



Oxford University Development

Begbroke Innovation District

Framework Delivery Servicing
and Management Plan

July 2023

KMC Transport
Planning Ltd

Contents

1	Introduction	2
1.2	Status	3
1.3	Framework DSMP Structure.....	3
2	Begbroke Innovation District	4
2.1	Site Location.....	4
2.2	Development Proposal	5
3	Delivery and Servicing Vehicle Access	6
3.2	Access to Begbroke Innovation District.....	6
3.3	Residential Deliveries.....	6
3.4	Residential Refuse Collection.....	7
3.5	Commercial Deliveries and Servicing.....	7
3.6	Commercial Refuse Collection	7
4	Objectives and Responsibilities.....	8
4.1	Objectives.....	8
4.2	Future DSMPs	8
4.3	Responsibilities.....	8
5	Delivery and Servicing Management Measures	10
5.2	Residential.....	10
5.3	Commercial	10
5.4	Monitoring and Reporting	11
5.5	Innovation	11

1 INTRODUCTION

- 1.1.1 KMC Transport Planning Ltd (KMC) is appointed by Oxford Development Limited (ODL) (the 'Applicant') to provide transport planning consultancy services in respect of proposals for the Begbroke Innovation District (the Proposed Development).
- 1.1.2 This Framework Delivery and Servicing Management Plan (Framework DSMP) has been prepared to support the outline planning application for the Begbroke Innovation District submitted to Cherwell District Council (CDC).
- 1.1.3 This document provides a framework for individual DSMPs that would be developed for the various phases of the Proposed Development and land use types as part of reserved matters applications.
- 1.1.4 Any DSMP submitted for approval as part of reserved matters applications must be substantially in accordance with the Framework DSMP which provides a framework for:
- the basis for the delivery and servicing strategy to be adopted;
 - the requirements to accommodate delivery and servicing vehicle movements; and
 - the ongoing management of deliveries and servicing.
- 1.1.5 The overarching servicing and delivery strategy for the development is based on:
- Residential refuse collection will occur on street from waste collection points situated around the Site;
 - Residential delivery and servicing trips are accommodated on-street due to the low level of movement, and to make the most efficient use of land when considering other factors such as public realm and landscaping;
 - Delivery and servicing vehicles for commercial uses will use specific bays situated in close proximity to or within those commercial units; and
 - A method of control will prevent unauthorised vehicles from accessing parts of the Site such as pedestrian priority routes using appropriate design or physical methods of control.
- 1.1.6 The outline planning application is also supported by a Transport Assessment (TA), which includes estimates of the number of vehicle movements generated by the proposed scale of development and should be read in conjunction with this document.
- 1.1.7 The TA provides a thorough description of the local highway network as well as existing land uses, established access strategies and existing traffic flows.

1.2 Status

- 1.2.1 This Framework DSMP acknowledges that the management of deliveries is a constantly evolving process and identifies the wider strategies that site occupants will adopt.
- 1.2.2 This document also considers the impact of delivery and servicing across the entire Site and provides a framework for the delivery and servicing strategy as later stages of the Site are developed.
- 1.2.3 It is anticipated that a condition on the planning permission will require the submission and approval of detailed DSMPs for each phase of the development, which will detail the exact location and operation of the delivery and servicing arrangements.
- 1.2.4 The focus of the Framework DSMP is on strategies associated with the residential and commercial elements of the development proposals as these will generate the most delivery movements. The movements for the commercial elements are likely to be regular with many that are planned, enhancing the chance of success of DSMPs.
- 1.2.5 The management of residential deliveries is more problematic given their frequency is varied both in terms of operator and time. The Framework DSMP does however identify where residential delivery movements can be safely accommodated, including refuse collection and identifies measures to improve efficiency.

