APPENDIX 13.4A
DELIVERY AND SERVICING PLAN

The Beehive Redevelopment

Delivery and Servicing Plan

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This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
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Comments

Final Draft

Disclaimer

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1. Introduction

Overview

1.1. Waterman Infrastructure & Environment Ltd ('Waterman') has been appointed by Railway Pension Nominees Limited ('the Applicant') to prepare a Delivery and Servicing Management Plan (DSP) in support of an outline planning application for the redevelopment of the Beehive Centre, Cambridge, CB1 3ET.

1.2. The site is in an area under the authority of Cambridge City Council, with planning under the authority of the Greater Cambridge Planning Service (GCP) and the Highway Authority is Cambridge County Council (CCC).

Site Location

1.3. The site is in Cambridge, circa 1.9km to the west of Cambridge City Centre. The Beehive centre, which is a mid-sized retail park including circa 24,382sqm (GEA) retail space currently set out as seventeen retail spaces. The existing site provides 885 car parking spaces.

1.4. The site is bordered to the north by Coldhams Lane and Cambridge Retail Park, the east by the rail line, the south by York Street and Sleaford Street which are residential roads and the west by St Matthew's Garden and Silverwood Close which are residential roads. The site's location is shown in Figure 1 below.

Figure 1: Site Location Plan

1.5. Cambridge Station is 1.3km south of the site, (approximately 4-5 minutes by bicycle and 13-16 minutes on foot) and Cambridge North Station is 2.7km north of the site, (approximately 9 minutes by bicycle and 27-34 minutes on foot).

Development Proposals

1.1. The proposals include the redevelopment of the Site to provide a Technology/Life Science Park comprising a maximum of 93,765sqm GIA commercial floor space (88,597sqm office/lab GIA and 5,168sqm mixed use GIA). The Site will have a total building floor area of 136,541sqm GIA and generate circa 6,450 employees. A total of 395 car parking spaces will be provided, of which 374 will be provided within a multi-storey car park (disabled and general parking) and 21 disabled spaces provided at-grade close to the respective buildings. The Proposed Development will represent a reduction of car parking spaces on the Site by 490 compared to the existing retail park, and also a reduced intensity in use across the day.

1.2. It is proposed to retain vehicular access from Coldham Lane, however the existing Coldhams Lane/Beehive Access/ Cambridge Retail Park Access priority junction will be reprovided as a Cycle Optimised Protected Signals (CYCLOPS) junction. A CYCLOPS junction provides a protected cycle lane which encircles the junction, keeping cyclists separate from both motor traffic and pedestrians. There will also be improvements to the pedestrian and cycle accesses from the York Street, Sleaford Street and St Matthew's Gardens entrances. The bus stop within the Site will be relocated and improved as part of a mobility hub more centrally within the Site.

1.3. The Proposed Development plan is shown in Figure 2 below.

Figure 2: Indicative Site Layout

Report Purpose and Structure

1.4. This Delivery and Servicing Management Plan (DSP) has been prepared to support the application at the Beehive Centre and set out a strategy of how delivery and servicing will be managed within the site to reduce the impact of servicing on site users, pedestrians, cyclists and the surrounding road network.

1.5. The following chapters will show how delivery and servicing activity, including refuse collection will take place on-site and how the impacts of delivery and servicing will be minimised through the implementation of controls and measures such as consolidation and delivery vehicle tracking using an Automatic Number Plate Recognition (ANPR) system.

1.6. Following this introduction, the structure of this DSP comprises:

- Section 2 – DSP Aims & Objectives;
- Section 3 – Policy Context;
- Section 4 – Delivery & Servicing Design and Management;
- Section 5 – Delivery & Servicing Measures;
- Section 6 – Targets and Monitoring; and
- Section 7 – Summary.

2. DSP Aims & Objectives

2.1. The Aims and Objectives of this DSP have been informed through policy within Cambridge City Council Local Plan (October 2018). The aim of this DSP is to enable safe, clean, and efficient deliveries to the site, helping the site users and site management manage deliveries, as well as reducing the impact of delivery and servicing on pedestrians and cyclists within the site and in the surrounding area.

2.2. The suite of measures introduced in this DSP and the proposed strategy to manage delivery and servicing will filter into the sites wider Sustainable Transport Strategy (STS) which aims to achieve substantial modal shift targets in favour of sustainable transport and reducing vehicle trips to the site (which includes delivery and servicing trips).

2.3. The objectives of this DSP are:

- To minimise the impact of delivery and servicing movements to and from the site.
- Promote use of low emission vehicles for delivery and servicing.
- Reduce local traffic congestion because of delivery and servicing activity.
- To make the Beehive Centre and the surrounding area greener and a more pleasant environment.
- To become an integral part of the site wide STS and set out a framework protocol for management of delivery and servicing vehicle access to the site.

3. Policy Context

3.1. This section sets out policy that is relevant to the delivery and servicing operation of a proposed development.

Cambridge Local Plan 2018

3.2. Policy 81: Mitigating the transport impact of development states:

"Where transport assessment of proposed development in Cambridge is required, appropriate prioritised and costed mitigation measures, including delivery plans and timescales, should take effect at agreed points in bringing new development forward. Where an assessment indicates insufficient capacity on the local or strategic road network, the Council and Cambridgeshire County Council are committed to ensuring that effective and appropriate interventions/investment are secured in order to achieve suitable mitigation of the additional transport impacts of the development.

…

Any development that will require regular loading or servicing must avoid causing illegal or dangerous parking, by providing appropriate off-street facilities."

Greater Cambridge Sustainable Design and Construction (January 2019)

3.3. This guidance provides the legislative and policy context to prepare a DSP to support a planning application within Cambridge. The guidance states a DSP should include details of:

- *"Times and frequency of deliveries and collections;*
- *Effective enclosure and sealing of loading bays and service areas and/or locations away from noise sensitive premises;*
- *Vehicle movements, including forklift vehicles;*
- *Quiet reversing methods; preference will be given to broadband reversing alarms or alternative quiet safety methods for reversing;*
- *Good practice working methods to minimise noise from the use of cages, trolleys, pallets and forklift vehicles – mitigation measures, such as barriers, low noise wheels on cages, low noise surfaces on tail lift decking and delivery routes for trolleys, silent electronically operated shutters etc."*

Fleet Operator Recognition Scheme (FORS)

3.4. Freight is essential to Cambridge. It supports all aspects of life in the city. Without freight and servicing, the city would seize up. The FORS Standard is a voluntary accreditation scheme. The FORS Standard aims to drive up standards within fleet operations and:

"Driving safety & efficiency

FORS helps businesses improve operator safety, fuel efficiency and vehicle emissions. It also helps embed economical operations throughout. Put simply – FORS is voluntary accreditation scheme that is an effective way to demonstrate to clients you are a high-performing operator who seeks to instil industry-leading best practice."

