Similarly to the National Planning Practice Guidance it sets out guidance on TAs and TPs, including when they are required and the scope.

Section 9 of the draft NPPF, entitled "Promoting Sustainable Transport" outlines the transport considerations for plan-making and development proposals.

Paragraph 103 outlines that *"transport issues should be considered from the earliest of stages of plan-making and development proposals"*, in order to ensure that:

- the potential impacts of development on transport networks can be addressed;
- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- opportunities to promote walking, cycling and public transport use are identified and pursued;
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for mitigation and for net gains in environmental quality; and
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.

Following on from this, paragraph 104 outlines that the planning system should "*actively manage patterns of growth*", in order to support the objectives outlined in paragraph 103. It goes on to say, in paragraph 104, that "*significant developments should be focused in locations which are or can be made sustainable*". This sustainability, it states, can be achieved through "*limiting the need to travel*" and by "*offering a genuine choice of transport modes*".

Paragraph 108 outlines the key considerations that should be ensured when assessing sites to be allocated for development in plans or specific development applications. These are:

- *appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *safe and sustainable access to the site can be achieved for all users; and*
- *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

If a development is to be prevented or refused on highway grounds, paragraph 109 explains this should only happen if "*residual and cumulative impacts on the road network or road safety would be severe*".

Following on from Paragraph 109, Paragraph 110 explains that applications for development should:

- *give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

Crucially, as outlined in Paragraph 111, *"all developments that generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed".*

2.2.3 NATIONAL PLANNING PRACTICE GUIDANCE

The Government has undertaken a review of the planning guidance that supports the delivery of the NPPF and published updated National Planning Practice Guidance (NPPG), this includes guidance on TP's, TA's and TS.

NPPG provides guidance on:

- When TP's, TA's and TS are required;
- How the scope of the plans and assessment should be defined; and
- What should be included within the documents.

This TP has been prepared in accordance with the NPPG.

2.3 REGIONAL (LONDON WIDE) PLANNING POLICY

2.3.1 THE MAYOR'S TRANSPORT STRATEGY

The adopted Mayor's Transport Strategy, published in March 2018, sets out the challenges and strategic policies and transport proposals to address them in London. The document inherits and develops from the existing principles to make London a better city for all Londoners. The key goals for the strategy for a future London are summarised below:

- New homes and jobs;
- A good public transport experience; and
- Healthy Streets and healthy people.

The strategy aims to have 80% of Londoners' trips made on foot, by bicycle or using public transport. The document also introduces the idea of a seamless, 'whole-journey' experience which will attract people to use public transport instead of cars. Some major infrastructure projects such as the Bakerloo line extension and new pedestrian and cycle crossing between Rotherhithe and Canary Wharf are to form part of the reshaping of London aiming to improve the quality of life for everyone.

2.3.2 LONDON PLAN (ADOPTED MARCH 2016)

The current London Plan, adopted in March 2016, is the Mayor's Spatial Development Strategy for greater London (2011) and further expands upon the criteria set out in the Mayor's Transport Strategy, acting as a statutory planning framework to help guide new developments in London. Focusing on the next two decades, the London Plan indicates that a sustainable development plan must be implemented, primarily based upon expansions to the existing walking, cycling, and public transport networks within London. Effective planning must be adopted to ensure the continued growth and expansion of London, with an integrated planning and transportation link at the forefront of these proposals.

The following policies within the London Plan are relevant to our proposed development:

Policy 6.1 'Strategic Approach' states that *'The Mayor will work with all relevant partners to encourage the closer integration of transport and development by encouraging patterns of development that reduce the need to travel, especially by car'*. In addition, those developments that generate high levels of trips will only be supported in locations with high levels of public transport accessibility.

Policy 6.3 'Assessing Effects of Development on Transport Capacity' states that *'development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network'.*

Policy 6.3 further states that *'TAs will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and / or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be co-ordinated with travel plans'.*

Policy 6.9 'Cycling' states that *'developments should provide secure, integrated and accessible cycle parking facilities and provide on-site changing facilities and showers for cyclists'.*

Policy 6.10 'Walking' states that *'development proposals should ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space'.*

Policy 6.13 'Parking' states that *'the maximum parking standards set out in the Parking Addendum should be applied to planning applications'.*

The London Plan also states that adequate parking spaces for disabled users should be provided preferably on site with reference to Lifetime Homes Part M and Wheelchair Housing Design Guidance which is further referred to within the **Mayor of London's Housing Supplementary Planning Guidance (SPG) 2010.** These standards necessitate the need for a 10% provision of accessible bays for the Lifetime home provision.

2.3.3 DRAFT NEW LONDON PLAN

The draft New London Plan is the Mayor's new draft Spatial Development Strategy for Greater London. The plan is a new plan and it is not an alteration or update of previous plans and once adopted will replace all previous plans. Focusing on the next 20-25 years, between 2019 and 2041, the draft plan sets out the new direction for planning in London, shaped around targets to deliver 65,000 new homes a year, to achieve a zero-carbon target by 2050 and ensure 80% of all trips are made by foot, cycle or public transport by 2041. The plan sets out specific tangible policies and planning issues in order to set out concrete

plans for action and how and where these plans for major developments and infrastructure will be delivered.

These plans and policies are centered around the concept of 'Good Growth', growth that is socially and economically integrated, inclusive and environmentally sustainable, ensuring the plan is focused on sustainable development. Each area of the plan is informed by the six Good Growth policies. These are:

- Policy GC4: Delivering the homes Londoners need
- Policy GC1: Building strong and inclusive communities
- Policy GC2: Making the best use of land
- Policy GC3: Creating a healthy city
- Policy GC5: Growing a good economy
- Policy GC6: Increasing efficiency and resilience

Chapter 10 of the Policy is specifically centred around the good growth of transport. A number of policies within this section are relevant to the proposed development, which are:

Policy T1: Strategic Approach to Transport states that *"development plans and development proposals should support the delivery of the Mayor's strategic target of 80% of all trips in London to be made by foot, cycle or public transport by 2041"*. The integration of land use and transport and the provision of a resilient public transport network are essential to realising and maximising the growth and ensuring sustainable and efficient connectivity across the city.

Policy T2: Healthy Streets states that development proposals and plans should *"promote and demonstrate the application of the Mayor's Healthy Streets Approach"* against the ten Healthy Streets Indicators.

Policy T4: Assessing and Mitigating Transport Impacts states that development proposals and plans should *'reflect and be integrated with current and planned transport access, capacity and connectivity'* and *'Transport assessments should be submitted with development proposals to ensure any impacts on the capacity of the transport network at a local, network-wide and strategic levels are fully assessed.'* It also states that *'It is important that development proposals reduce the negative impact of developments on the transport network and potentially reduce the harmful public health impacts'*.

Policy T5: Cycling states that development plans and proposals should *"help to remove barriers to cycling and create a healthy environment in which people choose to cycle"*. This will be achieved through development plans and proposals

"securing the provision of appropriate levels of cycle parking which should be fit for purposes, secure and well-located with developments providing cycle parking in accordance with the minimum standards set out in the London Cycling Design Standards".

Policy T6: Car Parking states that "*car-free developments should be the starting point for all development proposals in places well connected by public transport systems, with developments elsewhere designed to provide the minimum necessary parking 'car-lite' with the necessary infrastructure provided for electric and Ultra-Low Emission vehicles*". Appropriate disabled persons parking for Blue Badge holder should be provided, with a minimum of 1 space provided. It is imperative that "*new residential developments should not exceed the maximum parking standards*".

2.3.4 TRANSPORT FOR LONDON (TFL'S) TRAVEL PLANNING GUIDANCE NOTE (NOVEMBER 2013)

This guidance supersedes the previous TfL guidance 'Travel Planning for New Development in London: Incorporating Deliveries and Servicing' (January 2012). The document provides an overview of the requirements for preparing a TP for new developments and extension of existing sites located in London.

The document provides development scale guidelines for the preparation of a travel plan, outlining that for residential developments a travel plan statement should be prepared for between 50 and 80 units and a full travel plan should be prepared for equal or more than 80 units. In respect of this TP, the document states '*councils may adopt their own travel plan requirements for developments that are below the TfL thresholds, and where these are lower than those in Table 2.1, TfL supports their use*'.

2.4 LOCAL (BOROUGH) LEVEL PLANNING POLICY

2.4.1 LONDON BOROUGH OF RICHMOND UPON THAMES LOCAL PLAN (JULY 2018)

This Local Plan looks ahead to 2033 and sets out policies and guidance for the development of the borough over the period. It also identifies where the main developments will take place and how areas within the borough will change or be protected from the change. It has been submitted to the Secretary of State but will not be adopted before the independent examination in Public is completed.

Key Strategic Objectives of this Local Plan are as follow:

- Meeting People's Needs;
- A Sustainable Future; and
- Protecting Local Character.

Policy LP44 emphasises the importance of promoting Sustainable Travel Choices such as public transport, walking and cycling.

Policy LP45 suggests sufficient parking space has to be maintained within the new developments.

2.4.2 LONDON BOROUGH OF RICHMOND UPON THAMES DEVELOPMENT MANAGEMENT PLAN (2011)

This Development Management Plan (DMP) includes the detailed policies which will be used when new developments are considered. The DMP is a statutory development plan document and is part of the Local Plan.

Policy DM TP 2 suggests all planning applications for smaller developments should be accompanied by a TS as set out in Department of Transport (DfT) /TfL guidelines.

Policy DM TP 6 ensures new development and schemes should protect, maintain and where appropriate, improve the pedestrian infrastructure.

2.5 SUMMARY

The proposed development is considered to comply with the range of policies at a national, regional and local level summarised in this section. These include policies relating to accessibility, location and land use.

3. EXISTING SITE ACCESSIBILITY APPRAISAL

3.1 INTRODUCTION

This chapter provides a review of existing transport conditions within the vicinity of the development site. Specifically, it provides a description of the existing site, a review of the walking, cycling and public transport routes, services and facilities, the highway network and safety on roads close to the site.

3.2 SITE LOCATION AND EXISTING USE

The site is currently vacant, having been a former Thames Water Biothane treatment plant associated with the nearby Stag Brewery.

The site, the location of which is shown on **Figures 1 and 2**, is within the existing KRRD and the administrative boundary of the LBR. It is bound to the east by River Thames, to the southwest corner by Saffron House, to the west by Melliss Avenue and the northwest corner by Terrano House.

Figure 1: Site Location (Source: OpenStreetMap)

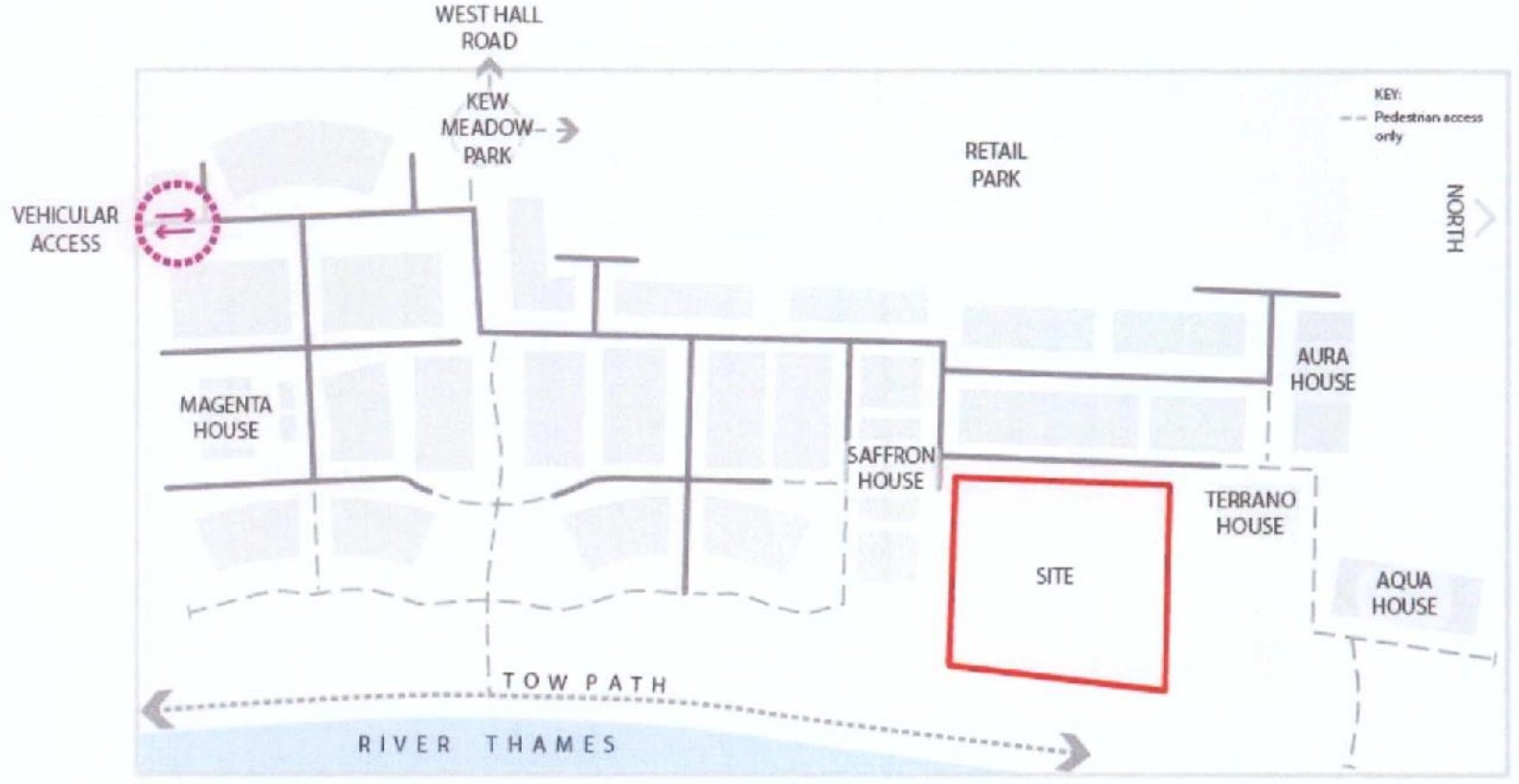

Figure 2: KRRD Internal Layout

3.3 WALKING AND CYCLING

The site is located within the KRRD. As shown on **Figure 2**, this development area can be accessed externally by pedestrians and cyclists via three separate locations, namely: the main gated access located on Melliss Avenue, just north of the priority junction access to LBR's Townmead Road Re-use & Recycling Centre ('Recycling Centre'); a gated access at the end of West Hall Road, which provides access via Kew Meadow Park; and from the towpath of the River Thames via Chiswick and Kew Bridge.