1.3 Framework DSMP Structure

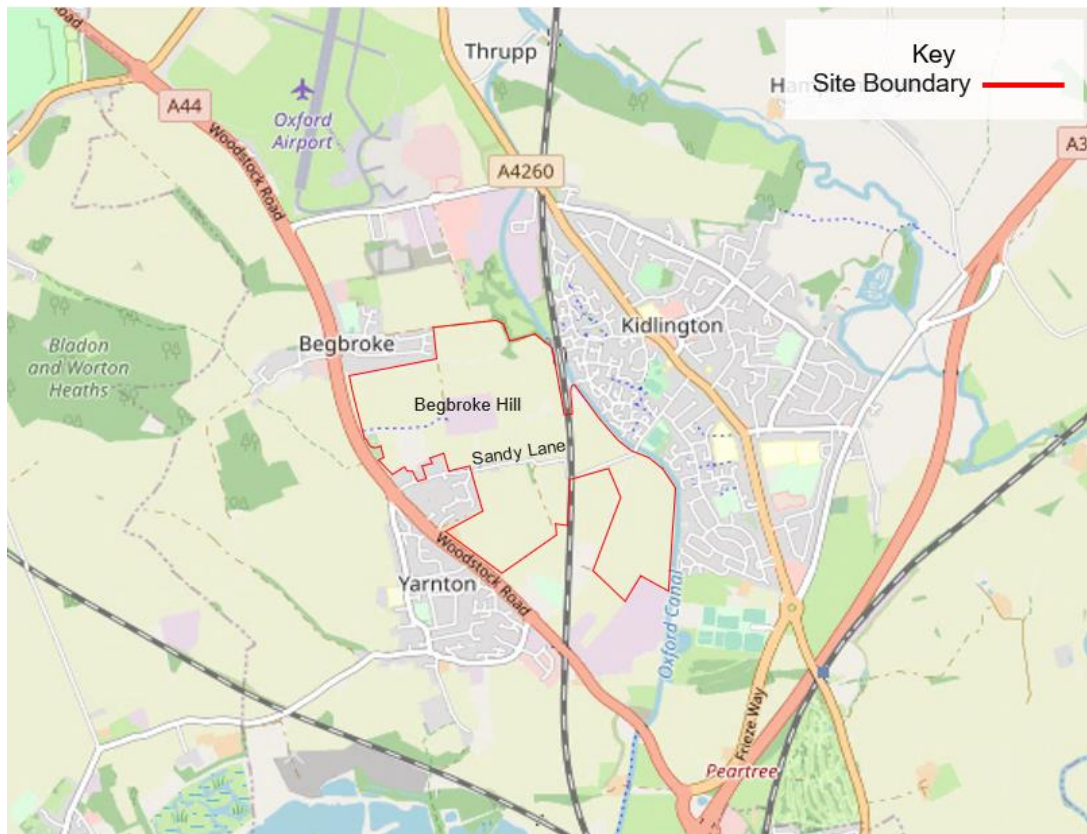
- 1.3.1 The Framework DSMP is structured as follows:
- Section 2: Begbroke Innovation District;
 - Section 3: Delivery and Servicing Vehicle Access;
 - Section 4: Objectives and Responsibilities; and
 - Section 5: Delivery and Servicing Management Measures.

2 BEGBROKE INNOVATION DISTRICT

2.1 Site Location

- 2.1.1 The Site is located circa 7.35km northwest of Oxford city centre, circa 1.25km west of Kidlington village centre and close to the villages of Yarnton and Begbroke.
- 2.1.2 The existing Begbroke Science Park is situated in the northern portion of the Site, which accommodates laboratories, engineering facilities and administrative buildings, with the remainder of the Site predominantly agricultural land. A historical landfill site, known as Sandy Lane East, is located in the centre of the Site and is approximately 5.2 ha in area.
- 2.1.3 The location of the Site and boundary are shown in **Figure 2.1**.