RECAP Waste Management Design Guide

3.5. The Cambridgeshire and Peterborough Waste Partnership (RECAP) works together to continuously improve waste services, increase recycling and reduce waste, finding cost effective and environmentally responsible ways to meet the needs of local communities.

3.6. Chapter 4 'Waste Storage Capacity' states:

"It is essential that adequate provision is made for waste segregation, storage and collection to encourage participation in effective waste management and to act as a frontline tool in waste education. However, this approach must be pragmatic and address actual needs of a particular development without sacrificing valuable space unnecessarily."

3.7. Chapter 7 'Waste Collection' states:

"Contemporary urban design is shifting away from the dominance of places by roads. However, the basic principles running through the changing approach to highways clearly value the importance of vehicle access. Routes should:

- *Interlink with each other;*
- *Make direct connections between developed facilities;*
- *Connect to existing routes and facilities;*
- *Facilitate traffic management;*
- *Offer convenience to users; and*
- *Take account of local character and distinctiveness of an area."*

4. Delivery & Servicing Design and Management

Existing Arrangement

4.1. Delivery and servicing for the existing Beehive retail centre takes place on-site. Unloading of deliveries and servicing currently takes place from two service yards:

- A service yard along the eastern boundary of the site with along the rail line, which extends southwards to the south of the site and borders Sleaford Street. This service yard is accessed via a priority junction on the access road, circa 35m south of the site access junction with Coldhams Lane. This service yard is used for the majority of existing units on-site.
- A service yard to the west of the site which borders York Street. This service yard is accessed through the sites car park and is used to service a small number of retail units to the west of the site.

4.2. There is an existing pedestrian and cycle access to the site from Sleaford Street which connects to the sites large service area. The existing access is narrow and hard to navigate for cyclists. A marked cycle route is then provided through a section of the service yard; however cycles will currently interact with delivery and servicing vehicle movements.

4.3. All delivery and servicing vehicles will access the site via the site access junction with Coldhams Lane. Coldhams Lane is a C-road, however, there have been high level discussions with GCP to downgrade Coldhams Lane.

4.4. Figure 3 shows the location and extent of the existing site service areas.

Figure 3: Existing site accesses and service yards

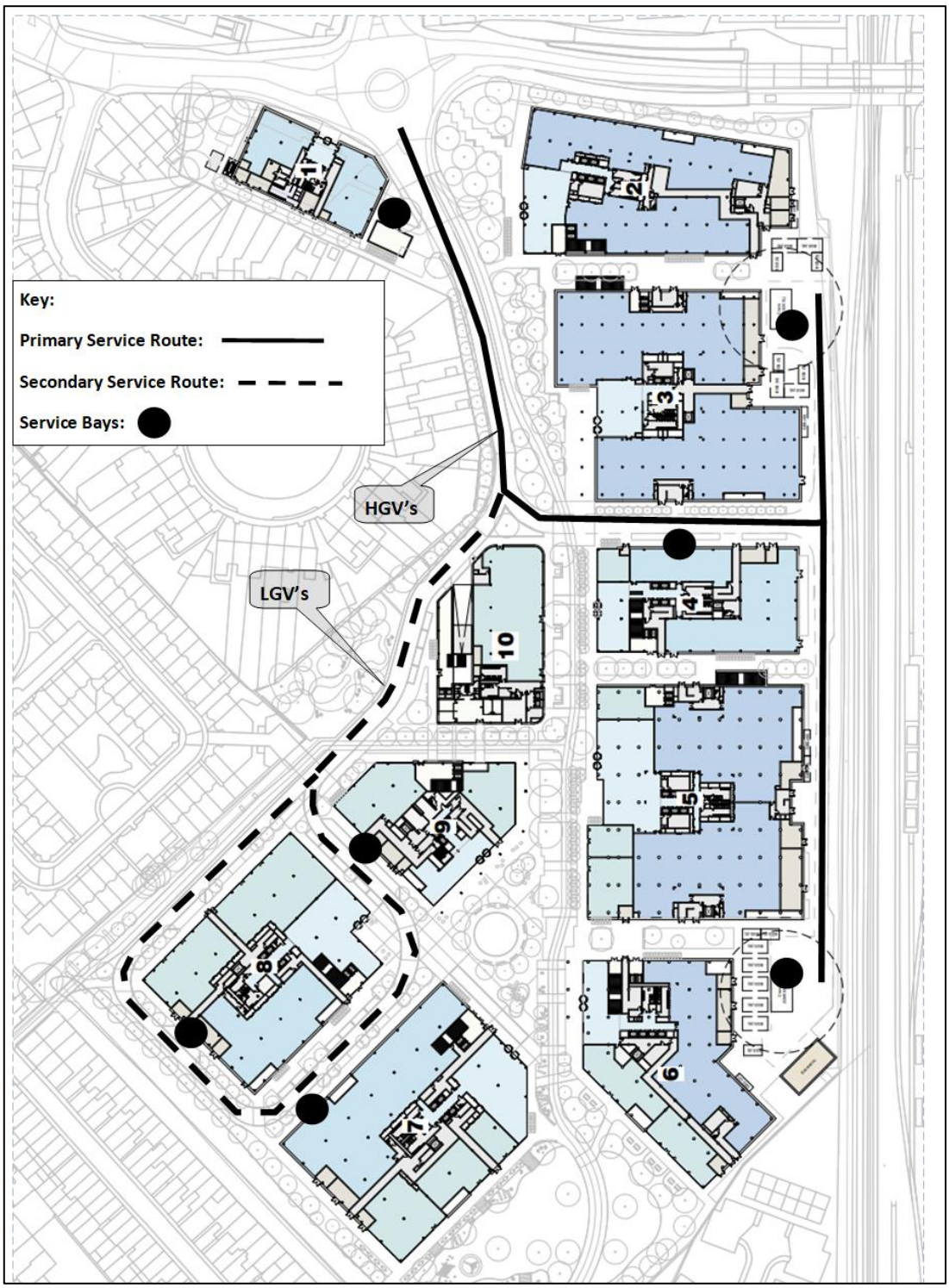
Proposed Arrangement

4.5. All delivery and servicing for the proposed development will take place on-site. The existing servicing area along the eastern boundary of the site, adjacent to the railway line, will be retained.