Figure 2 also show the access routes internally within the KRRD area, with a network of internal roads with footways and dedicated footpaths, linking the different development blocks. There are no footways on either side of Melliss Avenue along its section which borders the former Thames Water Biothane treatment plant site, as the site boundary fence is located immediately adjacent to the carriageway kerbside with parking bays for the adjacent residential block on the other side of Melliss Avenue.

In addition to the cycle routes along the river towpath via Kew and Chiswick Bridge, there are cycle lanes provided along both sides of the A205 Mortlake Road, which provides a link to the site via Townsmead Road and Melliss Avenue. National Cycle Route 4 is located 3 km southeast from the site and it is accessed via the on-road cycling route. The proposed Cycle Superhighway 9, which connects Kensington Olympia to Brentford or Hounslow, is currently under consultation and would, if implemented, provide a strategic cycle route link to the site via the river towpath at Kew Bridge.

The shortest walking/cycle route between the site and external access point at the KRRD is approximately 400m, i.e. to the access on West Hall Road. **Table 7** provides a summary of the location and resultant walk and cycle times to a number of local amenities.

Table 2: Local Amenities

Facility	Distance (m)	Walking time (minutes)	Cycling Time (minutes)
Kew Day Nursery & Pre-School	750	9	3
Kew Riverside Primary School	750	9	3
Kew Medical Practice	750	9	3
Kew Retail Park	500	6	2
Kew Garden High Street	1100	14	5
St Winefride Church	1300	16	6

Walking time based on an average speed of 4.8 km/hour
Cycle time based on an average speed of 15 km/hour

3.4 PUBLIC TRANSPORT

3.4.1 PUBLIC TRANSPORT ACCESSIBILITY LEVEL

PTAL is a TfL approved quantitative measure of public transport accessibility with a scoring range between 0 (worst) and 6b (best). The current PTAL has been **established with reference to TFL's 'Planning Information Database' included** on **TfL's website, for which the site achieves a PTAL score of 0.**

It should be noted however, the site's PTAL calculation is based on bus and rail services being within 640m and 960m walking distance respectively. As described in the following sections, by using existing dedicated pedestrian routes through the KRRD, the proposed site is within reasonable walking distance of **London's Overground, Tube and bus network.**

3.4.2 MAINLINE RAIL AND TUBE SERVICES

Kew Gardens Overground and Tube Station is located approximately 1000m (12 minutes walking or 4 minutes cycle trip) west from the site. The station is located at the Travelcard Zones 3 and 4. The District Line on the London Underground and North London Line on the London Overground operate through this station, providing important connections between the site and both inner and outer London. The northbound and southbound platforms are connected through a stepped footbridge, although it does not provide direct step free access. There is an indirect route for step free platform interchange via High Park Road with approximately 600m between platforms. 28 cycle storage spaces are currently installed outside the station.

The closest National Rail Station is Mortlake Station which is located approximately 1600m (20 minutes walk or 7 minutes cycle ride) southeast of the site. South Western Railway operates the station and all trains services. There are seven to eight trains to Waterloo per hour with half being direct via Clapham junction and other indirect trains going through Richmond, Wimbledon, Hounslow and Kingston. The northbound and southbound platforms are connected through a sheltered footbridge, although the station does not provide direct step free platform interchange. There is an indirect route for step free platform interchange via the level crossing on Sheen Lane. 132 sheltered cycle storage spaces are currently installed at Mortlake station.

Other rail stations in the local area include Kew Bridge Station, Chiswick Station and North Sheen Station, which are 1800m, 2100m and 2200m distance away from the site respectively.

3.4.3 BUS SERVICES

The closest bus stops to the site are named as Taylor Avenue (identified as bus stops X and W) and Kew Retail Park (identified as bus stop U). These bus stops are located on Mortlake Road and Bessant Drive respectively within around 550m walking distance of the site. Both Taylor Avenue and Kew Retail Park bus stops, which have facilities such as flagpole information, shelters and information boards, provide access to the bus service R68.

The R68 travels between the Kew Retail Park and Hampton Court, via Richmond **every 15 minutes during a weekday. It also provides access to London's wider** bus network, with local connections to services 190 and 419 on the Lower Richmond Road.

3.5 EXISTING ACCESS AND HIGHWAYS

The former Biothane Treatment Plant site has a vehicular access at the north of Saffron House via Melliss Avenue. Melliss Avenue is a single two-way carriageway private road (within the KRRD) with a speed limit of 10mph and average width of approximately 6m, narrowing to around 4.7m along its section which borders the proposed development site. There is a gated vehicle access to the KRRD, on Melliss Avenue immediately north of the access junction to the nearby recycling centre. The route then connects to the A205 Mortlake Road via Townmead Road. Both Mortlake Road and Townmead Road have speed limits of 30mph and are street lit.

The A205 Mortlake Road forms part of the Transport for London Road Network (TLRN), which is also known as London Red Route and has stopping restriction between 0700 to 1900 from Monday to Saturday. Mortlake Road also provides wider access to other routes on the strategic road network such as the A316 Lower Richmond Road, A307 Kew Road, A4 and M4 Motorway via Chiswick Roundabout.

Through consultation with LBR officers and local residents at the public consultation, it is understood that an existing traffic management issue is occasionally occurring on the local network surrounding the main access to the KRRD site and the Recycling Centre. This issue relates to drivers seeking to enter the recycling centre during peak activity periods, forming traffic queues upstream from the access, restricting and/or delaying vehicle access to the KRRD site. In certain instances, it is understood that some drivers entering the KRRD site have **overtaken illegally on the 'wrong' side of the road to avoid the queuing traffic.** Whilst no detail investigation has been carried out as part of this assessment as

to the reasons behind this traffic issue, it is reasonable to assume the problem is related to the existing internal traffic management, operations and limited space within the recycling centre to cope with the demand during the peak periods. Thus, vehicle queues are forming outside on Melliss Avenue during peak demand periods as observed in the survey data detailed in Chapter 3.6.

With regard to car parking, all private roads within the KRRD site are subject to restrictions with parking for permit holders only. Furthermore, an existing **Controlled Parking Zone (CPZ) 'KA' is located along Mortlake Road and around** Kew Garden Station. This CPZ is in operation between 1000 to 0000 from Monday to Friday. These restrictions make it very unlikely that significant parking overspill will occur from the proposed development site.

4. DEVELOPMENT PROPOSALS

4.1 INTRODUCTION

This chapter of the TA describes the development proposal in detail and includes a review of the car and cycle parking provision as well as the proposed vehicular delivery and servicing strategy.

4.2 DEVELOPMENT PROPOSALS

The proposals include the demolition of existing buildings and structures and redevelopment of the former Kew Biothane site to provide a Specialist Extra Care facility (C2 Use Class) for the elderly with existing health conditions. Comprising, 89 units, with extensive private and communal healthcare, therapy, leisure and social facilities set within a building of ground plus 3 to 5 storeys including set-backs. Provision of car and cycle parking, associated landscaping and publicly **accessible amenity spaces including a children's play area.**

The minimum age of residents will be 65 years and it is expected the significant majority will be in the range of 75-85 years. The residential unit mix of the site will consist of:

- 11 No. 1 bedroom units
- 78 No. 2 bedroom units

Residents will have full access to all facilities, certain facilities will be open to use **by local residents and visitors, for example, the café, hair salon, children's play** area and the Metropolitan Open Land which is being re- landscaped. Access to this space will predominantly be via the towpath with alternative access via Melliss Avenue.

Drawing PA2.02 in **Appendix B** shows the proposed ground floor layout for the development.

4.3 HIGHWAYS AND SITE ACCESS

As shown on drawing PA2.02 in **Appendix B**, the site has two vehicular accesses **to Melliss Avenue; the loop road at the building's main entrance and the car park** entrance in the southern part of the site. Both accesses include a change in surface and gradient, which provides a natural segregation from Melliss Avenue and forms a traffic calming influence.

In terms of proposed changes to Melliss Avenue, the carriageway in front of the site is currently around 4.7m wide and local widening to 6m is proposed at the proposed delivery loading area in the northwest corner of the site. Furthermore, a new footway is proposed along the entire frontage of the site with Melliss Avenue.

4.4 NON-PRIVATE CAR TRANSPORT SERVICES

As highlighted in Chapter 3, **while the site is within 550m of London's bus network** and 1,000m of Kew Gardens Overground and Tube Stations, reduced private car use to and from the development will be further encouraged through the introduction of a dedicated minibus service. This proposed service will connect the site to key transport hubs and areas of interest such Kew Gardens Overground and Tube stations, Kew Bridge Overground station, Kew and Richmond Town Centres and the nearby Kew Retail Park. The minibus will be available for used by residents, staff and visitors of the development. It is anticipated that the minibus service will be operating between 07:00 and 21:00 seven days a week and the frequency of operation will be subject to review based on feedback from the residents, staff and visitors after the initial occupation.

4.5 PARKING

4.5.1 VEHICLE PARKING

Residents

The proposed number of residential car parking spaces on the site is 14 spaces. Out of these 14 spaces, 10 are allocated as disabled spaces, i.e. 71% are disabled spaces. This proportion of disabled spaces, which is significantly higher in comparison to conventional residential developments, reflects the needs of the particular demographic of residents on this site.

Site Staff

5 parking spaces will be provided for staff on site. Out of these 5 spaces, 1 is allocated as a disabled parking space.

Site Visitors

Visitors to the site will mainly be visitors for a resident(s). All visitors will be encouraged to make use of more sustainable transport modes such as walking, cycling, public transport or using the dedicated minibus service. However, 7 visitor parking space will be provided on site, with one of these spaces for

disabled parking. All visitor parking spaces will require booking in advance to control the vehicular traffic to the site and avoid overflow parking.

Car Drop off / Short term spaces

A further car parking space is to be provided in front of the main entrance of the building to enable a drop off facility or short-term parking for certain types of visitors such as a doctor or nurse.

Minibus Parking

To ensure appropriate storage of the minibus vehicle, a dedicated parking space will be provided on site, within the proposed car parking area at the southern end of the site.

Electric Vehicle (EV) Parking

In accordance with the London Plan, for new developments, 20% of the proposed spaces will be available for electric vehicles with appropriate charging infrastructure, i.e. active spaces, with a further 20% available in the future, i.e. passive spaces.

Car Parking Summary

In conclusion, as shown on drawing PA2.02 in **Appendix B**, the proposals include a total of 26 car parking spaces provided in a dedicated car park at the southern end of the site and 1 drop off/short term space provide close the front of the main building entrance. 12 out of the 27 car parking spaces are disable parking spaces. The number of car parking spaces has been derived from first principles based on anticipated demand for parking in a development of this nature and to take into account the need to deliver a balanced approach, which encourages travel by more sustainable modes of transport rather than the use of a private car.

4.5.2 CYCLE PARKING

The site proposals include 8 secure and sheltered long stay cycle parking spaces within the building and 18 short stay cycle parking spaces outside the building.

4.5.3 MOBILITY SCOOTERS

There is provision for covered and secure mobility scooter parking in a dedicated room at the southern end of the main building, next to the proposed car park.

4.6 SITE SERVICING, DELIVERY AND REFUSE COLLECTION STRATEGY

The anticipated number of scheduled servicing and delivery vehicles travelling to and from the site will be included within the site's Delivery and Servicing Plan (DSP), to be prepared in conjunction with the future site operators.