Figure 2.1: Site Location



2.2 Development Proposals

- 2.2.1 The Applicant is seeking outline planning permission for a phased, mixed-use development, which would provide up to 155,000 square metres (sqm) gross external area (GEA) of new faculty, and research and development space associated with the expansion of the existing Begbroke Science Park, up to 215,000sqm GEA of residential floorspace that would deliver apartments, communal and sharer accommodation and traditional houses and associated amenity, education and community uses.
- 2.2.2 The Proposed Development would include supporting social infrastructure including a secondary school and two primary schools, health, indoor sport and recreation, emergency and nursery facilities as well as supporting retail, leisure and community uses.

3 DELIVERY AND SERVICING VEHICLE ACCESS

- 3.1.1 The proposed land uses within Begbroke Innovation District will each generate demand for deliveries and servicing.
- 3.1.2 Residential development typically results in deliveries by post, online shopping orders, online food deliveries and refuse collection movements. Individual courier or online shopping organisations will naturally consolidate vehicle movements at source.
- 3.1.3 Commercial development is typically associated with stock replacement and deliveries and waste collection. The development will also generate occasional servicing trips associated with general maintenance.
- 3.1.4 For Begbroke Innovation District, the life science and research and development focus of the employment offer will have specific delivery and servicing requirements. Organisations are likely to require specialist gas deliveries for research and potentially waste that may require specific servicing.

3.2 Delivery and Servicing Access

- 3.2.1 All delivery and servicing movements will be from the A44 to the west of the Site which provides convenient connections to strategic links necessary for logistics operations.
- 3.2.2 Vehicular access will be taken from the existing signal controlled A44/Begbroke Hill access, which is to be upgraded by allocated site PR9. Vehicular access to the Site would also be provided via a new three arm signal-controlled junction on the A44 to the south of the Site, which is proposed to be delivered by Hallam Land as part of their development proposals. Both proposed access points will accommodate the delivery and servicing movements.
- 3.2.3 Where possible, delivery and servicing movements will be managed to avoid peak periods.

3.3 Residential Deliveries

- 3.3.1 Residential servicing is expected to occur on-street and is considered acceptable given the expected low frequency and limited dwell times. Specific design considerations across the Site such as Living Streets will accommodate delivery movements, consistent with the car is the guest approach.
- 3.3.2 Streets will be designed to accommodate the more frequent requirements of panel vans and 7.5t box vans such that they can turn and load/unload or pass along streets, which reduces the impact on the main vehicular routes.
- 3.3.3 Due to their infrequent use mostly associated with moving days or the delivery of larger goods such as furniture, it is expected that larger HGVs will stop on-street to load and unload, which is appropriate when balancing the different needs of the development in achieving appropriate parking numbers, providing appropriate landscaping and high quality public realm.

- 3.3.4 Vehicle swept path analysis drawings will be provided for each reserved matters submission demonstrating that each phase can safely accommodate expected delivery and servicing vehicles.

3.4 Residential Refuse Collection

- 3.4.1 The indicative masterplan has been developed to ensure that refuse vehicles can access all necessary parts of the Site.
- 3.4.2 Residential refuse collection will occur on-street, stopping in suitable locations for individual collections or proximate to bin stores.
- 3.4.3 Where cul-de-sacs are included, suitable turning areas will be provided. The overall designs will ensure that vehicles are able to reach within 25m of individual bins or 10m of a bin store with communal facilities.
- 3.4.4 Vehicle swept path analysis drawings will be provided for each reserved matters submission demonstrating that each phase can accommodate refuse vehicles and turning requirements.

3.5 Commercial Deliveries and Servicing

- 3.5.1 Specific streets within the commercial area will be available to delivery and servicing vehicles. As the detail for each phase is developed and submitted for approval, dedicated loading areas and servicing bays will need to be identified within the layout. The size of areas will be in-line with expected and specific uses for buildings, factoring those specific requirements for research and development uses.
- 3.5.2 Generally, it is expected that street design and loading area requirements should reflect frequent deliveries made by panel vans and 7.5t box vans. Less frequent larger 10m rigid vehicles should also be allowed for.
- 3.5.3 Vehicle swept path analysis drawings will be provided for each Reserved Matters submission demonstrating that each phase can accommodate expected vehicles.