4.6. Two primary service yards are proposed, at the northern and southern ends of the service road, these will be accessed via the primary vehicle route which runs between blocks 3 and 4, with service/loading bays locates on the secondary vehicle route to the south of the site for smaller servicing and deliveries. HGV's will be restricted from accessing 'secondary access road' and the one-way loop and therefore only deliveries by LGV or smaller will take place from the loading bays along the one-way loop (with the exception of refuse collection). Swept path analysis of the service and delivery vehicle movements is included at Appendix A.

4.7. Signage will be provided to prevent HGV's accessing the one-way loop. Deliveries by larger vehicles for blocks that cannot be served directly from the on-site service area will stop within the service area to unload, with goods being transferred into smaller on-site electric vehicles or cargo bikes which will then distribute goods across the site. This ensures that heavy vehicles stay away from the public areas of the site, reducing interactions between HGV's, pedestrian and cyclists. The delivery and servicing vehicle size restriction is shown in Figure 4. All tenants will be informed about the on-site delivery restrictions at point of tenancy.

Figure 4: Proposed separation of LGV's and HGV's on-site



Delivery and Servicing access control

4.8. The Site access ANPR will be used to monitor the overall number of vehicles accessing the Site including delivery and servicing vehicles, record the dwell time of delivery and servicing vehicles and

restrict access to unauthorised vehicles.

4.9. There will be a maximum 20-minute dwell time on-site for all deliveries. The dwell time for deliveries will be recorded by the Site access ANPR. If a delivery requires a longer dwell time than 20 minutes then the company receiving the delivery or Site management will inform the parking management company who will exempt the numberplate from the maximum dwell time for 20 minutes.

4.10. All deliveries and servicing vehicles will have to be pre-registered to access the site. It will be the responsibility of the company making the order to ensure that the delivery/freight company is aware of the requirement to pre-register to access the site.

4.11. Vehicles accessing the site will be classified into two categories:

- Greenlist (pre-registered vehicles, blue badge holders and known deliveries)
- Redlist (unregistered deliveries and unscheduled deliveries).

4.12. Penalties can be issued for frequent unauthorised access to the site. If an unauthorised vehicle regularly accesses the site, they will be issued a warning to inform them they must pre-register before entering the site. A grace period will be allowed if a vehicle enters and exits the site in a short period (that is less than a typical delivery) to allow for vehicles that may turn into the site by accident or to allow for emergencies. If vehicles continue to access the site without pre-registering after receiving a warning, then a monetary penalty may be issued. The penalty for repeat unauthorised access will be discussed and agreed with the Applicant.

4.13. The Travel Plan Co-ordinator (TPC) and Sustainable Travel Managers (STM) will inform occupies about the need pre-register deliveries and the limit on dwell time. If a delivery requires a longer dwell time than 20 minutes then the TPC and STM will inform the parking management company who will exempt the numberplate from the maximum dwell time for 20 minutes. Requesting a dwell time for longer than 20 minutes will have to be done for every delivery in the event that it is a repeat delivery to prevent abuse of the system. If a delivery company regularly has a longer dwell time longer than 20 minutes without requesting for an extension to the dwell time, they will receive a written warning. If this continues to happen after a written warning, site management may take steps to blacklist the delivery company from the site.

Refuse Collection and Storage

4.14. It is proposed that refuse collection for the development will be undertaken using a private waste contractor. As part of companies lease agreement, companies will be required to appoint the same private waste contractor, who will collect waste for the full site for general, recyclable and food waste. This will significantly reduce the number of trips to the site associated with refuse collection. This will also allow the appointed private waste contractor to pre-register their vehicles to access the site.

4.15. Due to the nature of the proposed blocks on-site, clinical waste may arise from companies on-site. Due to the nature of clinical waste, all clinical/hazardous waste will be collected separately, and collection will be organised by the individual companies. However, the TPC and STM's will encourage that clinical/hazardous waste is collected by the same operators.

4.16. Refuse collection will take place from the service yards. Appendix A shows a refuse vehicle can access the service yards. Refuse collection for blocks not bordering the service yards will either take place from the loading bays nearest to the block, or within the service yards with all site waste being transferred to the service yard by the site management.

4.17. The refuse storage provision for each block will be based on the requirement's set out in the RECAP

Waste Management Design Guide, which is shown below in Table 1. This is based on the City of Westminster guidance. Clinical/hazardous waste will be stored separately and will be provided within the blocks on a case-by-case basis.

Table 1: Weekly refuse storage provision guidance

Commercial development type	Waste storage capacity	Fraction of capacity for storage of recyclables
Offices	2,600 litres per 1,000m gross floor area	Minimum of one third
Retail	5,000 litres per 1,000, gross floor space	Minimum of one third
Restaurants/fast food outlets	1,500 litres per 20 dining spaces	Variable

4.18. The refuse collection strategy for the Proposed Development is outlined in the Operational Waste Management Plan (OWMP). All waste collection will take place on-site from either the service yards or loading bays along the Site.

Delivery and Servicing Trip Generation Assessment

Existing site

4.19. A servicing survey was undertaken of the existing 24,382sqm (GEA) retail space on Wednesday 16th November 2022, Thursday 17th November 2022, Saturday 19th November 2022 and Sunday the 20th November 2022. The servicing survey recorded all vehicle movements in and out of the two existing service areas. There is staff parking within the existing service yard along the sites eastern boundary which has been counted as part of the servicing survey. While some deliveries will have been undertaken by cars, to ensure a robust assessment, all car movements to the large service yard have been discounted.

4.20. The results of the existing servicing survey are summarised in Table 2 which shows the number of trips for a weekday (average of Wednesday and Thursday), Saturday and Sunday.

Table 2: Existing Beehive Servicing Trips (Daily)

Item	Weekday average	Saturday	Sunday
Total servicing trips	155 (310 two-way trips)	162 (324 two-way trips)	128 (256 two-way trips)
OGV servicing trips	28 (56 two-way trips)	19 (38 two-way trips)	13 (26 two-way trips)
Average dwell time	45 minutes 8 seconds	30 minutes and 26 seconds	47 minutes and 3 seconds

Proposed Development

4.21. The delivery and servicing trip generation for the Proposed Development has been based on servicing trip rates that were presented and agreed in principle with CCC in October 2022 and GCP in February 2023.

4.22. The agreed light good and heavy good servicing trip rates are shown in Table 3, as well as the number of trips the 93,765sqm development would generate.

4.23. The agreed light goods and heavy goods servicing trip rates are shown in Table 3, as well as the number of trips the 94,824sqm development would generate.

