prevention Officer and by Royal Mail, the postman will gain access to each block via a programmed fob, with access restricted to the ground floor only.

The postman will be responsible for the distribution of mail to each post box.

### Window cleaning

As each unit has the benefit of an external balcony, all residents will be able to clean external opening doors and windows independently.

The windows/doors which can not be accessed internally (i.e. stair core windows), will be cleaned by the facilities management team every quarter.

Due to both residential and commercial blocks being medium-rise there is no requirement for a building maintenance unit.

A hose and pole cleaning strategy can be implemented at ground level to clean the lower levels.

ManSafe system has been provided to allow for abseiling methods to clean the upper floors, which will be inspected in line with health and safety requirements.

### Parking management

To prevent unauthorised parking by residents with multiple cars, all units will be provided with an assigned parking space.

### Groundskeeping

The facilities management team will be responsible for undertaking the following actions:

- Sweeping and litter picking
- Mowing of grassed areas
- Clipping and pruning of trees, hedges and shrubs
- Replacement of external light bulbs
- Re-planting (if required)
- Cleaning of bin stores

Dependant on seasons and weather conditions, as a minimum the above will be undertaken once a month.

### External and internal maintenance

Internal and external maintenance will be reviewed annually by the management team and when required will be responsible for the procurement of maintenance services.



## 9.8 SECURED BY DESIGN

### Integrated Approach

In preparing the layout, priority has been given to creating well lit public open spaces which can accommodate multiple uses, e.g. movement, recreation and parking. The lighting scheme will be designed to BS 5489, ensuring that good light levels are provided to all external highways, footpaths, communal and commercial seating areas, parking bays, doorways, storage rooms and internal circulation points. Consideration of crime prevention at the outset will avoid the need for installing physical measures at a later date.

### Natural Surveillance

Clearly defined private defensible space has been provided to all houses and podium apartments through the use of planting and hedges.

All glazing to ground floor units and common ground floor glazed areas will have 6.4 mm laminated glass installed. Communal doors serving residential accommodation will comply with enhanced security specification PAS 24.

### Open space and management

Public open spaces will be surrounded by apartments with principal frontages, therefore maximising natural surveillance.

### Secured by Design review

The meeting with Secured by Design officer, Constable Ray Goodlett, was held on site on 17 September 2019.

The proposal was very well received and Mr Goodlett confirmed that the design in its current form has good potential to make the site self-policing.

Mr Goodlett has also made the following detailed observations:

- All 4 x communal entrances to the flats will have an airlock (as per the plans), with the front door to each core achieving LPS1175:SR2, the inner door can be an FD60, both doors to have an access controlled audio and video entry system.
- The 1st floor podium amenity space to have an access control system installed, an thumb turn on the inside is acceptable.
- Due to the permeability of the site, due diligence will have to be shown to the site being used as a cut through from Holly Road to Windmill Road.
- Lighting scheme to be confirmed.
- Bin and postal strategy is acceptable
- Bike storage within the car park to be within a brick built building with an LPS1175:SR2 rated door.
- All Town houses & flats to have a PAS24:2016 door with 3rd party test certification fitted to the front entrance.
- All other accessible doors and windows to be PAS24:2016 with 3rd party test certification
- SMART meters to be installed for both electricity and gas.



# 9.9 M&E STRATEGY










Electrical strategy: Existing sub-station to be retained. New sub-station to be provided in an individual building to the south of the site, with dedicated servicing bay in the front. Switch rooms for Block 1 to be located on the Ground Floor level.

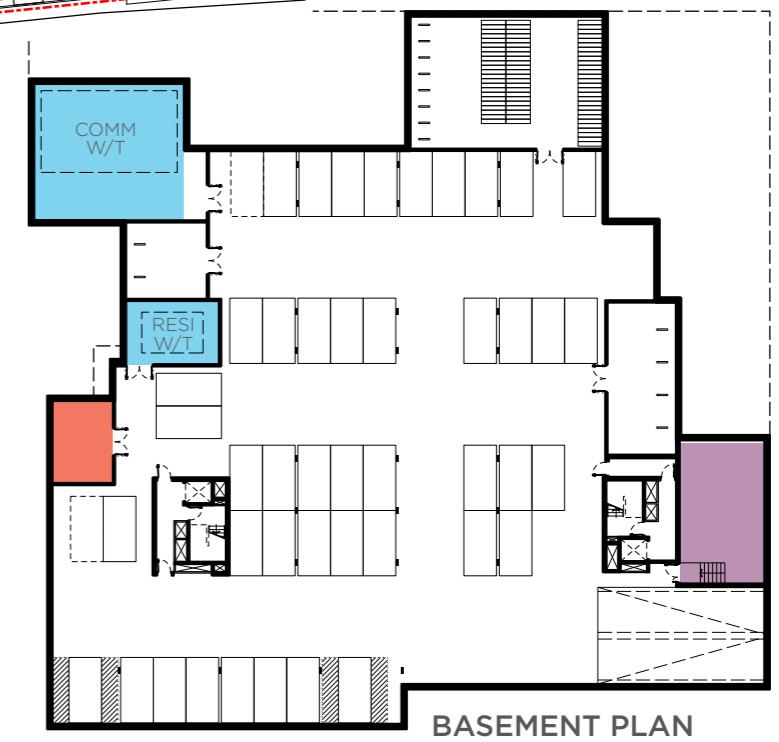
Heating strategy: All commercial and residential units will have electrical heating provided by ASHP system located on the roof.

