### 4. DESIGN STRATEGY

#### 4.1 Principles of Development

The proposed development has a clear and high aspiration to delivering a sustainable development in this location. The principle of the development is to create an energy efficient, ecological and affordable design of high architectural quality that would contribute to a regeneration of Stirchley.

Pursuant to this vision, and apart from a few disabled car spaces, the scheme would be non-vehicular, promoting sustainable modes of transport. This is consistent with the city's long term vision of achieving a sustainable city and promoting a healthy live and work life style.

The scheme also intends to bring together three key social enterprise retails that are currently growing succesfully into one complex that is capable of expanding their businesses and serving the community around Pershore Road.

The proposed development aspires to create an example building using local modular technolgy and setting a gateway landmark to the regeneration of Pershore Road as a whole.

#### 4.2 Tenancy

Stirchley Co-operative Development are very focused in the type accommodation they intend to provide. This is clearly specified in their future tenacy agreements in which all the future tenants will only use cycles and public transport as modes of transport. Prospective tenants with car ownership will not be eligible for accommodation.

### 4.3 Off-Site Manufacturing

The proposed development is designed on the basis of off-site fabricated modular panel systems. The closed panel system is manufactured at the Local Homes factory in Airfield Drive, Walsall.

The modular timber frame construction in which the proposals will be built delivers low carbon footprints, reduction of on-site wastage and high technical performance as the panels are constructed in internal, controlled, environments free of inclement weather.



Fig 14 - LoCal Home off-site manufacturing modular system.

#### 4.4 Key Design Principles

Local Plan Policy CP3 requires high standards of design for buildings and spaces that contribute to meeting the city's vision.

The proposed site is located at a gateway locaton into the central Birmingham city's transport network. The proposal has been based on the principles of relinking Pershore Road and framing the proposal as focal point.

The scheme enhances the visual prominence of the retail component through views in from the street and creates accomodation with good visibility along the Pershore Road.

#### 4.5 Evolution

The development of the layout has occurred through a series of design, appraisal and feasibility proposals which have resulted in continuous built frontages along Pershore and Hunts Roads.

A number of proposals of building form were considered, beginning initially with a U-shaped building having an enclosed internal courtyard. However, upon appraisal and further consultation with the developer, this was finally resolved to an L-shaped form addressing both highways which bound the site.

#### 4.6 Design and Appearance

The proposals draw inspiration from the existing architecture in the area. Whilst this is varied depending on different building types and historical periods, red brick and render are repetitive features. Dwellings are designed in a traditional style having predominantly duo pitched roofs, finished with plain or bold roll tiles, and chimneys. Windows are apparent as white UPVC.

Other architectural forms within the wider context in Stirchley are commercial. These follow contemporary features such as flat roofs and contemporary cladding materials.

The present design, whilst not replicating the existing, offers a new and attractive built form to the area. The proposals blend in and harmonise with the context in terms of scale, massing and some materials. A simple material palette of timber details, flat roof, grey rainwater goods and grey windows is utilised.

The roof is flat, proposed to be built using low pitch galvanised metal sheets concealed from street view by means of parapet external walls. As the design is modern, chimneys are not considered, consistent with the modern high street retail architecture.

Rainwater goods are proposed to be formed using gunmetal grey UPVC.

Windows are similarly to consist of a matching gunmetal grey colour.

External doors are to be fabricated using shopfront decors to the ground level retail units, subject to available door supplies on the market. Final choices will be agreed in consultation with the Local Planning Authority and will be advised.

External surface treatments are envisaged to comprise black macadam tar to roads and disabled parking spaces, and precast concrete paving slabs, or block paving, to pedestrian paths. Landscaped courtyard surface materials will be subject to a landscaping scheme by specialists.

External boundary treatments are to be constructed out of 1.8m high close boarded timber to the side and rear property perimeters.

The development will be provided with a rear garden outbuilding to accommodate secure cycle storage, encouraging the use of this sustainable means of transport, consistent with the Co-operative's sustainability objectives, as well as planning policies.

Other outbuildings will serve as refuse and recycling bin accommodation, and a potable gas storage area for usage by the Bike Foundry.