However, given the nature of the site, it is expected that such demand will be relatively low and that vehicle types will be restricted to smaller 'transit' or 7.5T box van type vehicles rather than larger HGVs to ensure noise and disruption to existing residents on the estate is minimised.

For these vehicles, a loading zone area (as shown on drawing PA2.02) is proposed within the north west corner of site. Following arrival of the vehicle, the site security gates will be opened by a member of the site's operations team. The vehicle will then proceed to reverse into the loading zone area from Melliss Avenue to load/unload and then turn left in forward gear to leave the site.

It is expected that the vast majority of servicing and delivery vehicles will use the loading area. However, in a minority of cases when non-scheduled larger HGVs are not able to access the loading area due to the size of the vehicle or the loading area being occupied, such vehicles will load/unload at kerb side adjacent to the site's loading zone. As highlighted previously, local widening of the carriageway width for Melliss Avenue in front of the loading area is proposed, which will enable two large vehicles to safely pass each other if required.

For the very small number of non-scheduled servicing and delivery vehicles not able to use the loading area, it is expected they will utilise the existing Thames Water plant entrance junction located immediately northwest of the site to turn around and leave via Melliss Avenue in forward gear. In the very rare occasions when due to size, vehicles are unable to turnaround, the vehicle will reverse back along Melliss Avenue and use the site's car park entrance to turn around and exit in forward gear, all under strict control such as via a banksman guiding the vehicle.

The strategy to be adopted for the refuse collection will be described in the site's waste management strategy, which will be prepared in conjunction with the site operators and the KRRD site management team. It is anticipated that refuse vehicles will park kerbside on Melliss Avenue in front of the loading bay area to load bins. With the proposed local widening of Melliss Avenue at this location, a non-site vehicle will be able to safely pass a stationary refuse vehicle at the kerbside.

5. INDICATIVE TRAVEL PATTERNS

5.1 INTRODUCTION

This chapter of the report assesses the likely multi-modal trip generation for the development site and describes the likely impact of the proposals on the surrounding transport network.

5.2 AREA SPECIFIC MODAL SPLIT

Analysis of 2011 Journey to Work Census data (as shown in **Table 3**) for the Richmond upon Thames 004 Middle Level Super Output Area (in which the site lies wholly within), indicates the existing mode choice of travel for local residents to their employment and staff employed in the local area.

A copy of the relevant census data used in this analysis is included in **Appendix C** of this report.

Table 3: 2011 Journey to Work Census Data (E02000787: Richmond upon Thames 004)

Method of travel to work (Workplace Population)	Modal Share (local residents)	Modal Share (local employees)
Underground, metro, light rail or tram	13%	24%
Train	18%	20%
Bus, minibus or coach	12%	8%
Taxi	0%	0%
Motorcycle, scooter or moped	1%	2%
Driving a car or van	38%	29%
Passenger in a car or van	1%	1%
Bicycle	5%	7%
On foot	9%	9%
Other method of travel to work	1%	1%

5.3 BASELINE MODE SHARE

Table 3 shows that based on the analysis of 2011 journey to work census data, 38% of local residents commute to work by driving a car or van, while 29% of commuting journeys made by people who work in the local area do so by driving a car or van.

However, due to the anticipated significantly lower car ownership level for residents on site in comparison to the local population, it is expected that car use for these residents will be considerably lower than the 38% mode share to around 15%. It should be noted that a travel survey would be undertaken in the first six months of first occupation to inform the actual baseline of the proposed development modal splits.

6. TRAVEL PLAN AIMS AND OBJECTIVES

6.1 INTRODUCTION

The aim of this TP is to contribute to ensuring and furthering the sustainable travel credentials of the development. A set of key aims and objectives have been identified which the TP will operate towards.

6.2 AIMS

The overall aims of this TP are to:

- Reduce carbon emissions from travel associated with the development and minimise the environmental impacts of all aspects of the **development's travel activity;**
- Raise the awareness of sustainable travel options and ensure benefits of sustainable modes of transport are apparent to users of the development;
- Monitor private car and powered two-wheeler use at the development;
- Reduce the overall level of impact of the development on the surrounding area, with respect to transport movements to and from the development;
- Promote and encourage the use of active modes of transport that improve health; and
- Set an example of good practice for the area.

6.3 OBJECTIVES

The aims of this TP are supported by five main objectives, which are as follows:

- Encourage walking as a means of transport in its own right or as part of a journey in conjunction with other modes of transport as well as promoting its health benefits;
- Encourage cycling as a healthy form of private transport;
- Reduce the emphasis on public transport as the primary mode of travel to the development for trips under 5km. Where journeys by walking and cycling could reasonably be undertaken; and
- Implement effective travel targets which are SMART (Site-specific, Measurable, Achievable, Realistic and Time-related).

7. TARGETS

7.1 INTRODUCTION

To support the aims and objectives of this TP, mode share targets will be set. As per TfL's 'Travel Planning Guidance Note November 2013' the targets set in this TP will be SMART:

- **Site specific**: The targets take into account the location of the development in terms of accessibility and the type of development proposed;
- **Measurable**: The proportion of users using each mode of transport will be measured and monitored using the travel questionnaires as outlined in section ten of this report;
- **Achievable**: It is considered that through the measures included within this TP relating to public transport, walking and cycling that the targets are achievable;
- **Realistic**: Given the likely low baseline proportion of car trips, a target decrease in these types of trips is considered realistic. A reduction in car driver based trips (by 5%) for journeys of less than 5km is considered realistic as it is likely that these journeys could be undertaken by walking and cycling; and
- **Time-bound**: The targets are to be met within five years of initial occupation of the development, and on-going for at least a ten year period.

TfL's 'Travel Planning Guidance Note November 2013' does not contain specific guidance on the level to which a travel plan should aim to reduce single occupancy car trips. However, the document does provide a summary of the London wide targets which are set out in the Mayor's Transport Strategy. These include:

- Achieve a 5% modal share for cycling;
- Increase walking mode share above 24%;
- To reduce private motorised transport by 4% from a base of 43%
- Achieve a 60% reduction in London's CO2 by 2025; and
- Balance capacity and demand for public transport and reduce trips on the network where possible through the promotion of walking and cycling.

7.2 TARGETS

A travel survey should be undertaken in the first six months of first occupation. This survey will inform the targets of the TP and will be in line with the TfL smart targets.

Until a full survey is undertaken, it is difficult to set targets as it is predicted that car usage for a high proportion of occupants will be low to negligible. However, if **after the first year's survey there is evidence of** higher car use, the targets will be reviewed and the development should look to achieve a reduction of 3% within three years of completion of the year one monitoring report. This would be paired with a target to increase walking and cycling, both by 5% over the same time period, for the staff trips.

7.3 HOW THE TARGETS MEET THE TP OBJECTIVES

The above targets are considered to meet the objectives of this TP by reducing single occupancy private car/ van trips and encouraging walking and cycling.

The proposed targets have been prepared in line with latest government and TfL guidance and are considered to be SMART.

8. PROPOSED MEASURES AND INITIATIVES

8.1 INTRODUCTION

This section of the report outlines the measures and initiatives that could be introduced at the development to achieve the targets set out previously in chapter 7.

The measures and initiatives outlined below have been divided into physical **'hard' measures and 'soft' measures such as information, education and** promotion.

8.2 'HARD' MEASURES

The following 'hard' measures will be implemented at the development in conjunction with the development proposals.

8.2.1 MINIBUS PROVISION

A proposed minibus service will connect the site to key transport hubs and areas of interest such Kew Gardens Overground and Tube stations, Kew Bridge Overground station, Kew and Richmond Town Centres and the nearby Kew Retail Park. The minibus will be available for used by residents, staff and visitors of the development.

8.2.2 CYCLING

In order to facilitate and increase the use of the bicycle as a means of travel to the development among staff and visitors, safe and secure cycle parking will be provided. The development proposal includes a total of 26 cycle spaces which will be dispersed across the development.

Staff and visitors will provide an indication of the success, or otherwise, of the cycle parking facilities provided. If the cycle parking facilities are found to be under used, it may be necessary to survey site occupiers to identify any underlying causes for the low usage and determine measures to encourage increased use where practical.

8.2.3 CAR PARKING PROVISION

27 parking bays including 12 disabled access spaces will be provided for the development.

8.3 SOFT MEASURES

The following 'soft' measures proposals could be developed and implemented at the development depending on the results of initial travel survey undertaken in the first six months of first occupation.

8.3.1 CAR SHARING

Car sharing is aimed at minimising the number of single occupancy car trips by encouraging people to car share. Car sharing benefits residents and staff financially, whilst also reducing the number of cars on the highway network. Lift sharing could be encouraged internally by the Travel Plan Co-ordinator (TPC) and through the welcome packs and notice board. Where matches within the development cannot be found established lift share services such as www.liftshare.com will be promoted.

8.3.2 CAR CLUB

Car clubs will be promoted to staff and residents to enable them to undertake longer distance journeys where public transport is not viable. Car clubs could be promoted with car sharing in mind. The local car club locations will be promoted within internal publications, welcome packs and on information boards.

8.3.3 WELCOME PACKS FORMED FROM THIS TP

An introductory Travel Information Welcome Pack is intended to motivate staff across the development to use sustainable modes of travel. A Welcome Pack will be issued to all staff upon starting upon moving in. This will help to establish sustainable travel patterns from the outset. As a minimum, each pack will include:

- An offer of a visit from the TPC to provide information about sustainable travel;
- Provision of walking and cycling maps showing routes to local facilities and public transport facilities, including walking/cycling times;
- Location of cycle hire docking stations in the vicinity of the development;
- Car share scheme details and car club locations;
- Site specific public transport information and timetables; and,
- A feedback survey to gather early information about perceived transport choices, the impact of the Travel Plan and ways of improving it.

The Welcome Pack will be kept up to date by the TPC and, should a unit change hands or a new member of staff start within the life of the Travel Plan, an up to date Welcome Pack will be provided.

8.3.4 HD TV NOTICE BOARD

A HD TV or similar could be provided in the communal areas of both blocks, providing travel and community information to residents and staff. The TV could also be used to inform staff, residents and visitors of any forthcoming travel initiatives or events that are being organised by the TPC. The exact location of this technology would determine on completion of the development and fit out.

8.3.5 SOCIAL MEDIA

A dedicated Twitter and Facebook page and or development website could be created which provides detailed information regarding sustainable modes of travel including walking, cycling and public transport. It could also be used to inform residents, visitors and staff of upcoming events at the development and across London related to encouraging the use of sustainable modes of transports.

8.3.6 NEWSLETTER EMAIL

A newsletter could be distributed via email to users across the development. The newsletter would provide an update on the progress of the plan as well as details about upcoming events and promotions.

8.3.7 PEDESTRIAN AND CYCLE PROMOTION

Staff could be provided with a map of the local facilities which are easily accessible by cycling or walking, together with an indication of suggested routes. Regular updates will be made available by the TPC via the notice board and newsletter.

Travel Information Welcome Packs could be issued to all staff, comprising of promotional material highlighting the benefits of walking and cycling.

A walking and cycling group could be introduced to promote walking and cycling amongst staff to organise walking and cycling events. Staff could be offered the opportunity to purchase a bicycle through the Cycle2Work scheme. This national scheme enables staff to purchase a bicycle in a tax efficient manner through salary sacrifice.

8.3.8 PROMOTIONAL EVENTS

Promotional events could be organised to encourage the use of more active transport modes amongst staff and visitors. The promotional events will be aligned with local and national events to give users the opportunity to enter larger events that they would not normally enter.

8.3.9 VISITORS

Visitors of the development could be made aware of the presence of the travel plan. Details about travelling to the development by sustainable modes could be made available on the development website.

9. TRAVEL PLAN MANAGEMENT, MONITORING AND REPORTING

9.1 INTRODUCTION

It is important to have a strong organisational structure with clearly defined roles in order to deliver a successful TP. This includes identifying key responsibilities, identifying how the TP will be implemented, identifying how the initiatives will be enacted and the procedure for monitoring and review.

9.2 MANAGEMENT

9.2.1 TRAVEL PLAN CO-ORDINATOR (TPC)

The day to day operation of the travel plan will be the responsibility of an appointed TPC. Details of the appointed TPC will be provided to the LBR. When the final TP is submitted the TPC will be responsible for:

- Marketing and publicising of the TP and Travel Plan;
- **Acting as the "Public Face" of the TP, the key contact point for staff and** residents;
- Letting staff, residents and visitors know of the benefits of the TP and taking a more sustainable approach to transport;
- Ensuring all information provided is relevant and up to date;
- Responsibility for the delivery of the identified initiatives;
- Investigating the potential for new measures and initiatives;
- Liaising with key service providers and the Local Authority;
- Identify and encourage participation in national and local events that promote sustainable travel;
- Organising the monitoring of the TP; and
- Reporting the results of the monitoring.

The TPC will dedicate a sufficient amount of time to ensure all tasks are completed for developing the initiatives and implementing an overall strategy for the development. The amount of time required will vary from month to month depending on the survey and resultant measures.