Table 3: Proposed Development Servicing Trips (Daily)

Vehicle type	Trip rate	Trips
Light goods	0.253 trips per 100sqm	237 two-way trips (118 – 119 vehicles per day)
Heavy goods	0.033 trips per 100sqm	31 two-way trips (15 – 16 vehicles per day)
Total	**0.286 trips per 100sqm**	**268 two-way trips**

4.24. Based on the trip generation above, the proposed development will result in a reduction of delivery and servicing trips throughout the day. The net difference between existing and proposed delivery and servicing trips is shown in Table 4.

Table 4: Net change in delivery and servicing two-way trips

Type of vehicle	Net change
All delivery and servicing vehicles	-42 daily two-way trips
OGV vehicles	-25 daily two-way trips

4.25. The proposed development would result in a reduction of 42 two-way delivery and servicing trips a day, of which there would be a reduction of 25 daily OGV/HGV delivery and servicing two-way trips.

Delivery and Servicing trip profile

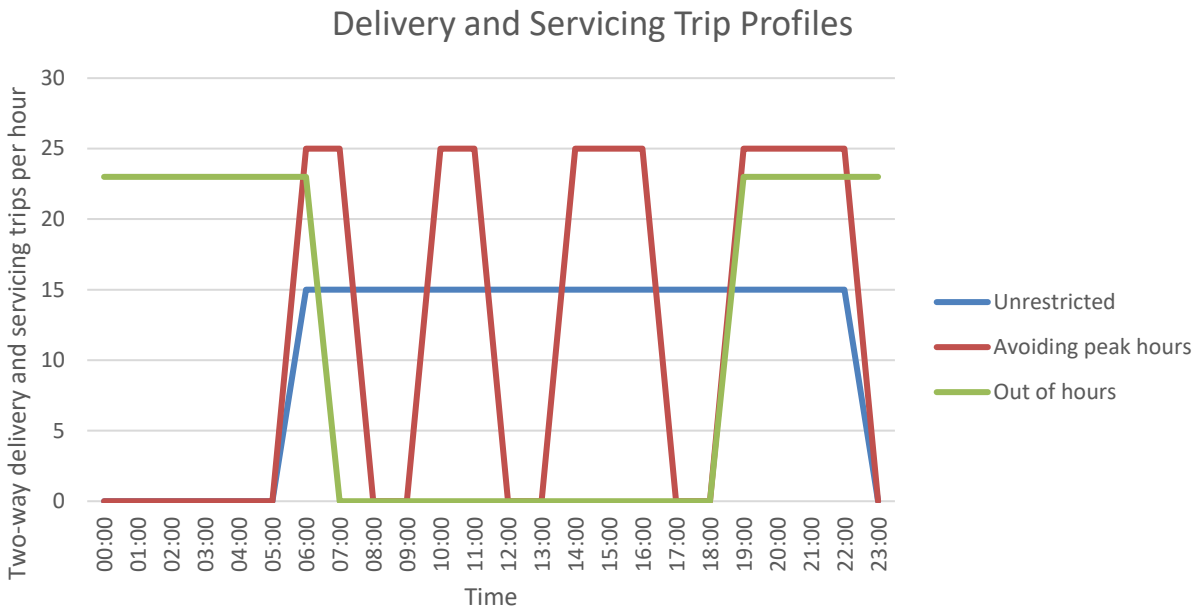
4.26. The proposed development will generate circa 268 two-way trips throughout the day. Across a day, this would result in 16-17 two-way trips an hour (based on daily servicing operation between 06:00 – 22:00), 8-9 servicing vehicles per hour predominantly LGVs (vans), which can be accommodated within the service yard and loading bays throughout the site.

4.27. To further reduce the impact of delivery and servicing on pedestrians, cyclists and other site users, the option to restrict delivery and servicing within the peak hours (avoiding 08:00-10:00, 12:00-14:00 and 17:00-19:00) which would result in circa 26-27 two-way delivery and servicing trips an hour, presuming that the earliest delivery remains at 06:00 and the latest delivery remains at 22:00. This level of trips per hour can still be accommodated within proposed facilities on-site.

4.28. Another option could be to allow for out of hours deliveries only, between 19:00-07:00 to avoid most interaction with site users, although this would be subject to vehicle and noise restrictions to limit impact on the surrounding residential area. This would result in circa 22-23 two-way deliveries an hour throughout the night which can be accommodated on-site.

4.29. The delivery profile options are shown in Figure 5. The timed delivery and servicing strategy will be agreed with CCC and GCP prior to occupation.

Figure 5: Delivery and Servicing Time Profile



Consolidation

4.30. A site wide approach requiring for all companies to use the same provider for common deliveries (i.e comestibles and stationery) can be included within companies lease clause which will be informed at point of tenancy. This was introduced at 70 Grosvenor Street. The project consolidated staff deliveries and stationery and appointed Anglo Office Group with Gnewt Cargo to run the scheme which led to a reduction from an average of 21 delivery vehicles per day to Grosvenor's head office, to just one drop per day from the consolidation centre. The introduction of site wide consolidation will reduce the number of vehicles entering the site and using the service yard/loading bays within the site. Consolidated deliveries will also be undertaken by a known supplier and will reduce the likelihood for unauthorised vehicles to enter the site.

4.31. In addition to consolidating common deliveries, the TPC and STM's will encourage companies on-site to make use of existing consolidation companies within Cambridge for more specialised deliveries. Service providers such as Zedify are already providing last mile consolidation services for office developments within Cambridge. Consolidation can achieve a 60% reduction in servicing and delivery vehicle movements, which could result in a reduced daily total of 107 delivery and serving vehicle trips generated by the site.

4.32. This offers a refinement over 'just' providing delivery consolidation services in that a vast range of goods can be ordered through them to consolidate at the point of order – essentially ordering a range of products from one source. This requires a more detailed appraisal of occupiers' requirements, though for a predominantly wet lab use, there are many options to rationalise supplies for all tenants.

5. Delivery & Servicing Measures

5.1. A key part of a DSP is to consider measures to reduce the impact of delivery and servicing on the local highway network and site operation. The measures can either be categorised into improving three key parts of delivery and servicing:

- Safe;
- Clean; and
- Efficient.

Safe

5.2. The DSP must show how the development has removed or managed potential conflicts with pedestrians and cyclists through the site:

On-Site Delivery Facilities

5.3. All delivery and servicing for the proposed site can take place on-site. Service yards are provided along the eastern boundary of the proposed development, adjacent to the railway line to reduce impact on the neighbouring residential properties. Unlike the existing site, the proposed service area will be separate from the proposed pedestrian and cycle route through the site.