The commercial units will be heated via reverse-cycle heat pumps that will also be used to provide comfort cooling. Condenser units for Block 1 will be located on floor 4 roof level. Condenser units for Block 2 will be located to the east of the block.

Both basement and ground level garages to have mechanical smoke extract, located in dedicated rooms.

Water tanks for both commercial and residential element to be located in a dedicated room on the basement level.

| KEY   |                            |
|---|----------------------------|
|  | ELECTICAL SUB-STATIONS     |
|  | GARAGE SMOKE EXTRACT ROOMS |
|  | GENERATOR ROOM             |
|  | SWITCH ROOMS               |
|  | A/C CONDENSER UNITS        |
|  | WATER TANK ROOMS           |
|  | PLANT ROOM                 |



**BASEMENT PLAN**

## 9.10 ENERGY AND SUSTAINABILITY STRATEGY

### Energy assessment summary

Silcock Dawson and Partners have been appointed by Notting Hill Genesis to provide an Energy Assessment for the proposed new development at St Clare Business Park, Richmond. This Energy Assessment is submitted as part of an application for full planning consent.

The dwellings occupy the majority of the floor area and will be designed to be energy efficient and incorporate the following key features:

1. The annual heating demand will be reduced by using insulation values better than the Notional Building, internal walls and floor slabs between the conditioned spaces and unheated internal spaces such as the residential entrance lobbies and refuse stores will be insulated. The target air permeability is 3.0 m<sup>3</sup>/hr/m<sup>2</sup>.
2. The dwellings will have a balanced ventilation system with heat recovery and automatic summer bypass.
3. The dwellings will be provided with 100% low energy luminaires.

The commercial units will also be provided with energy efficient LED lighting with daylight compensation controls where appropriate, in addition fabric U-values will be better than the Notional Building values.

The London heat map has been consulted, and it is noted that the site is not close to an existing heat network and is over 700m away from the edge of the nearest heat map study area.

The site is within a developed suburban area with a large number of terraced and semi-detached houses. The London heat map identifies the site location within an area of low heat density, it is therefore unlikely that a district heating network will be extended to development.

However, a communal heating system is proposed for the apartments, comprising a roof-mounted air source heat pump. The heat pump will be sized to ensure continuous operation and meet 100% of the annual heat demand.

As it is unlikely that a district-wide heating system will be implemented, it would be more efficient to serve the houses from individual heat pump systems, because of the higher distribution losses that would be expected from the increased pipework necessary at smaller pipe sizes.

The commercial units will be heated via reverse-cycle heat pumps that will also be used to provide comfort cooling.

A large PV array will be mounted on the roof of Block 1, with all power generated directed to the residential landlord supply. The total PV capacity for the development is predicted to be 67.2 kWp.

The energy efficiency measures reduce the residential emissions by 11%, with a further 36% reduction from the heat pumps serving the dwellings plus a 9% reduction from the photovoltaic panel installations, resulting in a total CO<sub>2</sub> reduction of 45% or 55 tonnes when SAP 10 emission rates are applied.

The energy efficiency measures from the commercial units are greater at 18%, with a further 22% reduction from the air source heat pump installations.

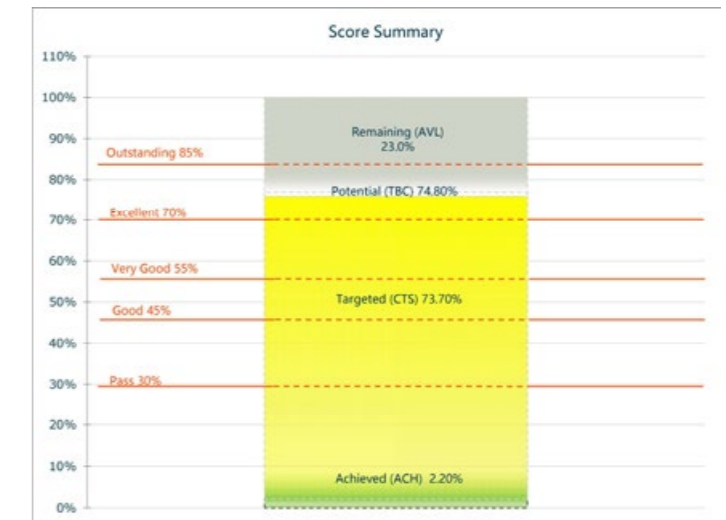
The total CO<sub>2</sub> reduction as a result of the energy efficiency measures across the whole development is predicted to be 18 tonnes CO<sub>2</sub> or 12% below the baseline model, with a total emissions reduction of 78 tonnes or 54% once renewable energy measures are incorporated.

Following a review of the relevant National and Local Planning Policies, this Energy Assessment proposes a strategy that positively responds to Policy 5.2 of the London Plan 2021, Policy SI2, SI3 of the London Plan 2021, and Policy LP22 Sustainable Design and Construction of the London Borough of Richmond upon Thames Local Plan (2017).

The zero carbon homes CO<sub>2</sub> offset payment is calculated to be £188,056 based on £95.00 / tonne over a 30 year period.

### BREEAM pre-assessment summary

The project currently targets a score of 73.7% which equates to an EXCELLENT rating and the minimum standards to achieve this rating have been met.





ARCHITECTURE /  
BUILDING CONSULTANCY  
/ URBAN DESIGN &  
MASTERPLANNING  
/ ADVANCED DESIGN /  
LANDSCAPE / INTERIORS  
/ IMAGING