The TPC will have a good knowledge of the local facilities in the area and will fully believe in the strategy to be implemented at the development. It is likely that the TPC will assume to be the manager of the development.

The TPC will be appointed at least one month prior to occupation of the development to ensure the measures and initiatives of the plan can be instilled from the offset. It is envisaged that the TPC will assume to be the manager of the development. Alternatively, a consultant could be employed to act as the TPC.

9.2.2 TRAVEL PLAN WORKING GROUP

A travel plan should be seen as an evolving document which is subject to ongoing review and tailored to maximise its effectiveness. This process of management and review will be undertaken by a steering group containing representatives from the management team, staff and residents as well as the TPC. The Local Authority and key service providers will also be consulted as part of the review process. The site manager will be responsible for ensuring that the role of the TPC and the steering group are adequately resourced to undertake their tasks efficiently.

Not all members of the Travel Plan Working Group will be known until the whole development is occupied. As soon as available, a contact list of the nominated people associated with the TP will be drafted.

9.3 IMPLEMENTATION

This TP looks to establish a sustainable approach to travel provision and the behaviour of those travelling to and from the development. This TP will seek to influence the transport choices made by staff, residents and visitors to and from the development. The way this TP is implemented will determine how successful the measures and initiatives are in influencing this behaviour and there are a number of areas which can be targeted to maximise its impact.

Travel behaviour is determined at a very early point and once people settle in to a particular routine it is difficult to alter. It is therefore important that every effort is made to influence **individuals'** decisions at the earliest possible opportunity. In line with this, the measures and initiatives will be implemented from the point of occupation, where appropriate. On first occupation, residents and staff will be issued with Travel Information Welcome Packs which will contain relevant information on walking, cycling and public transport facilities that are available in the vicinity of the development.

The effectiveness of this TP will also benefit from interaction between those responsible for its management and those who it is designed to benefit. This is a

two-way process with the need to encourage a strong sense of ownership among residents and staff. This can lead to a greater participation in events and initiatives and strengthen a feeling of involvement. This process then benefits from feedback provided by those taking part in the scheme, supplying a source of ideas and comments from those directly impacted, while the Travel Plan Co-ordinator and Travel Plan Working Group provides information back to them as part of the review and informing process. This becomes a continuous transferring of ideas and strengthens the interaction of the groups. This may be facilitated by having regular TP meetings or the production of a TP newsletter.

9.4 MONITORING

Monitoring will be undertaken for a period of five years. The monitoring and review process will be implemented to generate information by which the success of the travel plan can be evaluated. Monitoring and review will be the responsibility of the TPC and the Working Group.

A travel questionnaire will be issued to all occupiers within six months of first occupation of the development in order to establish baseline travel patterns. This baseline survey and all subsequent surveys will be iTrace compliant. Following the baseline survey further monitoring surveys will be undertaken at the end of the first, third and fifth year. The travel questionnaires will seek to establish all relevant information as per the TRICS survey methodology.

An important part of the monitoring process will be making the results available to the relevant groups to increase awareness and ensure the accountability of the TP, to legitimise it and encourage further feedback. The TPC will be responsible for the public reporting of the results and this may occur through:

- Publication of a Travel Plan Report;
- Information provided in newsletters; and
- Notices posted on the travel plan notice board and provided within the Welcome Pack.

In order to ensure that the targets are met additional measures and initiatives could be provided should the monitoring demonstrate that the targets may not be met.

As requested in TfL's 'Travel Planning Guidance Note November 2013' this TP will be monitored through the iTrace system.

9.5 REPORTING AND REVIEW

This TP will be reviewed at the end of the first, third and fifth year with the first review to be undertaken after one year of the TP being implemented (one year after initial occupation) in order to measure its effectiveness. The TPC will be responsible for the review process with the support of the Working Group.

A Monitoring Report will be developed by the TPC summarising the results of the surveys at the end of the first, third and fifth year of occupation. This report will be circulated to staff, residents, LBR and key stakeholders.

The report will include the current survey results compared against the targets established within the baseline travel survey. Should the results of the survey show that the targets are not being met the report will include details of measures which are to be implemented in order to help improve mode share.

The review of the TP will consider staff and residents' travel needs arising from new developments in transport provision. The travel plan will be updated as appropriate to account for this.

TYRÉNS

APPENDICES

TYRÉNS

APPENDIX A SCOPING NOTE

TYRÉNS

TECHNICAL NOTE

Project Name	Red & Yellow extra care development at former Kew Biothane Plant, Melliss Avenue	**Project No.**	0203/TN04
Subject	Transport Scoping Note	**Date**	22 June 2018

Introduction

AKTII/Tyréns UK have been appointed by Red & Yellow Care (R&Y) as transport consultants to support them prepare a full planning application for the redevelopment of the former Thames Water Biothane Plant on Melliss Avenue, Kew in London.

This Scoping Note (SN) has been prepared to present to the London Borough of Richmond upon Thames (LBR) and Transport for London (TfL) our proposed approach to the preparation of our Transport Assessment (TA) and Travel Plan (TP), which will accompany the planning application.

Site Location and Development Proposals

The site location is shown on Figure 1. The development is within the administrative boundary of the LBR, positioned between Melliss Avenue and River Thames. Melliss Avenue is a two-lane single carriageway road which is privately owned as its located within the existing Kew Riverside Development. It joins the public highway network at the junction with Townmead Road, south of the Kew Riverside **Development's** main entrance. Townmead Road provides a connection to the TfL strategic road network at the priority junction with the A205 Mortlake Road.

Figure 1 Site Location (Source: Streetmap.co.uk)

The proposed 4-6 storey extra care development will provide a range of medical, health, and leisure facilities and care services depending upon their specific needs and conditions. The minimum age of residents will be 65 years and it is expected the majority will be in the range of 75-85 years. The development will provide 96 self-contained Extra Care units, reflecting the following unit mix:

- 9 No 1 bedroom units
- 87 No 2 bedroom units

Residents will have full access to all facilities, certain facilities will be open to use by local residents and visitors, for example, the café, hair salon, children's play area and the Metropolitan Open Land which is being re landscaped. Access to this space will predominantly be via the towpath with alternative access via Melliss Avenue.

Non-Private Car Transport Services

With regards to travel to and from the site, opportunities to use public transport are provided via a bus route service (R68) which operates along the A205 South Circular Road and adjacent to the nearby Kew Retail Park every 15 minutes and London Underground Services via the Kew Gardens Tube Station (District Line), which is approximately 1km walking distance from the site. However, despite these services, the Public Transport Accessibility Level (PTAL) as measure by **TfL's website is ranked as 0, i.e. very low.**

Therefore, in acknowledgement of the limited public transport services to the site, it is proposed to provide a dedicated minibus service. The proposed service will connect the site to key transport hubs and areas of interest such Kew Gardens Tube station, Kew Bridge Overground station, Kew and Richmond Town Centres and the nearby Kew Retail Park. The minibus will be available for used by residents, staff and visitors of the development.

Vehicle Parking

Residents

There are a number of factors highlighted below, which are likely to contribute towards residents on the site having relatively low levels of car ownership.

- R&Y has advised that the average age of residents (those receiving care and those who are relatives/partners) will range from 75 to 85. Due to the expected demographic profile of the residents, it is anticipated that their car ownership level will be very low in comparison with the overall population in the local area;
- The dedicated minibus service for the site will provide good and easy access to key local amenities and transport hubs. Such a service will reduce the need for residents to make journeys by private car;
- London residents of this age are able to travel for free on all forms of public transport (after 9:30am for National Rail), which should further incentive residents to reduce car ownership; and
- The multi-purpose nature of the site provides a community without the need to travel off site extensively, thus further reducing the need for car ownership.

Taking into account the above factors it is considered robust to assume that the car ownership level for residents will equate to 0.15 cars per residential unit. The proposed number of residential car parking spaces on the site will therefore be 15 spaces (96 units x 0.15).

Out of these 15 spaces, 10 are allocated as disabled spaces, i.e. 67% are disabled spaces. This proportion of disabled spaces, which is significantly higher in comparison to conventional residential developments, reflects the needs of the particular demographic of residents on this site.

Site Staff

Based on the site's 'Operator Statement' prepared by R&Y and dated 16th March 2018, there are anticipated to be four working shifts for staff, namely:

- a day shift (9am to 5pm) with 7 staff;
- an AM shift (7am to 2pm) with 12 staff;
- a PM shift (2pm to 9pm) with 12 staff; and
- a night shift 9pm to 7am) with 3 staff

Due to the time overlap in shift patterns it is expected that a maximum of around 19 staff will be working on site at any one time.

Analysis of 2011 Journey to Work Census data (as shown in table 1) indicates that 38% of people who work in the local area to the site travel by single occupancy car. However, the site will have a dedicated minibus service available to staff, a relatively high level of cycle parking for staff (details described later in this note), and a staff recruitment strategy, which encourages employment from the local community as much as possible, thus reducing the need to travel by car. It is therefore expected the staff car mode share will be lower at around 25%.

Based on the expected maximum number of staff and their car mode share, 5 parking spaces will be provided for staff on site (19 staff x 25% car mode share). Out of these 5 spaces, 1 is allocated as a disabled parking space.

Table 1: 2011 Journey to Work Census Data (E02000787: Richmond upon Thames 004)

Method of travel to work (Workplace Population)	**Modal Share**
Underground, metro, light rail or tram	13%
Train	18%
Bus, minibus or coach	12%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	38%
Passenger in a car or van	1%
Bicycle	5%
On foot	9%
Other method of travel to work	1%

Site Visitors (Visitors for residents & Local Community Guests)

Visitors to the site will mainly be either visitors for a resident(s) or a local community guest, visiting one of a number of facilities on site proposed to be available to non-residents.

In terms of visitor parking, all visitors will be encouraged to make use of more sustainable transport modes such as walking, cycling, public transport or using the dedicated minibus service. However, 6 visitor parking space will be provided on site, with one of these spaces for disabled parking.

Car Drop off / Short term spaces

A further car parking space is to be provided in front of the main entrance of the building to enable a drop off facility or short-term parking for certain types of visitors such as a doctor or nurse.

Minibus Parking

To ensure appropriate storage of the minibus vehicle, a dedicated parking space will be provided on site, within the proposed car parking area at the southern end of the site.

Electric Vehicle (EV) Parking

In accordance with the London Plan, for new developments, 10% of the proposed spaces will be available for electric vehicles with appropriate charging infrastructure, i.e. active spaces, with a further 10% available in the future, i.e. passive spaces.

Car Parking Summary

In conclusion, a total of 26 car parking spaces and 1 drop off/short term spaces will be provided on site. 12 out of the 27 car parking spaces are disable parking spaces. The number of car parking spaces has been derived from first principles based on anticipated demand for parking and to take into account the need to deliver a balanced approach, which encourages travel by more sustainable mode of transport rather than the private car.

The TA will demonstrate through swept path tracking analysis that vehicle (both car and minibus) can safely manoeuvre within the car parking area and travel into and out of car park in forward gear.

Cycle Parking

Long Stay Cycle Parking

Due to the demographic profile of the residents, it is very unlikely they will be using bicycle as a mode of transport. Furthermore, based on the census data in table 1, only 1 long stay cycle parking space for staff is required to satisfy demand (19 staff x 5% bicycle mode share) based on current mode choices in the local area.

However, in recognition of the need to provide an effective and sustainable transport strategy for the site (i.e. discourage private car use), we are proposing to provide 8 long stay cycle parking spaces. It should be noted that the Draft London Plan cycle parking standards for C2 land use require a minimum of 1 long stay cycle parking space per 5 full time staff. We are therefore providing a significantly greater level of cycle parking than required from emerging standards in London.

Short Stay Cycle Parking

There are two separate groups of people requiring short stay cycle parking, i.e. visitors for the residents and guests from the local community.

We have referenced to the Draft London Plan cycle parking standard for C2 land use, 10 visitor spaces will be provided for 183 bedrooms based on the minimum requirement of 1 space per 20 bedrooms in the draft London Plan.

It is anticipated (and encouraged) that local community guests will use sustainable modes of transport such as waking and cycling due to their geographical proximity to the site. Therefore, adequate short stay cycle parking provision will be provided. **A total of 8 short stay cycle parking spaces will be provided for the café, children's play area, wellness &** beauty centre, movie/activity room and care outreach services.

Cycle Parking Summary

The site proposals will include 8 secure and sheltered long stay cycle parking spaces within the building and 18 short stay cycle parking spaces outside the building.

Site Servicing and Delivery Strategy

The TA will provide details of the anticipated number and type of scheduled servicing and delivery vehicles travelling to and from the site. It should be noted that given the nature of the site, it is expected that such demand will be relatively low and **that vehicle types will be restricted to smaller 'transit'** or 7,5T box van type vehicles rather than larger HGVs to ensure noise and disruption to existing residents on the estate is minimised.

For these vehicles, a loading zone area is proposed within the north west corner of site. Following arrival of the vehicle, **the site security gates will be opened by a member of the site's operations team. The vehicle will then proceed to** reverse into the loading zone area from Melliss Avenue to load/unload and then turn left in forward gear to leave the site.