3.6 Commercial Refuse Collection

- 3.6.1 Commercial and retail waste will be stored by the tenants in their own demise, with all tenants required to ensure recyclable and non-recyclable waste streams are separated adequately.
- 3.6.2 Private contractors appointed by the facilities management team will then collect the commercial waste.
- 3.6.3 The private commercial and retail waste collection will occur from loading bays / areas provided for within the Site in close proximity to stores.
- 3.6.4 Vehicle swept path analysis drawings will be provided for each reserved matters submission demonstrating that each phase can accommodate expected vehicles.

4 OBJECTIVES AND RESPONSIBILITIES

4.1 Objectives

4.1.1 This Framework DSMP has been developed as part of the planning process and seeks to support a sustainable development.

4.1.2 The following objectives are identified as relevant and achievable:

- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
- Improve the reliability of deliveries to the Site;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents and the environment.

4.2 Future DSMPs

4.2.1 The Framework DSMP sets out the overarching approach to delivery and servicing management. The outline nature of the planning application means that much of the detail relating to layout, which would include specific loading bays and access to property, bin store locations and turning requirements are not yet fixed.

4.2.2 Begbroke Innovation District will be delivered in a number of phases with reserved matter planning applications for each phase providing detail on layouts.

4.2.3 Accordingly, each reserved matters application will need to be supported with detailed, phase specific DSMPs. The phase specific DSMPs shall include:

- A forecast of expected delivery and servicing vehicle numbers;
- The types of vehicles expected to visit the Site;
- Details of loading areas and delivery bays;
- Outline of measures to be delivered; and
- Swept path analysis drawings.

4.3 Responsibilities

4.3.1 The responsibility for individual DSMPs will fall within the remit of the respective residential and commercial Travel Plan Co-ordinators (TPCs).

4.3.2 Site-wide assets are likely to be managed by an appointed estate management company and it is envisaged that the role of the Residential TPC can be included within this remit, fulfilled within an existing role.

- 4.3.3 Any commercial organisation which leases any of the retail or office space will, depending on the size, will nominate a TPC or Travel Plan Representative.
- 4.3.4 It is proposed that the TPCs' roles and responsibilities will be assigned before initial occupation of the both the residential and employment aspects of the development. The TPC will liaise with the Travel Plan Manager for Begbroke Innovation District regarding any delivery / servicing issues.
- 4.3.5 More details on the role of travel planning and TPCs is provided in the Framework Site-Wide Travel Plan.

5 DELIVERY AND SERVICING MANAGEMENT MEASURES

5.1.1 This section outlines a number of qualitative measures that the future commercial property occupants will be encouraged to implement as part of their ongoing operation to manage their delivery and service demands.

5.1.2 It is recognised that residential deliveries will occur on a more ad-hoc basis. As such, these delivery and servicing trips cannot as readily be effectively regulated or consolidated.

5.2 Residential

5.2.1 Deliveries associated with residential land uses are less able to be managed, particularly in terms of consolidation. Delivery companies naturally consolidate at source to ensure vehicle movements through residential areas are made as efficiently as possible.

5.2.2 Where apartments or communal areas are proposed, the opportunity to incorporate delivery lockers within the development, reducing the number of trips or dwell times of vehicles will be implemented.

5.3 Commercial

Location

5.3.1 At first occupation, commercial occupants will be informed of the locations where delivery and servicing activity should occur particularly where these are shared. This will include turning movements, and any restrictions that are in place. A map showing loading and unloading locations will be included in communications with the supplier.

5.3.2 The occupants will then be requested to inform their appointed delivery agents prior to accessing the Site where possible to do so.