#### 4.7 Form and Scale

The building assumes an L-shape form, respecting existing building lines and addressing both highways which meet and form a junction at the site. It is considered this approach is ideal from an urban design perspective.

At 45 units, and with a site area of approximately 0.2 ha or 0.566 acres, the proposals deliver a density of almost 80 dwellings to the acre. As the units constitute grouped housing, the Applicant considers this density agreeable.

#### 4.8 Massing and Height

The height of the development is 3-4 storey, not significantly higher than the massing of adjacent houses and commercial units.

The dwellings along Hunts Road are two-storey. Consequently, the design has ensured this section of the development is limited to 3-storey to achieve a similar massing.

The Pershore Road frontage is 4-storey, maximising the build footprint along the high street and thereby contributing to the Applicant's sustainability objectives by maximising brownfield land uptake.

#### 4.9 Environmental Assessment – Solar, Wind and Natural Light

This assessment relates to solar, wind and natural lighting aspects. The building's predominant east – west orientation guarantees solar penetration to the dwellings which is healthy. The Pershore Road wing of the proposals takes this orientation, whilst the Hunts Road frontage has a north – south aspect. However, as all the dwellings are single aspect facing south, this orientation is similarly satisfactory from a solar perspective.

As the building mass has been retained to maximum 4-storeys (3-storeys adjacent the dwellings along Hunts Road), with the building frontages respecting existing building lines, no undue over shadowing is anticipated.

A full environmental assessment has been prepared by specialists and forms part of this submission.

#### 4.10 Sustainability

The fabric of the dwellings has been designed to exceed current building regulations' energy efficiency requirements, reducing the carbon footprint of the development.

The use of timber frame construction as the principal 'Modern Methods of Construction' mode will be complemented by other offsite manufacturing techniques including a pre-cast insulated floor system and pre-fabricated timber cassette system, as part of the construction procurement.

The adoption of sustainable drainage techniques, including rainwater harvesting to recycle water where possible, will further assist in creating a long-term sustainable development with a reduced environmental impacts.

Recycling provision is an integral part of the proposals, designed to be consistent with the city's kerbside recycling policy. The provision will be enhanced by the inclusion of recycling bins within each individual dwelling's kitchen layout. Compost bins are a further possibility, encouraging the recycling of bio-degradable waste.

### 5. THE DETAIL PROPOSAL

#### 5.1 Amount

The scheme comprises of the following: -

#### **Residential**

 1 bed 2 person flats (43 sqm) - 29no.

 2 bed 3 person flats (58 sqm) - 10no.

 2 bed 4 person flats (68 sqm) - 04no.

 3 bed 4 person flats (<u>73 sqm</u>) - 02no.

 Total
 (2245 sqm) - 45no.

#### <u>Retail</u>

Artefact	(292 sqm)
Bike Foundry	(98 sqm)
Loaf	<u>(260 sqm)</u>
Total	(650 sqm)

The above dwelling sizes will deliver the requirements set out in Birmingham City Council's adopted Supplementary Planning Guide, 'Places for Living'.

All units are proposed for affordable rent.

Closed circuit television may form part of the installations if deemed necessary.

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1 bed 2 person flat - bath fitting option Type A2 Internal Floor Area = 43.0m<sup>2</sup>



1 bed 2 person flat Type A4 Internal Floor Area = 42.6m<sup>2</sup>



2 bed 4 person flat Type C Internal Floor Area = 68.6m<sup>2</sup>



1 bed 2 person flat - shower fitting option Type A1 Internal Floor Area = 43.0m<sup>2</sup>



1 bed 2 person flat Type A3 Internal Floor Area = 42.7m<sup>2</sup>



2 bed 3 person flat Type B Internal Floor Area = 58.4m²



3 bed 4 person flat Type D Internal Floor Area = 73.2m<sup>2</sup>

0 1 5 10 Metres at scale 1:100



#### 5.2 Retail

The retail units are located on the ground floor.

Internal layouts include an art display, mini-theatre (denoted as 'creative hall' on the submission plans) and cafe to the Artefact space. Birmingham Bike Foundry consists of a workshop and training area whilst Loaf comprises a bakery and cookery school.