It is expected that the vast majority of servicing and delivery vehicles will use to the loading area. However, in a minority of cases when non-scheduled larger HGVs are not able to access the loading area due to the size of the vehicle or the loading area being occupied, such vehicles will **load/unload at kerb side adjacent to the site's loading zone. The** current carriageway width for Melliss Avenue is approximately 4.7m, so the local widening of Melliss Avenue is proposed to enable two large vehicles to safely pass each other if required.

For the very small number of non-scheduled servicing and delivery vehicles not able to use the loading area, it is expected they will utilise the Thames Water plant entrance junction located northwest of the site to turn around and leave via Melliss Avenue in forward gear. In the very rare occasions when due to size, vehicles are unable to turnaround, **the vehicle will reverse back along Melliss Avenue and use the site's car** park entrance to turn around and exit in forward gear, all under strict control such as via a banksman guiding the vehicle.

Forecast Trip Generation

Forecast Trip rates associated with the proposed development have been derived from the industry standard TRICS database. It should be noted that there is no land-use category in TRICS directly comparable to our site, with the conventional care homes and sheltered homes the closest representatives of the development within the database. The nature of the extra care development, such as number of staff and types of residents, lies between care homes and sheltered homes. Therefore, the average of the trip rates derived from these two categories has been used for this extra care development. **Table 2** provides the weekday person trip rates by hour extracted from TRICS. The full TRICS reports will be included as an appendix within the TA.

Table 2 Forecast Person Trip Rates

	Care Homes Person Trip Rates per Resident			Sheltered Homes Person Trip Rates per Dwelling		
Time	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
07:00-08:00	0.117	0.123	0.240	0.101	0.109	0.210
08:00-09:00	0.141	0.147	0.288	0.109	0.132	0.241
09:00-10:00	0.166	0.074	0.240	0.186	0.318	0.504
10:00-11:00	0.178	0.166	0.344	0.326	0.349	0.675
11:00-12:00	0.172	0.178	0.350	0.225	0.178	0.403
12:00-13:00	0.117	0.123	0.240	0.225	0.147	0.372
13:00-14:00	0.184	0.08	0.264	0.24	0.349	0.589
14:00-15:00	0.129	0.166	0.295	0.209	0.101	0.310
15:00-16:00	0.086	0.166	0.252	0.217	0.186	0.403
16:00-17:00	0.123	0.166	0.289	0.202	0.186	0.388
17:00-18:00	0.061	0.11	0.171	0.155	0.14	0.295
18:00-19:00	0.123	0.147	0.270	0.147	0.155	0.302

As the care homes person trip rates are expressed per resident, for the purpose of our trip generation analysis we have assumed there will be a total of 144 residents on the development based on the units being 50% single occupancy and 50% double occupancy (48 units x 1 person and 48 units x 2 people). Table 3 presents the forecast total person trips for the development.

Table 3 Forecast Person Trips

	Care Homes Person Trips for 144 residents			Sheltered Homes Person Trips for 96 dwellings		
Time	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
07:00-08:00	17	18	35	10	10	20
08:00-09:00	20	21	41	10	13	23
09:00-10:00	24	11	35	18	31	48
10:00-11:00	26	24	50	31	34	65
11:00-12:00	25	26	50	22	17	39
12:00-13:00	17	18	35	22	14	36
13:00-14:00	26	12	38	23	34	57
14:00-15:00	19	24	42	20	10	30
15:00-16:00	12	24	36	21	18	39
16:00-17:00	18	24	42	19	18	37
17:00-18:00	9	16	25	15	13	28
18:00-19:00	18	21	39	14	15	29

To forecast the vehicular trip generation the vehicle mode share for the proposed development has been derived by using 2011 census travel to work data. As described earlier in this note, the census data indicates a car mode share of 38% for people traveling to a work destination in the local area. Given the proposed minibus and cycle parking provision it is anticipated that this car mode share will be reduced to 25% and this mode share level has been used to forecast vehicle trips to and from the site. It should be noted that using this percentage is consider robust as the car mode share for residents is likely to be significantly lower than 25%.

Tables 4 and **5** present the site's forecast vehicular trip generation by hour for the weekday. This analysis concludes that the proposed development site will generate only 8 and 7 two-way vehicle trips in the morning and evening peaks respectively. The forecast development traffic specific peak period is 10:00-11:00 and 14 two-way trips will be generated in this period.

Table 4 Vehicular Trip Generation for Care Home and Sheltered Home categories

	Care Homes Vehicular Trips for 144 residents			Sheltered Homes Vehicular Trips for 96 dwellings		
Time	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
07:00-08:00	4	4	9	2	3	5
08:00-09:00	5	5	10	3	3	6
09:00-10:00	6	3	9	4	8	12
10:00-11:00	6	6	12	8	8	16
11:00-12:00	6	6	13	5	4	10
12:00-13:00	4	4	9	5	4	9
13:00-14:00	7	3	10	6	8	14
14:00-15:00	5	6	11	5	2	7
15:00-16:00	3	6	9	5	4	10
16:00-17:00	4	6	10	5	4	9
17:00-18:00	2	4	6	4	3	7

18:00-19:00	4	5	10	4	4	7

Table 5 Average Vehicular Trip Generation for Kew Site

	Proposed development Average Vehicular		
Time	Arrival	Departure	Two-Way
07:00-08:00	3	4	7
08:00-09:00	4	4	8
09:00-10:00	5	5	10
10:00-11:00	7	7	14
11:00-12:00	6	5	11
12:00-13:00	5	4	9
13:00-14:00	6	6	12
14:00-15:00	5	4	9
15:00-16:00	4	5	9
16:00-17:00	5	5	10
17:00-18:00	3	4	7
18:00-19:00	4	5	8

Scope of Transport Assessment

Based upon this vehicular trip generation analysis the following scope of transport work is proposed.

The TA will be produced in accordance with the TfL's **'Transport Assessment** Best practice' and Ministry of Housing, Communities and Ministry of Housing, **Communities & Local Government's 'National Planning Practice Guidance'.** It will include the following elements:

- A review of national, regional and local transport policy relevant to the development proposals;
- A review of the existing baseline transport conditions in the vicinity of the site, including accessibility by all modes of transport (walking, cycling, public transport and vehicular access), and a review of highway safety utilising the most recently available three years of accident data for the study area;
- A description of the proposed development including the access, car and cycle parking and servicing arrangements;
- Swept path analysis will be undertaken of the proposed access arrangements and servicing facilities to demonstrate the practicality of the design;
- An all mode trip generation for the proposed development.
- A distribution of traffic associated with the proposed development based upon census travel to work origin-destination information.
- Given the traffic generation for the development is anticipated to be very low, no traffic modelling will be carried out as part of the overall assessment.
- A qualitative assessment of the transport impacts of the proposed development.
- A summary of the preceding sections of the TA, including the conclusions of the assessment.

Scope of Travel Plan

The TP will be produced in accordance with the Department for Communities and Local Government's 'National Planning **Practice Guidance'**. The TP will include the following elements:

- A review of the plan in terms of national, regional and local policy as well as highlighting travel planning guidance;

- A review of the site in terms of pedestrian connectivity, cycle connectivity, public transport links and highway access;
- An outline of the development proposals;
- An analysis of the indicative travel patterns for the proposed users of the development;
- A description of the aims, objectives and target of the TP;
- Proposed measures and initiatives that could be implemented to meet the targets;
- A plan on how the TP will be managed, implemented, monitored and report.

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APPENDIX B PROPOSED GROUND FLOOR LAYOUT

IMPORTANT NOTES:

Do not scale from drawings. All dimensions to be checked on site before commencement of work. All discrepancies to be brought to the attention of the Architect. Larger scale drawings and written dimensions take preference. This drawing is copyright and the property of the author, and must not be retained, copied or used without the express authority of MARCHESE + PARTNERS INTERNATIONAL PTY. LTD.

FOR PLANNING
NOT FOR CONSTRUCTION

PARKING

1	MAIN ENTRY DROP-OFF
12	ACCESSIBLE PARKING
14	VISITOR / STAFF / CAR SHARE PARKING
1	MINIBUS PARKING

TOTAL

27	CAR PARKING SPACES
20	EXTERNAL BICYCLE SPACES

REVISION	DATE	DESCRIPTION	BY
0	XX/09/2016	FOR PLANNING	KSD

marchese partners

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Kuala Lumpur · Auckland · Christchurch

CLIENT
RED & YELLOW

PROJECT
KEW RIVERSIDE
MELLISS AVENUE

DRAWING TITLE
PROPOSED GROUND FLOOR PLAN

SCALE	DATE	DRAWN	CHECKED
1 : 250 @A1	XX/09/2016	PDN	KSD
JOB	DRAWING		REVISION
17093	PA2.02		0

APPENDIX C CENSUS MODE SHARE DATA

QS703EW - Method of Travel to Work (2001 specification)

population	All usual residents aged 16 to 74
units	Persons
area type	2011 super output areas - middle layer
area name	E02000787 : Richmond upon Thames 004

Method of Travel to Work	**2011**	Calculated Mode Share
All categories: Method of travel to work	8,010	/
Work mainly at or from home	736	/
Underground, metro, light rail, tram	1,216	24%
Train	1,012	20%
Bus, minibus or coach	435	8%
Taxi	11	0%
Motorcycle, scooter or moped	90	2%
Driving a car or van	1,492	29%
Passenger in a car or van	65	1%
Bicycle	335	7%
On foot	463	9%
Other method of travel to work	32	1%
Not in employment	2,123	/

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

WP703EW - Method of travel to work (2001 specification) (Workplace population)

population	All usual residents aged 16 to 74 in employment in the area the week before the census
units	Persons
area type	2011 super output areas - middle layer
area name	E02000787 : Richmond upon Thames 004

Method of travel to work	2011	Calculated Mode Share
All categories: Method of travel	3,706	/
Work mainly at or from home	736	/
Underground, metro, light rail or	394	13%
Train	526	18%
Bus, minibus or coach	369	12%
Taxi	7	0%
Motorcycle, scooter or moped	40	1%
Driving a car or van	1,132	38%
Passenger in a car or van	41	1%
Bicycle	153	5%
On foot	275	9%
Other method of travel to work	33	1%

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.


invest & change

Annex E. Application Viability Assessment

Bespoke Property Consultants

maximising development potential

Review of the Viability Report on the Development of The Former Kew Biothane Site Mellis Avenue TW9 4BQ

On behalf of The London Borough of Richmond upon Thames

February 2019

Report by S.Devitt
Email simon.devitt@bpglimited.co.uk

Checked by A M Leahy BSc MIoD FRICS
Email andy.leahy@bpglimited.co.uk

FOI Exemption Section 41 & 43 (2) Private and Confidential except in respect of the Executive Summary

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CONTENTS

Appendices

1.0 Instructions

1.1 Bespoke Property Consultants (BPC) has been instructed by the London Borough of Richmond upon Thames to review the applicant's viability assessment of the proposed development at The Former Kew Biothane Site Mellis Avenue TW9 4BQ

1.2 In carrying out this review, BPC has been issued with a report dated November 2018 by DS2 which assesses the viability of the proposed development.

1.3 BPC have not inspected the property.

1.4 This assessment is provided for the purposes of agreeing appropriate S.106 and affordable housing obligations and is not a valuation of the subject site or scheme. It is provided for the sole use of the party to whom it is addressed. It is confidential to the addressee (save that the Executive Summary can be extracted and made publicly available in line with para 10 of the NPPG (July 2018)) and their professional advisors. Bespoke Properties Ltd accepts responsibility to the Client named at the start of this report alone that this report has been prepared with the skill, care and diligence reasonably to be expected of a competent consultant, but accept no responsibility whatsoever to any person other than the client themselves.

1.5 Neither the whole nor any part of the report nor any reference thereto may be included in any published document, circular, or statement, or published in any way, without the prior written approval of Bespoke Properties Ltd of the form and context in which it may appear and should remain confidential in accordance with the terms of the Freedom of Information Act, with the exception of the Executive Summary as noted above.

2.0 Executive Summary

2.1 We have reviewed the report by DS2 dated November 2019 and concluded that the main issues relating to the viability of the scheme are the base build cost used in the applicant's appraisal; costs proposed for the fit out of the development and the benchmark land value of the site.

2.2 We have reviewed the inputs and assumptions used by DS2 as set out in Section 4 below and found them on the whole to be reasonable, with the exception of

a) The build cost allowance, which is 5% above the figure estimated by Exigere in their analysis

b) Costs for fit out and S106 which are not itemised so we are unable to establish if they should be allowed as a capital cost.

c) The Benchmark Land Value for the site we have derived as £1,903,200 based on its existing use value (EUV) plus a premium, which is lower than the applicant's assumption by £3,893,800

2.3 We have carried out our own appraisal of the scheme based on the build cost rates estimated by Exigere and our assessment of Benchmark Land Value, but maintaining the other inputs adopted by the applicant other than fit out and S106 costs and the results of this appraisal are shown at Appendix A.