5.4. All HGV's will have to service the site from the main service yards and will not be allowed to travel onto the one-way loop of the secondary internal road network in the south-west of the site, which will sign posted for delivery drivers.

5.5. Goods delivered by HGV for blocks within the south-west of the site will be off-loaded in the service yard and transferred into smaller electric vans and cargo bikes and then distributed to the respective blocks. Delivery vehicles that are LGV's and smaller will be able to access the one-way loop and stop in the loading bay along the site's internal road network.

5.6. The proposed development would also result in fewer delivery and servicing trips throughout the day, reducing interaction between site users and delivery and servicing vehicles.

Safer Vehicles

5.7. The site access will be monitored using an ANPR. Companies that are not signed up to and associated with the Fleet Operator Recognition Scheme (FORS), will be unable to register to access the site, which will ensure all companies on-site receive deliveries using companies signed up with FORS. FORS is a voluntary accreditation scheme that recognises operators who have adopted cleaner, safer, and more efficient practices. By obtaining suppliers who are part of FORS, this will help encourage operators to adopt the latest safety and environmental standards.

Site Access Monitoring

5.8. If a delivery and servicing company is deemed to act inappropriately on-site (i.e parking along the sites internal road network, driving dangerously, not according with time restrictions) then the TPC can blacklist a certain delivery company registering their vehicle to access the site. This will ensure delivery and servicing companies comply with the relevant rules and strategies applied.

Size Restrictions

5.9. Vehicles larger than an LGV will be unable to access the one-way loop of the sites internal road network and will have to unload deliveries within the service yard. This will ensure that large vehicles to not interact with the pedestrian and cycle priority routes in the south-west of the site.

Staff Training

5.10. The STM's for each company will be responsible for ensuring that staff who interact with delivery and servicing vehicles receive appropriate training to receive all deliveries safely and correct procedures are followed.

Accident Monitoring

5.11. In the event an accident occurs related to the delivery and servicing operation of the proposed development, it will be reported to the TPC, who will be responsible to investigate the situation and put in safeguards to ensure that a similar accident does not occur again.

Clean

5.12. There are schemes in place to mitigate delivery by motorised vehicles in Cambridge.

Cargo-bike delivery

5.13. Short stay cycle parking will be provided within the site and close to every block to allow for deliveries on Cargo bikes. A cargo bike delivery company already operates in Cambridge (https://www.zedify.co.uk) and the TPC and STM's will encourage companies to make use of cargo bike deliveries where possible. Delivery by Cargo bikes will also have the benefit of not having to pre-register to access the site and will not have a maximum dwell time of 20-minutes.

5.14. Information on Cargo bike deliveries will also be provided in the Mobility Hub, the TIP and Maas to ensure all employees and companies are aware of Cargo bike deliveries, maximising the number of Cargo bike deliveries.

On-site and nearby facilities

5.15. The proposed development will provide ground floor retail space to allow site users to source goods from within the site (i.e lunch places provided on-site so employees won't have to get lunch delivered to the site or travel off-site). In addition, all staff will be informed about local facilities in the local area through a TIP and Maas, which will allow them to source goods close to the site. This will reduce the need to have goods delivered to the site.

Air Quality

5.16. On-site companies will be encouraged to commission contractors who operate green fleets as a priority, only commissioning a contractor who does not operate green fleet if an alternative is not available. The TPC will keep track of the delivery vehicles entering the site for each company through the site access ANPR and will work with STM's to encourage commissioning contractors with green fleets.

Off-Peak Deliveries

5.17. The Applicant, LPA and TPC will explore enforcing delivery restrictions on-site to either only allow out of peak deliveries (08:00-10:00, 12:00-14:00 and 17:00-19:00) or overnight deliveries. This will reduce conflict of the delivery and servicing operation of the site at the busiest periods when pedestrians and cyclists are traveling through the site. Any delivery and servicing time restrictions will be agreed with GCP and CCC prior to occupation.

Max Dwell Time

5.18. There will be a maximum 20-minute dwell time on-site for all deliveries. The dwell time for deliveries will be recorded by the site access ANPR. If a delivery requires a longer dwell time than 20 minutes then the TPC and STM will inform the parking management company who will exempt the numberplate from the maximum dwell time for 20 minutes.

5.19. Requesting a dwell time for longer than 20 minutes will have to be done for every delivery in the event that it is a repeat delivery to prevent abuse of the system. If a delivery company regularly has a longer dwell time longer than 20 minutes without requesting for an extension to the dwell time, they will receive a written warning. If this continues to happen after a written warning, site management may take steps to blacklist the delivery company from the site.

HGV Delivery Restriction

5.20. HGV's will be restricted from accessing the one-way segment of the internal road network. Therefore, deliveries by HGVs for these blocks will stop within the service yard, where the goods will be distributed into smaller electric delivery vehicles, which will then distribute the goods to the respective block. These measures will prevent HGV's entering the south-west of the site and reduce the interaction of pedestrian and cyclists with HGVs.

Efficient

5.21. The management of delivery and servicing activities should be efficient to minimise the impact of delivery and servicing on the local highway network.

Consolidation

5.22. A site wide approach requiring for all companies to use the same provider for common deliveries (i.e comestibles and stationery) can be included within companies lease clause. The introduction of site wide consolidation will reduce the number of vehicles entering the site and using the service yard/loading bays within the site. Consolidated deliveries will also be undertaken by a known supplier and will reduce the likelihood for unauthorised vehicles to enter the site.

5.23. In addition to consolidating common deliveries, the TPC and STM's will encourage companies on-site to make use of existing consolidation companies within Cambridge for more specialised deliveries. Service providers such as Zedify are already providing last mile consolidation services for office developments within Cambridge.

Preferred Suppliers

5.24. Companies that regularly deliver to the site can be registered as preferred suppliers. This will allow all of their vehicles to be pre-registered to access the site. Preferred suppliers will be reserved for companies who regularly supply the site, and comply with the relevant site rules (pre-registering,

dwell times lower than 20 minutes). This will ensure companies continue to use these preferred suppliers, maximising efficiency of delivery to the site.

Personal Deliveries

5.25. Staff will be discouraged from ordering personal deliveries to the site to reduce the number of delivery and servicing trips to the site. However, it is proposed to provide smart lockers for all staff deliveries on-site. Smart lockers allow for a company such as Amazon to deliver all packages in one place instead of having to go to numerous blocks to deliver parcels.

5.26. The smart lockers will be provided in a pedestrianised area and staff will be send a code to access their parcel. This provision of smart lockers will also be made available to the local community. This will reduce dwell time of delivery vehicles on-site.