#### 5.3 Residential

The upper floors of the development accommodate residential dwellings constituted in a total of 7no. dwelling types of 1, 2 & 3-bedroom sizes.

Other facilities available to the residents are communal lounge, kitchen, dining and laundry facilities.

The dwellings additionally enjoy access to outdoor roof gardens.

### 5.4 Building Materials and External treatments

The proposals draw inspiration from the existing architecture in the area. Whilst this is varied depending on different building types and historical periods, red brick and render are repetitive features. The existing dwellings are of a traditional style having predominantly duo pitched roofs finished with plain or bold roll tiles and chimneys. Windows are apparent as white UPVC.

The proposals are formed of walls to be built in timber, utilising this sustainable material. No brickwork entirely has been designed to the facades.

The roof is flat, to be built using low pitch galvanised metal sheets concealed from street view by means of parapet external walls.

Rainwater goods are to be formed using gunmetal grey UPVC or metal.

Windows are similarly to consist of a matching gunmetal grey colour.

External doors are to be fabricated using shopfront decors to the ground level retail units, subject to available door supplies on the market. Final choices will be agreed in consultation with the Local Planning Authority.

### 5.5 Landscape

Landscaping proposals are to be prepared by a specialist in due course. The proposals will develop the internal courtyard area in a theme focused around social interaction, place making and bio-diversity enhancement.

The landscape proposals will include roof garden areas which will have further bio-diversity enhancements such as bee-hives to the 2nd floor roof garden.

External surface treatments are envisaged to comprise black macadam tar to roads and disabled parking spaces, and precast concrete paving slabs, or block paving, to pedestrian paths. Landscaped courtyard surface materials will be subject to a landscaping scheme to be prepared by others in due course.

External boundary treatments are to be constructed out of 1.8m high close boarded timber to the eastern side and northern rear property perimeters.

#### 5.6 Drainage

A detailed drainage scheme, to explore the use of sustainable urban drainage systems (SUDS) subject to the results of a ground investigation, is to be prepared by consulting engineers.

Fig 16 - Indicative courtyard landscaping - details to be developed by specialists.





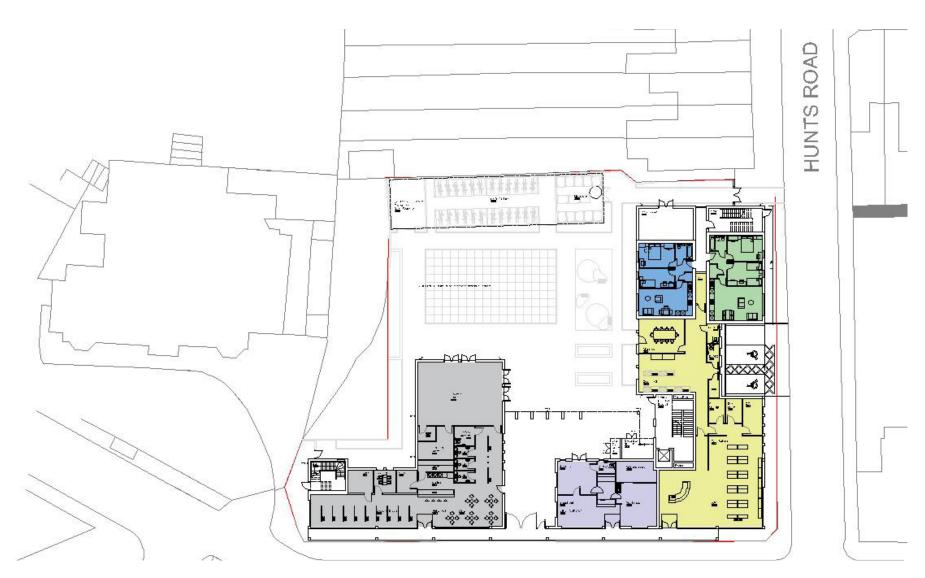


Fig 17 - Scheme ground floor layout.



Fig 18 - Scheme first floor layout.

Fig 19 - Scheme second floor layout.

#### 5.7 Secured by Design

The layout exploits opportunities for natural surveillance to all external aspects. The Pershore Road frontage is overlooked by full height shopfront windows. Hunts Road is overlooked by further shopfronts and windows from dwelling habitable rooms. Consequently, clear views to fronts and disabled car parking area will be available.