2.4 This appraisal shows a residual land value of £5,309,847 after allowing for CIL of £596,560 This land value is above the benchmark land value by £3,406,647 and therefore the proposed scheme is viable and could provide additional affordable housing contributions.

2.5 With regard to fit out costs and S106 contributions the applicant should be asked to justify the values they have put forward and provide more evidence to support their position.

2.6 Should the Council be minded to grant consent with less than policy-compliant provision of affordable housing, we would recommend a late stage viability review mechanism in accordance with the Mayor of London's Affordable Housing and Viability SPG.

2.7 In order to be compliant with CIL Regulation 122 and para 56 of the NPPF, any contributions generated by the review procedure must be capped at the value of the contributions foregone

plus indexation from the date of the planning consent, thus meeting the tests set out in those documents.

2.8 Please note the comment in para 4.8.5 of this report that the CIL allowance has been provided by the applicant and should be confirmed by the Council.

3.0 Policy Context

3.1 The Local Plan for the London Borough of Richmond upon Thames

3.1.1 The Local Plan was adopted 3rd July 2018 and the affordable housing policies are contained in Policy LP36. This states that a contribution towards affordable housing is expected from all sites. Where onsite housing is required the Council expects 50% of housing will be affordable and of the affordable units 40% should be for rent and 10% intermediate housing. On former employment sites at least 50% affordable housing is required. For schemes providing less than 10 units a financial contribution commensurate with the scale of the development is required

3.1.2 The policy goes on to say the Council will seek the maximum reasonable amount of affordable housing having regard to economic viability; individual site costs; the availability of public subsidy and the overall mix of uses and any other planning benefits.

3.1.3 If the proposals are unviable the applicant will be expected to demonstrate this with a detail open book provision of all the financial information, sufficient to enable the council or independent consultant to assess the viability position. This accords with para 10 of the NPPG which states that a financial viability assessment should be supported by appropriate evidence.

3.1.4 Existing Use Value plus a premium should be used to determine Benchmark Land Value.

3.1.5 Local Plan Viability Assessment Assumptions for the subject scheme typology

Item	Local Plan Allowance
Sales values / m²	£5,257 - £9,231
Base build / m²	£1,297 – £2,915
Professional fees	12%
Contingency	5%
Sales & Marketing costs	3%
Finance interest rate	6.75%
Finance fees	No allowance
Profit margin: Open market Affordable	 20% 6%

3.2 National Planning Policy Framework July 2018

3.2.1 Para 55 sets out that *"Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification.*

3.2.2 The framework, in paragraph 56, states that planning obligations normally required under S.106 agreements should only be sought where they meet all of the following tests:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind to the development.

3.2.3 Para 57 goes on to say; *"Where up-to-date policies have set out the contributions expected from development, planning applications that comply with them should be assumed to be viable. It is up to the applicant to demonstrate whether particular circumstances justify the need for a viability assessment at the application stage. The weight to be given to a viability assessment is a matter for the decision maker, having regard to all the circumstances in the case, including whether the plan and the viability evidence underpinning it is up to date, and any change in site circumstances since the plan was brought into force. All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available."*

3.3 National Planning Practice Guidance (July 18)

3.3.1 Paragraph 2 states that the role of a financial viability assessment (FVA) is primarily at the plan-making stage. It is the responsibility of site promoters to engage in plan making and the price paid for land is not relevant justification for failing to accord with the relevant policies of the plan.

3.3.2 Paragraph 6 states that developers should have regard to the total cost of the relevant planning policies when buying land.

3.3.3 Paragraph 8 requires that the FVA should refer back to the information that supported the Local Plan making and explain the differences. Ultimately it is for the decision-maker having regard to the transparency of assumptions made in the FVA as to the weight to be applied to the FVA in coming to the final decision.

3.3.4 Paragraph 9 of the guidance advises that review mechanisms should be used where appropriate and there is no mention in the guidance of whether these should be pre or post-implementation or whether the size of a scheme impacts on the decision whether to use one.

3.3.5 Paragraph 10 states that any FVA should be supported by appropriate evidence and that the FVAs should be proportionate, simple, transparent and publicly available. This ethos is expanded upon in paragraphs 11-15 where the relative values and costs (including land value) are discussed in further detail.

3.3.6 Paragraph 13 states that the benchmark land value should primarily be based on Existing Use Value (EUV) plus a premium and paragraph 14 expands upon this to say that the EUV should reflect the implications of abnormal costs, infrastructure, professional fees and be informed by market evidence.

3.3.7 Paragraph 15 states that the EUV is the value of the land in its existing use together with the right to implement any policy compliant extant consents including realistic deemed consents but without regard to alternative uses.

3.3.8 Paragraph 16 advises that the premium to be applied to the EUV should be a reasonable incentive to the land owner to bring forward the development whilst allowing for policy compliance. As a practice we have always taken this to mean that EUV plus a premium would equal market value as defined by the RICS Guidance Note 94/2012.

3.3.9 The guidance advises at para 17 that AUV should be based on an existing implementable permission or development that would comply with plan policies. To such a value no land owner premium is to be added. If such an alternative use is being utilised as the benchmark, then the applicant should give a justification for why it is not being pursued.

4.0 Assessment Inputs and Assumptions

4.1 Assessment methodology

4.1.1 The applicant's appraisal uses the Argus Developer (version 6) appraisal model, whereas the alternative model used by Bespoke Property Consultants was the HCA EAT. Both appraisal models are acceptable and should give similar answers if the same inputs are used.

4.2 Unit Mix

4.2.1 The scheme comprises 89 Extra Care (C2 use) residential units as set out in the accommodation schedule included in the applicant's report.

4.3 Values of residential units

4.3.1 The values used within the applicant's appraisal are based on the Knight Frank report submitted December 2018 as an addendum to the DS2 Report.

4.3.2 There is no direct local comparative data for Extra Care accommodation of the nature proposed. Bespoke Property Consultants have looked at new build apartment prices on riverside developments and the limited number of Extra Care units available in Richmond (albeit the latter units are not the scale of the proposed units).

4.3.3 We have analysed the evidence provided by Knight Frank which is substantially based on developments that are C3 use rather than C2. We believe their proposed pricing schedule is reasonable and have adopted the values proposed by Knight Frank (averaging £11,691/m2) for our appraisal

4.3.4 The assumptions used by the applicant and BPC for Ground Rents are the same. Both appraisals assume an average Ground Rent of £300 per unit capitalized at 6%

4.4 Gross Development Value

4.4.1 As both appraisals adopt the same unit pricing and Ground Rent assumptions the Gross Development Value are the same at £84,000,000

4.5 Development Timescale

4.5.1 DS2 have assumed six months pre-construction, 2 years construction and 35% sales off-plan with the remaining sales at 3 a month after completion. We believe this is reasonable and have adopted this programme for the purposes of our appraisal.

4.6 Build costs

4.6.1 A summary build cost analysis is included in the report by DS2. This estimate was based on a cost plan by Quantum resulting in a build cost figure of £4,024 per m^2.

4.6.2 Exigere have reviewed the cost plan on behalf of the Council and have advised it is higher than there assessment

4.6.3 The Bespoke Property Consultants' appraisal has been undertaken using the Exigere figure which equates to £3,826/m^2 inclusive of abnormal costs and contingency

4.7 Other assumptions

4.7.1 Professional Fees – a figure of 12% has been used for professional fees by the applicant. The applicant's assumption is a reasonable allowance. However, they have also included a number of other costs for insurance, legal fees and carbon off-set etc. In our view an allowance of 12% for professional fees should be inclusive of all such costs.

4.7.2 Contingency – Both Quantum and Exigere's estimates of build cost are inclusive of contingency.

4.7.3 S.106 Contributions – DS2 have allowed a figure of £500,000 for Section 106 costs without specifying the details of the payment. The applicant should provide information showing the basis for this figure. The Bespoke Property Consultant's appraisal makes no allowance for S106 costs in order to determine the surplus that is available to fund any S.106 contributions or affordable housing provision.

4.7.4 CIL – The CIL has been estimated using the information supplied by the applicant, and the Council should verify this figure before the application is decided.

4.7.5 Sales and Marketing – 3% has been allowed for by the applicant, which in our view is reasonable and is replicated in the Bespoke Property Consultant's appraisal.

4.7.6 Site acquisition costs – DS2's appraisal shows a negative residual land value. The Bespoke Property Consultants have allowed 1.75% for fees and SDLT based on the HMRC SDLT calculator.

4.7.7 Finance costs – an interest rate of 7% has been used by the applicant, inclusive of fees. We believe this is reasonable and have used the same figure for our appraisal.

4.7.8 Profit – the applicant has adopted a figure of 20% of GDV for the return for risk and profit. For this development we consider 20% is appropriate in the current market and that is the figure adopted in our appraisal which reflects the risks involved in the scheme.

4.7.9 Fit Out – DS2 Have included £1,500,000 covering FFE and Operating and Servicing costs. There is no detail of how these costs are made up. In order to be considered details need to be provided to determine whether this expenditure is appropriate and acceptable. Furthermore, on the basis of the minimal information provided, we are of the view that a significant element of such expenditure would be written off over a period of three to five years and as such would not be permissible as costs in a viability assessment. In essence they are revenue costs.

4.8 Benchmark Land Value

4.8.1 DS2 have based their assessment of Benchmark Land Value on a valuation provided by Gerald Eve. This states that it comprises an Existing Use Valuation. However, it is based on the assumption that rather than the 600m² (approx.) of B2 use that currently exists, an alternative scheme comprising 2,880m² B2 use would be acceptable

4.8.2 For the purposes of viability testing the Gerald Eve valuation comprises an Alternative Use Value (AUV) rather than an Existing Use Value (EUV). In accordance with both the NPPF and Mayor's Affordable Housing and Viability SPD for an AUV to be considered the scheme valued should have an extant Planning Permission or it should be demonstrated that the alternative use can be implemented. Richmond upon Thames' Development Management Officer dealing with the current application was unable to confirm that the B2 scheme posited by Gerald Eve as the basis for their valuation would definitely receive Planning Permission. As such we cannot accept the Gerald Eve valuation as a basis for establishing the Benchmark Land Value.

4.8.3 We have therefore undertaken a Residual Valuation based on the existing B2 area of 600m². We have adopted the values used by Gerald Eve in their valuation. Given the low value generated we have allowed a premium of 30% on the EUV. The details of the EUV are set out in Appendix D

4.9 Local Plan FVA Assumptions

Local plan viability assessment assumptions for same scheme typology

Item	Local Plan Allowance	Applicant's Allowance	Comments
Sales values / m²	£5,257 - £9,231	£11,691	
Base build / m²	£1,297 -£2,915	£4,024	
Professional fees	12%	12	
Contingency	5%	5%	
Sales & Marketing costs	3%	3	
Finance interest rate	6.75%	7%	
Finance fees	-		
Profit margin: Open market Affordable	 20% 6%	 20%	

5.0 BPC Assessment and Conclusions

5.1 We have re-run the appraisal, taking account of all the comments on the applicant's inputs and assumptions as noted above. The results of this analysis are shown at Appendix A to this report. The main changes between our assessment and the applicant's submission are as follows:

a) We have reduced the Build Cost Rate to £3,826/m² in line with Exigere's advice.

b) We have reduced the benchmark land value based on Existing Use Value to £1,903,200 from the applicant's view of £5,797,000.

c) We have excluded £500,000 of unspecified S106 costs and £1,500,000 of unspecified fit out costs

5.2 CIL has been allowed for at £596,560 as per the DS2 submission and the Council should verify this allowance is correct.

5.3 Our own assessment of the scheme shows a residual site value of £5,309,847 which is above the benchmark land value of £1,903,200 by £3,406,647 without any allowance for affordable housing or S.106 contributions. This suggests that the scheme is viable and could support affordable housing or S.106 contributions

Bespoke Property Consultants
maximising development potential

3rd July 2019 Our ref: SD/AL/al

Nicki Dale
Planning Department
London Borough of Richmond upon Thames
Civic Centre. 44 York Street
Twickenham. Middlesex TW1 3BZ

Dear Nicki

Former Kew Biothane Site

I refer to the Financial Viability Assessment Addendum produced by DS2 dated 20th March 2019. These comments has been produced further to our report on the original Viability Submission (February 2019) and particularly following the changes to the NPPF 9th May 2019

MCIL2

DS2 included an allowance for MCIL2 of £954,640. We are instructed that the Council's assessment of the liability is £943,096 and our appraisal has been amended reflect this figure

Benchmark Land Value

The revisions to the NPPG published 9th May 2019 clarify that where substantive works are required to establish the use to be considered as the Benchmark Land Value this should be considered as an Alternative Use Value not an Existing Use Value – notwithstanding the resultant development is the same Planning Use as the current use. The significance of this is that while the NPPF provides for the allowance of a premium when calculating Benchmark Land Value on the basis of Existing Use Value no such provision is allowed for where an Alternative Use Valuation is used. Therefore, we have amended our appraisal to remove the premium from our calculation of the Benchmark Land Value for this scheme.