Timing

5.3.3 At first occupation commercial occupants will be encouraged to manage deliveries so that they occur outside of network peak periods, thereby removing the additional contribution to local congestion.

5.3.4 Furthermore, should demand dictate, the TPC will consider the implementation of a delivery management system that all commercial occupiers would use to centrally book available delivery slots to ensure there is not a clustering of deliveries occurring at the same time.

Consolidation

5.3.5 Consolidation is the act of transporting several part loads in one vehicle to reduce the number of required journeys or by adopting backloading where spare capacity on vehicle return legs is utilised.

5.3.6 The TPC will encourage the commercial occupants to consolidate and/or backload as much as possible and/or use delivery agents that adopt such a practice.

5.3.7 The TPC will also investigate if there is potential to backload across the different operators.

Fleet Operator Recognition Scheme (FORS) and Construction Logistics and Community Safety (CLOCS)

5.3.8 FORS is a voluntary compliance scheme designed to promote best practice for commercial vehicle operators. FORS includes all facets of vehicle safety, efficiency, and environmental protection by encouraging operators to measure, monitor and improve the performance of their vehicle or fleet so they can achieve a competitive advantage to stand out from others in the industry.

5.3.9 CLOCS is a national Standard that requires all stakeholders in construction to take responsibility for health & safety. It demands collaborative action to prevent fatal or serious collisions between vehicles servicing construction projects and vulnerable road users: pedestrians, cyclists, and motorcyclists.

5.3.10 Organisations should give priority to contractors able to demonstrate FORS and CLOCS compliance or compliance to similar schemes.

5.4 Monitoring and Reporting

5.4.1 Understanding movements associated with deliveries and servicing will be an important component of the overall management of Begbroke Innovation District. The overarching approach to transport as part of the proposal is to continually 'monitor and manage' transport matters. Monitoring of delivery and servicing vehicles will feed into the wider Travel Planning monitoring requirements.

5.5 Innovation

5.5.1 The last mile is the final stage of delivery, where packages are transported from a transportation hub to the end customer. With online shopping on the rise, the demand for efficient last-mile solutions is also increasing.

5.5.2 Various trends will impact the future of deliveries in the future. One of them is the growing use of technology for better efficiency, cost savings, and customer experience. Companies will also look for ways to reduce their carbon footprint through clean technologies. Safety and security of deliveries will be a priority within the context of future operations.

5.5.3 Innovation in deliveries which is relevant to commercial and residential will undoubtedly continue to develop at source. However, Begbroke Innovation District may consider several potential innovations going forward.

- 5.5.4 Consolidation hubs can be useful for specific districts. Areas of London for example, are seeing such proposals where deliveries are centrally managed for onward last mile delivery by courier bikes. This approach might be considered as the approach develops.
- 5.5.5 The use of cargo bikes for deliveries is popular in a number of locations currently. Schemes should future proof layouts to ensure suitable locations for the storage of cargo delivery bikes. Zedify in Cambridge is one example of a successful company, consolidating and ensuring last mile deliveries by bikes for several organisations.
- 5.5.6 Drones for deliveries has been trialled by companies such as Amazon and might help to reduce vehicle movements in the future. The technology is evolving. However, ground drone technology such as the Starshipbot vehicle used to deliver groceries in areas of Milton Keynes shows that this innovation is real and happening in practice.
- 5.5.7 Autonomous vehicles may also come forward to help consolidate and make deliveries more efficient. Oxa (previously Oxbotica) are developing this technology with companies such as Ocado and are active within the Oxfordshire area.
- 5.5.8 Within the residential layout, the potential for communal waste storage and collection can be explored. The Eddington development in Cambridge utilises subterranean, on street communal bin stores. This reduces space for bin storage.

Contact

Tom Clarke

Hello@oud.co.uk

Oxford University Development Ltd, Suite B, 6

Worcester Street, Oxford OX1 2BX

+44 (0) 1865 346995



OXFORD UNIVERSITY DEVELOPMENT