The careful design of soft landscaping (to be carried out by others) within the scheme's internal courtyard will create a private, defensible, communal space within the development. This space will not only act as a pleasant focal space for social interaction but additionally, be clearly identifiable as semi-public or private.

Boundary treatments to the site's perimeter will explicitly demark private and public domains, thereby defining the defensible spaces within the development.

External lighting is to be provided adjacent front entrances and to the internal courtyard.

There is a commitment to achieving 'Secured by Design' certification up to at least Silver Standard for both site wide and physical building elements. In this respect liaison has been entered into with the Police Designing Out Crime Officer (DOCO) for the locality.



Fig 20 - Scheme third floor layout.

### 6. ACCESS

### 6.1 Local Facilities

The site is well served by a range of local amenities in close proximity and has good access to Birmingham City Centre.

A range of local amenities exists in the locality, including the Co-operative superstore, Farmfoods and numerous other smaller shops and restuarants along Pershore Road.

The majority of needs such as short shopping trips, access to leisure facilities, school journeys and trips to bus stops from the development will be made by foot or cycle.

The above is in accordance with the recommendations of the Manual for Streets (DfT, 2007):

"Walk-able neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents."



Fig 21 - Indicative modular facade system.

### Healthcare

• St. Andrews Healthcare is located along Dogpool Lane, a few hundred metres to the north of the land.

#### Leisure

• Stirchley Baths is among the leisure facilities in the locality.

### Education

• Stirchley Primary School is located barely 100m to the south of the land along Pershore Road.

### Retail

• The Co-op and Farmfoods supermarkets are among the retail developments in close proximity, along with Loaf.

### 6.2 Pedestrian, Cycling and Public Transport Pedestrian and Cycling Strategy

The network of public paths within the adopted highway network is well suited for cycling and pedestrian modes of travel. This includes the provision of : -

- a good level of street and path lighting;
- tactile and coloured surfacing.

#### **Public Transport**

The site has good access to public transport and is well located to utilising this existing infrastructure for bus, rail, cycling and pedestrian modes of travel, encouraging future residents to utilise these sustainable modes of transport.

Bus stops are in close proximity along the A441 Pershore Road, serviced by bus nos. 38, 45, 47 and 146, among others, leading into Birmingham City Centre.

Bournville Railway Station is barely 10 minutes' walk from the site, giving access to Birmingham City Centre to the north and up to Bromsgrove and Redditch to the south. Connections further afield within the region or country are available at Birmingham New Street Station.



Front (Pershore Road) Elevation



Side (Hunts Road) Elevation

Fig 22 - Indicative Elevations.

### 6.3 Vehicular Access and Parking Vehicular Access Strategy

The development is proposed as a 'car free' scheme which will have no residents' vehicular access or parking facilities.

Off-road access to the site is to be mainly from Hunts Road. This access is currently existing and therefore acceptable to the Highway Authority. Nevertheless, as the scheme is non-vehicular, this access will only serve maintenance or emergency vehicles.

The vehicular access gates shown off Pershore and Hunts roads are therefore included only to ensure accessibility for mainternance personnel, the fire service and other emergency vehicles.

#### **Parking Strategy**

Three car parking bays only have been designed into the development, of which 2no. are disabled. The bays are located off Hunts Road to the southern perimeter of the land and are intended to ensure that disabled persons receive equal accessibility to the facility. The additional non-disabled bay is for occassional visitors and deliveries.

In lieu of a car parking facility for the scheme, the development incorporates a substantial cycle parking store to provide at least one cycle space per bed space in the proposals.

### 7. CONCLUSION

The scheme creates a bespoke development of character and quality, contributing to and enhancing the architecture of the locality.

The development takes cognisance of and responds to the vernacular, drawing upon this in its design and aesthetics.

A simple but highly attractive palette of materials ensures the proposals fit into and harmonise with the existing built form.

Landscaping, to offer an element of biodiversity enhancement wherever possible, will complete the design, giving Stirchley a new and attractive contribution to its form and distinctive character.