Conclusion

We have revised our appraisal as outlined above. This shows a residual value of £3,697,132 which is above the Benchmark Land Value of £2,678,313 by £1,018,819 and therefore the scheme can support an increase in affordable housing provision equalling the surplus figure..

Yours sincerely

pp S DEVITT
Bespoke Property Consultants

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Homes & Communities Agency

Economic Appraisal Tool

click here to proceed

Version 2.0 July 2009

GVA Grimley

Bespoke Property Group

maximising development potential

GVA GRIMLEY & BESPOKE PROPERTY GROUP (Worksheet 2)
HCA ECONOMIC APPRAISAL TOOL

INPUT SHEET 2 - RESIDENTIAL VALUE & COST ASSUMPTIONS

BUILDING PERIOD (month 0 = date of planning consent, allow for lead in period to start on site)

	Timing (month)	
Construction Start	6	*(whole number, minimum of 0, maximum of 60)*
Construction End	30	*(whole number, minimum of 0, maximum of 60)*

Overall Scheme End Date (this must be completed)

	Month	
Final End Date of Scheme (scheme built and fully let/sold)	54	*(whole number, minimum of 0, maximum of 60)*

RESIDENTIAL VALUE ASSUMPTIONS

Base Value

Affordable Housing Tenure 1: Social Rented

Type of Unit	Rent per Unit per Week (£)	Total Annual Rent (£ per Unit)
0		
0		
0		
0		
0		
0		
0		

Management Costs (% of rent)	12.00%	*(% of gross rent per annum)*
Voids / bad debts (% of rent)	4.50%	*(% of gross rent per annum)*
Repairs Fund (% of rent)	18.00%	*(% of gross rent per annum)*
Yield (%)	6.25%	*(to capitalise the net rent, currently circa 6% but please seek*

	Start Month	End Month	
Timing of Affordable Housing Tenure 1 Purchase Payment			*(whole number, minimum o*

Affordable Housing Tenure 2: Intermediate - Shared Ownership

Type of Unit	Total Unit Capital Value (£ psm, NIA)	Rent per Unit per week of rented share (£)	Total Annual Rent (£ per Unit)
0		£0	£0
0		£0	£0
0		£0	£0
0		£0	£0
0		£0	£0
0		£0	£0
0		£0	£0

Owner-occupied share (%)			
Unsold Equity Rent Per Annum (%)		*(HCA Limit of 2.75%)*	
Management Costs (% of rent)			*(% of gross rent per annum*
Voids / bad debts (% of rent)			*(% of gross rent per annum*
Repairs Fund (% of rent)			*(% of gross rent per annum*
Yield (%)			*(to capitalise the net rent, c*

	Start Month	End Month	
Timing of Affordable Housing Tenure 2 Purchase Payment			*(whole number, minimum o*

Affordable Housing Tenure 3: Intermediate - Discounted Market Sale

Type of Unit	Capital Value pre-discount (£ psm, NIA)
0	

% of Open Market Value		*(ie discounted value)*

	Start Month	End Month	
Timing of Affordable Housing Tenure 3 Purchase Payment			*(whole number, minimum o*

Affordable Housing Tenure 4: Intermediate - Other Type of Shared Own / Shared Equity

Type of Unit	Total Unit Capital Value (£ pam, NIA)	Rent per Unit per week of rented share (£)	Total Annual Rent (£ per Unit)
		£0	£0
		£0	£0
		£0	£0
		£0	£0
		£0	£0
		£0	£0
		£0	£0

Owner-occupied share (%)			
Unsold Equity Rent Per Annum (%)			
Management Costs (% of rent)			*(% of gross rent per annum*
Voids / bad debts (% of rent)			*(% of gross rent per annum*
Repairs Fund (% of rent)			*(% of gross rent per annum*
Yield (%)			*(to capitalise the net rent, c*

	Start Month	End Month	
Timing of Affordable Housing Tenure 4 Purchase Payment			*(whole number, minimum o*

Affordable Housing Tenure 5: Affordable Rent

Type of Unit	Rent per Unit per Week (£)	Total Annual Rent (£ per Unit)
0		
0		
0		
0		
0		
0		
0		

Management Costs (% of rent)		*(% of gross rent per annum)*
Voids / bad debts (% of rent)		*(% of gross rent per annum)*
Repairs Fund (% of rent)		*(% of gross rent per annum)*
Yield (%)		*(to capitalise the net rent, currently circa 6% but please seek*

	Start Month	End Month	
Timing of Affordable Housing Tenure 5 Purchase Payment			*(whole number, minimum o*

Open Market Values

		Capital Value (£ pam)	Average value of unit
Open Market Housing Type 1:	1 beds	£12,012	£841,441
Open Market Housing Type 2:	2 beds 1/2/3floors	£10,833	£953,304
Open Market Housing Type 3:	4th floor	£11,251	£1,003,589
Open Market Housing Type 4:	2 beds 5th floor	£11,461	£1,097,964
Open Market Housing Type 5:	-		

	Month	
Timing of First Open Market Housing Sale	30	*(whole number, minimum o*
Timing of Last Open Market Housing Sale	54	*(whole number, minimum o*

Ground rents

		Average ground rent per unit per annum (£)	(where applicable)
Affordable Housing Tenure 1:	Social Rented		
Affordable Housing Tenure 2:	Intermediate - Shared Ownership		
Affordable Housing Tenure 3:	Intermediate - Discounted Market Sale		
Affordable Housing Tenure 4:	Intermediate - Other Type of Shared Own / Shared Equity		
Affordable Housing Tenure 5:	Affordable Rent		
Open Market Housing Type 1:	1 beds	£300	
Open Market Housing Type 2:	2 beds 1/2/3floors	£300	
Open Market Housing Type 3:	4th floor	£300	
Open Market Housing Type 4:	2 beds 5th floor	£300	
Open Market Housing Type 5:	-		
Yield (%)	6.00%	(to capitalise the ground rents)	
	Month		
Timing of ground rent payment	40	(whole number, minimum of 0, maximum of 60)	

Social Housing Grant & Other Funding

		Grant per unit (£)
Affordable Housing Tenure 1:	Social Rented	
Affordable Housing Tenure 2:	Intermediate - Shared Ownership	
Affordable Housing Tenure 3:	Intermediate - Discounted Market Sale	
Affordable Housing Tenure 4:	Intermediate - Other Type of Shared Own / Shared Equity	
Affordable Housing Tenure 5:	Affordable Rent	

	Timing of 1st Payment	Timing of 2nd Payment
Timing Social Housing Grant Paid		

Other sources of funding

	Value (£)	Timing of Payment	
			(whole number, minimum o
			(whole number, minimum o
			(whole number, minimum o
			(whole number, minimum o
			(whole number, minimum o
			(whole number, minimum o

BUILDING COST, MARKETING COST & SECTION 106 ASSUMPTIONS

		Building Costs - Gross (£ / sq m)	Net to Gross Ratio for Building Costs (%)*
Affordable Housing Tenure 1:	Social Rented		
Affordable Housing Tenure 2:	Intermediate - Shared Ownership		
Affordable Housing Tenure 3:	Intermediate - Discounted Market Sale		
Affordable Housing Tenure 4:	Intermediate - Other Type of Shared Own / Shared Equity		
Affordable Housing Tenure 5:	Affordable Rent		
Open Market Housing Type 1:	1 beds	£4,839	78%
Open Market Housing Type 2:	2 beds 1/2/3floors	£4,838	78%
Open Market Housing Type 3:	4th floor	£4,839	78%
Open Market Housing Type 4:	2 beds 5th floor	£4,839	78%
Open Market Housing Type 5:	-		

** The ratio is typically 70% - 85% in blocks of flats to reflect the difference between GIA & NIA (ie common parts such as lifts, stairs, corridors etc) and 100% in houses which have no common parts*

	Building Costs (£ / car parking space)	
Residential Car Parking Building Costs (average cost / car parking space)		
	% of Building Costs	
Building Design Fees % (Architects, QS etc)	10.00%	(typically around 10%)
Building Contingencies (% of Building Costs)		(typically around 5% for ne

Section 106 Payments (£) *	Cost (£)	Month of Payment
MCIL	£943,096	30
carbon offset	£0	30

* *This section excludes Affordable Housing section 106 payments*

Site Abnormals (£)	Cost (£)	Month of Payment

Building Cost Percentage Increase (if any)	**%**
Site Specific Sustainability Initiatives (%)	
Lifetime Homes (%)	
Code for Sustainable Homes (%)	
Other (%)	

OTHER COSTS

SITE ACQUISITION COSTS

	%	
Agents Fees (% of site value)	1.00%	*(typically around 1%)*
Legal Fees (% of site value)	0.75%	*(typically around 0.75%)*
Stamp Duty (% of site value)	5.00%	

	Cost (£)	Month of Payment
Other Acquisition Costs (£)		

FINANCE COSTS

Arrangement Fee (£)		
Interest Rate (%)	6.50%	*(typically around 3-5% abo*
Misc Fees - Surveyors etc (£)		

Marketing Costs

Affordable Housing Marketing Costs

	Cost (£)	Timing (month)
Developer cost of sale to RSL (£)		
RSL on-costs (£)		
Intermediate Housing Sales and Marketing (£)		

Open Market Housing Marketing Costs

Sales Fees (agents fees & marketing fees) - %	3.00%	*(typically around 6%)*
Legal Fees (per Open Market unit) - £		*(typically around £600 per*

DEVELOPER'S RETURN FOR RISK AND PROFIT (before taxation)

	% of Housing Capital Value	
Open Market Housing (%)	17.50%	*(typically 17.5-20%)*
Affordable Housing (%)		*(typically around 6%. profit only taken on the capital value of*

GVA GRIMLEY & BESPOKE PROPERTY GROUP (Worksheet 1)
HCA ECONOMIC APPRAISAL TOOL

INPUT SHEET 1 - RESIDENTIAL MIX ASSUMPTIONS

Basic Site Details

Site Address	Kew Biothane -Revised April 2019
Site Reference	
File Source	
Scheme Description	
Date	
Site Area (hectares)	
Author & Organisation	
HCA Investment Manager	

Residential Mix Assumptions

Affordable Housing Tenure 1: Social Rented

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

Affordable Housing Tenure 2: Intermediate - Shared Ownership

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

Affordable Housing Tenure 3: Intermediate - Discounted Market Sale

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

Affordable Housing Tenure 4: Intermediate - Other Type of Shared Own / Shared Equity

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

Affordable Housing Tenure 5: Affordable Rent

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

* Other = User-defined

Open Market Housing Type 1: 1 beds

	1 b						
Unit Size (sq m) - NIA	53.4						
Habitable Rooms per Unit	2						
Persons per Unit	2						
Total Number of Units	11						

Open Market Housing Type 2: 2 beds 1/2/3floors

Unit Size (sq m) - NIA	88						
Habitable Rooms per Unit	3						
Persons per Unit	4						
Total Number of Units	54						

Open Market Housing Type 3: 4th floor

Unit Size (sq m) - NIA	89.2						
Habitable Rooms per Unit	3						
Persons per Unit	4						
Total Number of Units	14						

Open Market Housing Type 4: 2 beds 5th floor

Unit Size (sq m) - NIA	95.8						
Habitable Rooms per Unit	3						
Persons per Unit	4						
Total Number of Units	9						

Open Market Housing Type 5:

Unit Size (sq m) - NIA							
Habitable Rooms per Unit							
Persons per Unit							
Total Number of Units							

Parking spaces (see handbook for correct definition)

Total number of residential car parking spaces *(Open Market and Affordable)*
Value of each residential car parking space *(See user manuel for correct definition)*

GVA GRIMLEY & BESPOKE PROPERTY GROUP
HCA ECONOMIC APPRAISAL TOOL

(Worksheet 3)

INPUT SHEET 3 - COMMERCIAL & NON-RESIDENTIAL

OFFICE ASSUMPTIONS

Size of office scheme (gross sq m)		
Size of office scheme (net lettable sq m)		
Values		
Rent (£ psm)		
Yield (%)		
Purchaser's costs (% of value)		*(typically around 5.75% assuming a 4% stamp duty)*
Building Costs		
Office Building Costs (Gross, £ psm)		
Office Building Professional Fees (% of building costs)		*(typically around 10% - 15%)*
Building Contingencies (% of building costs)		*(typically around 5%)*
	Timing (month)	
Timing		
Start of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
End of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
Timing of Letting / Sale (month)		*(whole number, minimum of 0, maximum of 60)*
Letting, Advertising & Sale fees		
Letting fees (% of annual income)		*(typically around 10% for sole agent and 15% for joint agents)*
Advertising fees (% of annual income)		*(typically around 1%)*
Sale fees (% of sale price)		*(typically around 1.75%)*
Return for risk / profit (% of value)		*(typically around 20%)*