Refuse Collection

5.27. As part of companies' lease agreement, companies will be required to appoint the same private waste contractor. This will significantly reduce the number of trips to the site associated with refuse collection. This will also allow the appointed private waste contractor to pre-register their vehicles to access the site.

5.28. Due to the nature of the proposed blocks on-site, clinical waste may arise from companies on-site. Due to the nature of clinical waste, all clinical/hazardous waste will be collected separately, and collection will be organised by the individual companies. However, the TPC and STM's will encourage that clinical/hazardous waste is collected by the same operators to minimise vehicle movements.

Waste Storage

5.29. Each block will be provided with a ground floor refuse store for general waste, dry mixed recyclables, food waste. Clinical/hazardous waste will be stored separately and will be provided within the blocks on a case-by-case basis. Bin stores will be provided with taps and gullies to allow for regular cleaning of bin stores.

5.30. Refuse collection for blocks adjoining the service yard will be undertaken from the service yard. Refuse collection for the remaining blocks will be undertaken either from the nearest loading bay to the respective block or from the service yards with all bins being transferred to the service yards by the site management team.

Proposed Delivery and Servicing Trip Generation

5.31. Tables 2 and 3 show the existing and proposed delivery and servicing trip generation. The proposed development will generate fewer OGV/HGV and a reduction to overall delivery and servicing trips compared to the existing retail use.

5.32. The proposed servicing area does not intersect the cycle route through the site, which is accessed from Sleaford Street, improving safety for cyclists. This is an improvement on the existing delivery and servicing strategy. Most delivery and servicing will take place using a Transit, Sprinter and/or Luton type van, although EV and cargo bike use will be strongly encouraged.

6. Targets and Monitoring

6.1. To ensure the successfully implementation of a delivery and servicing strategy, targets should be set to ensure the sites delivery and servicing strategy has a continued reducing impact on site users and the surrounding highway network.

6.2. To help guide the success of the DSP, a number of targets have been proposed. The targets are SMART (**S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**imebound).

6.3. The initial DSP targets are:

- To have all delivery and servicing vehicles access the site be low or zero emission vehicles.
- Achieve at least 10% of all deliveries by cargo bike.
- Have no reported delivery or servicing accidents or near misses in a year.
- Reduce the average dwell time to below the 20-minute limit.

6.4. The TPC will liaise and agree final DSP targets with CCC. These targets will also be revisited every two years to reflect any changes on-site, changing technology or changing trends in the freight industry.

Monitoring

6.5. The DSP will constantly monitor vehicle numbers and dwell times through the site access ANPR and the TPC will be responsible for collating a site-wide delivery and servicing report each year, which consists of the average number of daily delivery and servicing vehicles accessing the site, the percent of low/zero emission delivery vehicles, the percent of deliveries by cargo bikes, average dwell time of delivery and servicing vehicles, number of non-authorised deliveries and any reported accidents or near misses. This yearly report will be used to monitor long term delivery and servicing trends on-site and will be submitted to CCC and targets adjusted or adopted to suit observed trends or issues.

6.6. The surveys can help look for a ‘quick win’ which could be finding more than one similar delivery a day or week that the site could combine into one order, or to ensure deliveries are outside of peak hours, using emission compliant vehicles.

6.7. As well as the yearly DSP monitoring, the DSP will be monitored alongside the TP, which seeks multi-modal travel surveys to completed within six months after initial occupation and then years 1, 3 and 5 from full occupation of the site.

Monitor and Manage

6.8. The ‘Monitor and Manage’ approach is a core element of the STS, setting the framework and protocol for the management of vehicle use to access the site. The Monitor and Manage approach will be enforced through a range of measures including conditions of employment, registration of all delivery vehicles, appointment of preferred suppliers and site wide consolidation and monitoring of all delivery and servicing on-site through ANPR.

6.9. The Monitor and Manage approach will set out a framework for delivery of the DSP targets for the site. The Monitor and Manage strategy include the provision of a ‘Mode Share Incentive Scheme’ (MSIS), which will be secured through a Section 106 Agreement, comprising a financial penalty to incentivise achievement of mode share targets within identified timeframes. This could include a penalty relating to delivery and servicing (i.e. maximum number of deliveries for a week or month). The value of the MSIS and specific timeframes for delivery of mode share targets will be agreed with

the Local Authority as part of the planning process.

6.10. Should mode share targets not be met with specified timeframes, the Applicant and/or appointed TPC will discuss and agree a plan of action with the Local Authority, to determine how any deficiencies in the operation of the DSP will be met.

7. Summary

7.1. Waterman Infrastructure & Environment Ltd ('Waterman') has been appointed by Railway Pension Nominees Limited ('the Applicant') to prepare a Delivery and Servicing Management Plan (DSP) in support of an outline planning application for the redevelopment of the Beehive Centre, Cambridge, CB1 3ET.

Background

7.2. The site is in Cambridge, circa 1.9km to the west of Cambridge City Centre. The Beehive centre, which is a mid-sized shopping area including circa 24,382sqm (GEA) retail space currently set out as seventeen retail spaces. The existing retail park provides 885 car parking spaces.

7.3. The proposals include the redevelopment of the Site to provide a Technology/Life Science Park comprising a maximum of 93,765sqm GIA commercial floor space (88,597sqm office/lab GIA and 5,168sqm mixed use GIA). The Site will have a total building floor area of 136,541sqm GIA and generate circa 6,450 employees. A total of 395 car parking spaces will be provided, of which 374 will be provided within a multi-storey car park (disabled and general parking) and 21 disabled spaces provided at-grade close to the respective buildings. The Proposed Development will represent a reduction of car parking spaces on the Site by 490 compared to the existing retail park, and also a reduced intensity in use across the day.

7.4. Vehicular access is to be retained from Coldham Lane, to be reprovided as a CYCLOPS junction. There will also be enhanced pedestrian and cycle accesses from the York Street, Sleaford Street and St Matthew's Gardens entrances. The bus stop within the Site will be relocated and improved as part of a mobility hub more centrally within the Site.

Aims and Objectives

7.5. The aims and objectives of this DSP are to minimise the impact of delivery and servicing on the surrounding highway network, the site, and passing pedestrians and cyclists.

Delivery and Servicing Design and Management

7.6. Delivery and servicing for the proposed development can take place on-site. A dedicated service yard will be provided along the sites eastern boundary and loading bays will be located along the sites internal road network. All deliveries by HGV's will stop in the service yard, where goods will be distributed into smaller electric vehicles and delivered to blocks around the site.

7.7. All delivery and servicing vehicles will have to pre-register to access the site and could be subject to either out of peak or out of hours deliveries and a maximum dwell time of 20 minutes. In addition, there will be site wide consolidation for common goods to reduce delivery and servicing trips to the site.

7.8. The proposed development would also result in a reduction in the overall delivery and servicing trips and the number of OGV/HGV trips when compared to the existing site and therefore would have a negligible impact on the surrounding highway network.

Delivery and Servicing Plan Measures

7.9. This DSP proposes measures to further ensure that the proposed delivery and servicing strategy is safe, efficient, and clean. These measures are in-line with Cambridge Local Plan (October 2018).

Targets and Monitoring

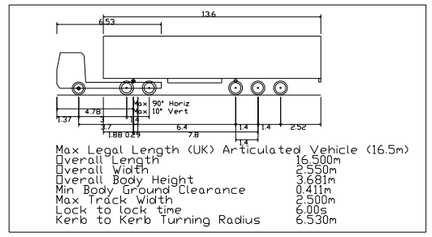
7.10. The DSP proposes a monitoring regime and initial targets. Monitoring the DSP can help look for a ‘quick win’ which could be finding more than one similar delivery a day or week.

Conclusion

7.11. This DSP has been prepared in-line with Cambridge Local Plan. The DSP outlines that delivery and servicing will take place on-site and will have a negligible impact on site users, pedestrian and cyclist safety and the surrounding highway network.

APPENDICES

A. Swept Path Analysis



Rev	Date	Description	By	Chk
A04	02.08.24	LATEST LAYOUT ADDED		DM
A03	06.07.23	SKIP SIZE UPDATED		JH
A02	23.06.23	SITE PLAN UPDATED		JH
A01	24.11.20	ISSUED		DM

Amendments

Project

Beehive Retail Park, Cambridge

Title

Service and Delivery Vehicles
Swept Path Analysis
16.5m HGV

Client

RAILPEN

Pickfords Wharf Clink Street London SE1 9DG
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mail@watermangroup.com www.watermangroup.com

Work Stage: STAGE 2 Concept design — RIBA

Suitability: PRELIMINARY

Designed By	Director	Waterman Ref
JH	MP	WIE17469
Drawn By	**Date**	**Scales @ A3**
GF	November 2020	1:1,250

Project	Originator	Functional	Spatial	Form	Discipline	Number	Revision
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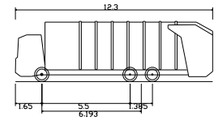

12.3m Refuse Vehicle

Overall Length	12.300m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	11.400m

Rev	Date	Description	By	Chk
A04	02.08.24	LATEST LAYOUT ADDED		DM
A03	06.07.23	SKIP SIZE UPDATED		JH
A02	23.06.23	SITE PLAN UPDATED		JH
A01	24.11.20	ISSUED		DM

Amendments

Project

Beehive Retail Park, Cambridge

Title

Service and Delivery Vehicles
Swept Path Analysis
12.3m Refuse Collection Vehicle

Client

RAILPEN

waterman

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Work Stage: STAGE 2 Concept design — RIBA

Suitability: PRELIMINARY

Designed By: JH	Director: MP	Waterman Ref: WIE17469	
Drawn By: GF	Date: November 2020	Scales @ A3: 1:1,250	

Project	Originator	Functional	Spatial	Form	Discipline	Number	Revision
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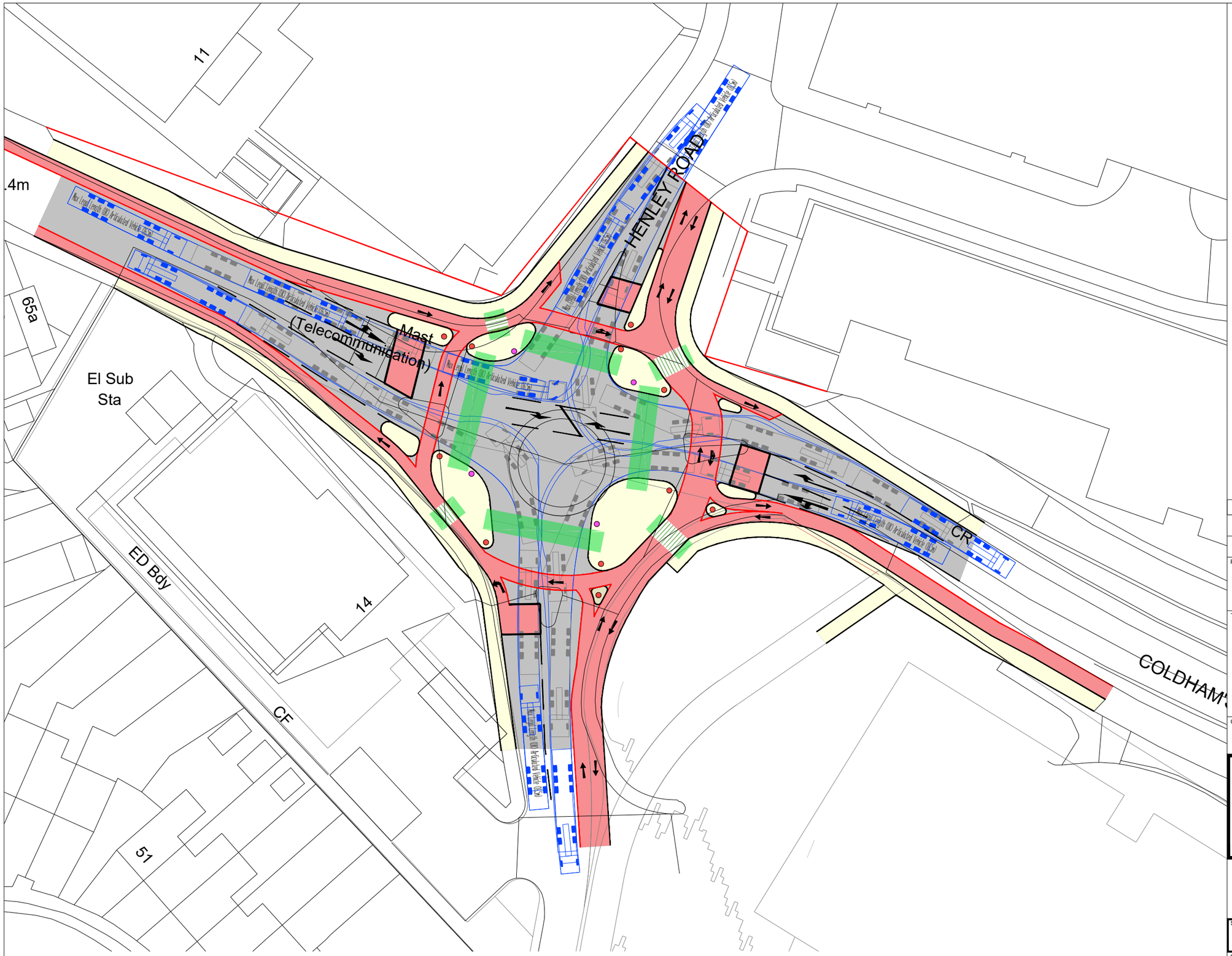