RETAIL ASSUMPTIONS

Size of retail scheme (gross sq m)		
Size of retail scheme (net lettable sq m)		
Values		
Rent (£ psm)		
Yield (%)		
Purchaser's costs (% of value)		*(typically around 5.75% assuming a 4% stamp duty)*
Building Costs		
Retail Building Costs (Gross, £ psm)		
Retail Building Professional Fees (% of building costs)		*(typically around 10% - 15%)*
Building Contingencies (% of building costs)		*(typically around 5%)*
	Timing (month)	
Timing		
Start of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
End of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
Timing of Letting / Sale (month)		*(whole number, minimum of 0, maximum of 60)*
Letting / sale fees		
Letting (% of income)		*(typically around 10% for sole agent and 15% for joint agents)*
Advertising (% of annual income)		*(typically around 1%)*
Sale (% of sale price)		*(typically around 1.75%)*
Return for risk / profit (% of value)		*(typically around 20%)*

INDUSTRIAL ASSUMPTIONS

Size of industrial scheme (gross sq m)		
Values		
Rent (£ psm)		
Yield (%)		
Purchaser's costs (% of value)		*(typically around 5.75% assuming a 4% stamp duty)*
Building Costs		
Industrial Building Costs (Gross, £ psm)		
Industrial Building Professional Fees (% of building costs)		*(typically around 10% - 15%)*
Building Contingencies (% of building costs)		*(typically around 5%)*
	Timing (month)	
Timing		
Start of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*

End of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
Timing of Letting / Sale (month)		*(whole number, minimum of 0, maximum of 60)*
Letting / sale fees		
Letting (% of income)		*(typically around 10% for sole agent and 15% for joint agents)*
Advertising (% of annual income)		*(typically around 1%)*
Sale (% of sale price)		*(typically around 1.75%)*
Return for risk / profit (% of value)		*(typically around 20%)*

LEISURE ASSUMPTIONS

Size of Leisure scheme (gross sq m)		
Size of Leisure scheme (net lettable sq m)		
Values		
Rent (£ psm)		
Yield (%)		
Purchaser's costs (% of value)		*(typically around 5.75% assuming a 4% stamp duty)*
Building Costs		
Leisure Building Costs (Gross, £ psm)		
Leisure Building Professional Fees (% of building costs)		*(typically around 10% - 15%)*
Building Contingencies (% of building costs)		*(typically around 5%)*
Timing	**Timing (month)**	
Start of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
End of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
Timing of Letting / Sale (month)		*(whole number, minimum of 0, maximum of 60)*
Letting / sale fees		
Letting (% of income)		*(typically around 10% for sole agent and 15% for joint agents)*
Advertising (% of annual income)		*(typically around 1%)*
Sale (% of sale price)		*(typically around 1.75%)*
Return for risk / profit (% of value)		*(typically around 20%)*

COMMUNITY USE ASSUMPTIONS

Size of Community-use scheme (gross sq m)		
Size of Community-use scheme (net lettable sq m)		
Values		
Rent (£ psm)		
Yield (%)		
Purchaser's costs (% of value)		*(typically around 5.75% assuming a 4% stamp duty)*
Building Costs		
Community-use Building Costs (Gross, £ psm)		
Community-use Building Professional Fees (% of building costs)		*(typically around 10% - 15%)*
Building Contingencies (% of building costs)		*(typically around 5%)*
Timing	**Timing (month)**	
Start of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
End of Building Period (month)		*(whole number, minimum of 0, maximum of 60)*
Timing of Letting / Sale (month)		*(whole number, minimum of 0, maximum of 60)*
Letting / sale fees		
Letting (% of income)		*(typically around 10% for sole agent and 15% for joint agents)*
Advertising (% of annual income)		*(typically around 1%)*
Sale (% of sale price)		*(typically around 1.75%)*
Return for risk / profit (% of value)		*(typically around 20%)*

GVA GRIMLEY & BESPOKE PROPERTY GROUP **(Worksheet 4)**
HCA ECONOMIC APPRAISAL TOOL

SUMMARY

Site Address	Kew Biothane -Revised April 2019
Site Reference	
File Source	
Scheme Description	
Date	
Site Area (hectares)	
Author & Organisation	
HCA Investment Manager	

Housing Mix (Affordable + Open Market)

Total Number of Units	88	*units*
Total Number of Open Market Units	88	*units*
Total Number of Affordable Units	0	*units*
Total Net Internal Area (sq m)	7,450	*sq m*
Total Habitable Rooms	253	*habitable rooms*
% Affordable by Unit	0.0%	
% Affordable by Area	0.0%	
% Affordable by Habitable Rooms	0.0%	
% Social Rented within the Affordable Housing	-	*by number of units*
% Social Rented within the Affordable Housing	-	*by area*
% Social Rented within the Affordable Housing	-	*by habitable rooms*
Total Number of A/H Persons	0	*Persons*
Total Number of Social Rented Persons	0	*Persons*
Total Number of Intermediate Persons	0	*Persons*
Total Number of Open Market Persons	330	*Persons*
Total Number of Persons	330	*Persons*
Site Area	0.00	*hectares*
Net Internal Housing Area / Hectare	-	*sq m / hectare*

Residential Values

Affordable Housing Tenure 1: Social Rented

Type of Unit	Total Rent pa (£)	Yield (%)	Capital Value (£)
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
Total	-	-	-

Total Capital Value of Affordable Housing Tenure 1 £0

Affordable Housing Tenure 2: Intermediate - Shared Ownership

Type of Unit	Capital Value (£ psm)	Total Floorspace (sq m)	Total Capital Value (£)
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
£0	-	-	-
£0	-	-	-
Total	-	-	-

Owner-occupied / rented % share -

Capital Value of owner-occupied part -

Type of Unit	Total Rent pa (£)	Yield (%)	Capital Value (£)
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
£0	-	-	-
£0	-	-	-
Total (full capital value if sold at OMV)	-	-	-

Total Capital Value of Affordable Housing Tenure 2 £0

Affordable Housing Tenure 3: Intermediate - Discounted Market Sale

Type of Unit	Capital Value (£ psm)	Total Floorspace (sq m)	Total Capital Value (£)
0	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
Total	-	-	-

% of Open Market Value -

Total Capital Value of Affordable Housing Tenure 3 **£0**

Affordable Housing Tenure 4: Intermediate - Other Type of Shared Own / Shared Equity

Type of Unit	Capital Value (£ psm)	Total Floorspace (sq m)	Total Capital Value (£)
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
Total	-	-	-

Owner-occupied / rented % share -

Capital Value of owner-occupied part -

Type of Unit	Total Rent pa (£)	Yield (%)	Capital Value (£)
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
Total (full capital value if sold at OMV)	-	-	-

Total Capital Value of Affordable Housing Tenure 4 **£0**

Affordable Housing Tenure 5: Affordable Rent

Type of Unit	Total Rent pa (£)	Yield (%)	Capital Value (£)
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
0	-	-	-
Total	-	-	-

Total Capital Value of Affordable Housing Tenure 5 **£0**

TOTAL CAPITAL VALUE OF ALL AFFORDABLE HOUSING (EXCLUDING SHG & OTHER FUNDING) **£0**

Social Housing Grant

	Grant per unit (£)	Number of Units	Grant (£)
Social Rented	£0	0	£0
Intermediate - Shared Ownership	£0	0	£0
Intermediate - Discounted Market Sale	£0	0	£0
Intermediate - Other Type of Shared Own / Share	£0	0	£0
Affordable Rent	£0	0	£0
SHG Total	-	0	£0

Social Housing Grant per Affordable Housing Person -
Social Housing Grant per Social Rented Person -
Social Housing Grant per Intermediate Person -

TOTAL VALUE OF SOCIAL HOUSING GRANT **£0**

0 £0

0		£0
0		£0
0		£0
0		£0
0		£0

OTHER SOURCES OF AFFORDABLE HOUSING FUNDING	£0
TOTAL CAPITAL VALUE OF ALL AFFORDABLE HOUSING (INCLUDING SHG & OTHER FUNDING)	£0

Open Market Housing

Type of Open Market Housing	Net Area (sq m)	Revenue (£ / sq m)	Total Revenue (£)
1 beds	567	£12,012	£7,055,849
2 beds 1/2/3floors	4,752	£10,833	£51,478,416
4th floor	1,249	£11,251	£14,050,249
2 beds 5th floor	862	£11,461	£9,881,674
-	-	-	-
Total	7,450	-	£82,466,188

	Average value (£ per unit)
1 beds	£641,441
2 beds 1/2/3floors	£953,304
4th floor	£1,003,589
2 beds 5th floor	£1,097,964
-	

TOTAL CAPITAL VALUE OF OPEN MARKET HOUSING	£82,466,188

Car Parking

No. of Spaces	Price per Space (£)	Value
-	-	-

TOTAL VALUE OF CAR PARKING	£0

Ground rent

		Capitalised annual ground rent
Affordable Housing Tenure 1:	Social Rented	£0
Affordable Housing Tenure 2:	Intermediate - Shared Ownership	£0
Affordable Housing Tenure 3:	Intermediate - Discounted Market Sale	£0
Affordable Housing Tenure 4:	Intermediate - Other Type of Shared Own / Shared Equity	£0
Affordable Housing Tenure 5:	Affordable Rent	£0
Open Market Housing Type 1:	1 beds	£55,000
Open Market Housing Type 2:	2 beds 1/2/3floors	£270,000
Open Market Housing Type 3:	4th floor	£70,000
Open Market Housing Type 4:	2 beds 5th floor	£45,000
Open Market Housing Type 5:	-	£0
TOTAL CAPITALISED ANNUAL GROUND RENT		£440,000

TOTAL CAPITAL VALUE OF RESIDENTIAL SCHEME	£82,906,188

Non-Residential Values

Office	£0	
Retail	£0	
Industrial	£0	
Leisure	£0	
Community-use	£0	£0
TOTAL CAPITAL VALUE OF NON-RESIDENTIAL SCHEME		£0

TOTAL VALUE OF SCHEME	£82,906,188

Residential Building, Marketing & Section 106 Costs

Affordable Housing Build Costs		
Open Market Housing Build Costs	£46,21[illegible]81	£46,215,681
Cost Multipliers		
Site Specific Sustainability Initiatives (%)	0.0%	£0
Lifetime Homes (%)	0.0%	£0
Code for Sustainable Homes (%)	0.0%	£0
Other (%)	0.0%	£0
Residential Car Parking Build Costs		£0
Other site costs		
Building Contingencies	0.0%	£0
Building Cost Fees (Architects, QS etc):	10.0%	£4,621,568
Other Acquisition Costs (£)		£0
Site Abnormals		
0		£0
0		£0
0		£0
0		£0
0		£0
0		£0
0		£0
0		£0
Total Building Costs		**£50,837,250**
Section 106 Costs (£)		
MCIL		£943,096
carbon offset		£0
0		£0
0		£0
0		£0
0		£0
0		£0
0		£0
Section 106 costs		**£943,096**
Marketing (Open Market Housing ONLY)		
Sales Fees:	3.0%	£2,473,986
Legal Fees (per Open Market unit):	£0	£0
Marketing (Affordable Housing)		
Developer cost of sale to RSL (£)		£0
RSL on-costs (£)		£0
Intermediate Housing Sales and Marketing (£)		£0
Total Marketing Costs		**£2,473,986**

Non-Residential Building & Marketing Costs

Building Costs		
Office	£0	
Retail	£0	
Industrial	£0	
Leisure	£0	
Community-use	£0	£0
Professional Fees (Building, Letting & Sales)		
Office	£0	
Retail	£0	
Industrial	£0	
Leisure	£0	
Community-use	£0	£0
Total Non-Residential Costs		**£0**
TOTAL DIRECT COSTS:		**£54,254,331.20**

Finance and acquisition costs
(finance costs are only displayed if there is a positive residual site value)

Arrangement Fee	£0
Misc Fees (Surveyors etc)	£0
Agents Fees	£60,683
Legal Fees	£45,512
Stamp Duty	£303,416
Total Interest Paid	£7,742,349
Total Finance and Acquisition Costs	**£8,151,961**

Developer's return for risk and profit

Residential		
Open Market Housing Operating 'Profit'		£14,431,583
Affordable Housing 'Profit'		£0
Non-residential		
Office	£0	
Retail	£0	
Industrial	£0	
Leisure	£0	
Community-use	£0	£0
Total Operating Profit		**£14,431,583**

(profit after deducting sales and site specific finance costs but before allowing for developer overheads and taxation)

Residual Site Value

SITE VALUE TODAY	**£6,068,313**
EXISTING USE VALUE	£2,678,313
DIFFERENCE BETWEEN SITE VALUE AND EXISTING USE VALUE	£3,390,000

Checks:

Site Value as a Perce tal Scheme Value	
Site Value per hectare	#VALUE!

Notes & Calculation Sheet

(Worksheet 5)

%	3b 4p	3b 5p	3b5p	3b6p	4b 5p	4b 6p	4b 7p	
	73	100	115.6	123	100	109	125	
	4	5	4	5	5	5	6	
	4	5	5	6	5	6	7	
100%	15	18	6	4	7	7	1	
25%	4	5	2	1	2	2	0	14.500