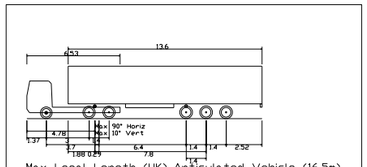

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

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P01	S0	19:03:24	ISSUED	SR	DM
Status		Date	Description	By	Chk

Amendments

Project

Beehive Retail Park, Cambridge

Title

INDICATIVE CYCLOPS ACCESS SWEPT PATH - HGV

Client

Railpen

waterman

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Status

PRELIMINARY

Designed By	Director	Waterman Ref
SR	DM	WIE17469
Drawn By	**Date**	**Scales @ A3**
SR	MARCH 2024	1:500

Project - Originator - Volume - Level - Type - Role - Number

WIE-17469-SA-05-0082-P01

Revision

P01

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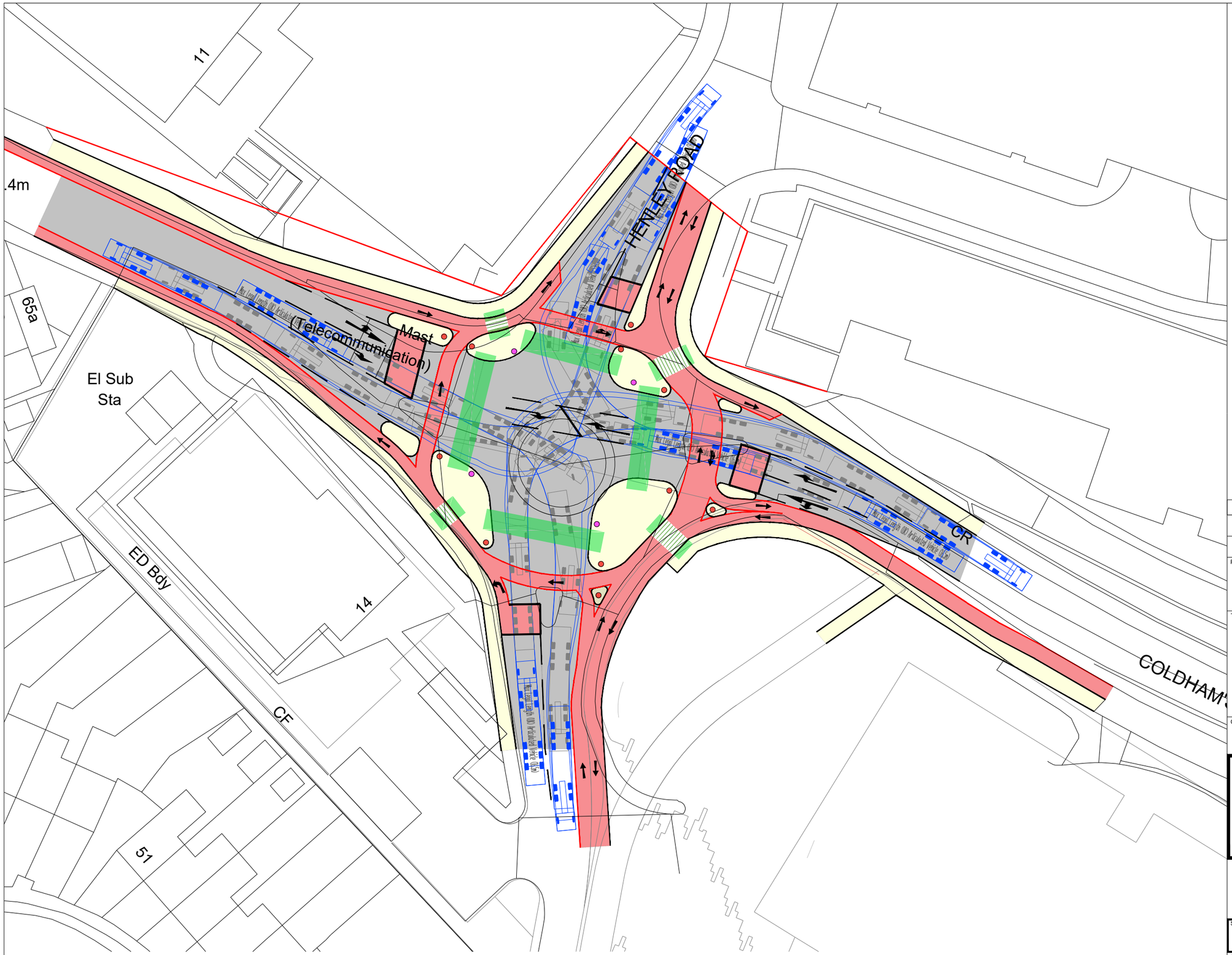

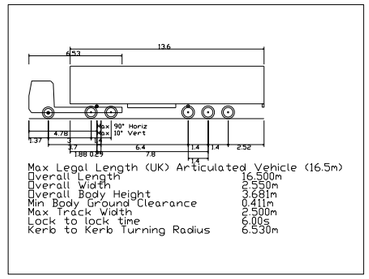

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Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.330m

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Status		Date	Description	By / Chk

Amendments

Project

Beehive Retail Park, Cambridge

Title

INDICATIVE CYCLOPS ACCESS SWEPT PATH - HGV

Client

Railpen

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Status

PRELIMINARY

Designed By: SR	Director: DM	Waterman Ref: WIE17469
Drawn By: SR	Date: MARCH 2024	Scales @ A3: 1:500

Project - Originator - Volume - Level - Type - Role - Number

WIE-17469-SA-05-0083-P01

Revision

P01

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We are Waterman, where every project matters

We deliver progressive, sustainability-driven environmental and engineering consultancy services across every sector. We think differently, and we're harnessing our collective expertise to deliver greener, healthier and well-connected communities, networks and built environments.

Based in strategic locations throughout the UK and Ireland, our team of specialists is at the forefront of tackling the climate emergency and forging a path to a Net Zero built environment.

UK & Ireland Office Locations