

### WASTE MANAGEMENT PLAN

HAVEN BANKS, EXETER

**Proposed Mixed-Use Redevelopment** 

Date: July 2022 Ref: 21/5945/WMP07

#### 1 INTRODUCTION

#### Background

- RGP is commissioned by Welbeck CP to provide highway and transport planning advice 1.1 with respect to the proposed redevelopment of the Haven Banks Retail Park ("the site") to provide a new residential-led scheme with ground floor commercial uses.
- 1.2 The site is located within the administrative boundaries of Exeter City Council (ECC), as Local Planning Authority and Devon County Council (DCC), as County Highway Authority.
- 1.3 The existing site comprises three vacant commercial units which formerly operated collectively as the Haven Banks Retail Park, located a short distance to the south of Exeter Quayside. The Retail Park contains two large retail superstores and a leisure use with a shared car park containing 205 spaces, accessible from Water Lane. The existing retail and leisure units comprise the following approximate floor areas:
  - The Range (use class Ea): 3,496 sqm;
  - Matalan (use class Ea): 1,382 sqm; and
  - Tenpin (use class Ed): 1,964 sqm.
- The Water Lane access into the on-site car park facilitates two-way vehicle movements. A 1.4 secondary point of egress from the site is provided onto Haven Road to the north, with no entry permitted into the car park from this location. The site also contains a rear service yard which is accessed via Water Lane separately to the visitor car park.

**RGP** – Transport Planning and Infrastructure Design Consultants

30 Stamford Street, London SE1 9LQ

enquiries@rgp.co.uk

www.rgp.co.uk

Surrey Office London Office Shackleford Suite, Mill Pool House, Mill Lane, Godalming, Surrey GU7 1EY

T: 01483 861 681 T: 020 7078 9662





- 1.5 The development proposals comprise a demolition of the retail park to provide a new mixed-use scheme including 434 residential dwellings, comprising a mix of 246 flats and 188 co-living apartments. Each of the co-living apartments would contain a single bedroom, whilst the proposed 246 flats would comprise the following mix of units:
  - 131 x 1 bedroom / 2 person units;
  - 75 x 2 bedroom / 4 person units; and
  - 40 x 3 bedroom / 6 person units.
- 1.6 The site would also provide four flexible commercial units at ground floor level, which are envisaged to comprise small café/restaurant uses. The commercial floorspace would amount to 639m2. Additionally, an ancillary management suite would be provided at ground floor level of Block D for the estate management providing residential services to the site, comprising 113m2.
- 1.7 The specific breakdown of the proposed on-site land uses by each building is provided in the following table:

Table 1 Proposed Land Uses

Block	C3: 1 bedroom units	C3: 2 bedroom units	C3: 3 bedroom units	C3: Co- living apartments	E(b) Café / Restaurant	Ancillary Office Space
Block A	11	6	5	-	349 sqm	-
Block B	14	7	-	-	220 sqm	-
Block C	105	63	35	-	-	-
Block D	-	-	-	188	70 sqm	113 sqm
TOTAL	130	76	40	188	639 sqm	113 sqm

- 1.8 The development proposal would include the closure of the car park's two points of vehicular access / egress to redesign the main throughfare as 'car-free', including the formation of a central pedestrian route through the site between Haven Road and Water Lane. The existing service road from Water Lane within the southern section of the site would be retained for the continued use of the site and would provide access to a limited number of residential parking spaces and retain access for servicing vehicles.
- 1.9 A total of 32 car parking spaces would be provided on-site, accessible from Water Lane in place of the existing service yard to the rear of the retail units currently located within the site. Additional laybys would be provided adjacent to the site on Water Lane and Haven Road respectively to facilitate deliveries and waste collections.



- 1.10 All residential blocks would be provided with secure refuse storage and cycle parking facilities. A marked cycle lane would be provided within the site's central courtyard, connecting to the wider cycle network, with NCR 34 forming a route along the southern bank of the River Exe. Communal amenity space and associated landscaping would be provided for the use residents and visitors.
- 1.11 The proposed site layout is illustrated on the following extract, whilst the full plan is attached at **Appendix A**.



1.12 This Waste Management Plan (WMP) has been prepared to ensure that the redeveloped site operates with sufficient provision for the storage and collection of waste, in accordance with Exeter's Local Plan / Core Strategy objectives, the Devon Waste Plan and the waste storage guidance defined within the British Standards document BS 5906:2005.

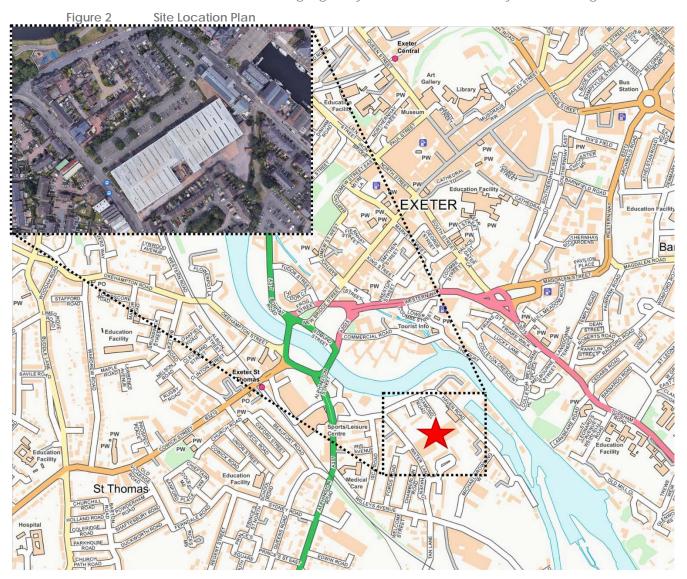


- 1.13 Consideration is also given to DCC's Waste Audit Statement, which is detailed in Appendix B of the Devon County Minerals and Waste Development Framework (July 2015). The corresponding waste tonnage assessment is set out in Section 7 of this WMP.
- 1.14 This WMP is prepared for the use of the residential and commercial management, waste collection companies and ECC. This document serves as a practical guide to be used by these parties involved to ensure that waste generated by the site is efficiently and appropriately managed and removed as per the following defined strategy.
- 1.15 A Delivery and Servicing Management Plan (DSMP) is also prepared by RGP for the site, providing an overarching strategy to accommodate delivery and servicing vehicles at the site, including details regarding the management of the designated servicing areas, as well as delivery vehicle sizes and frequencies. This document is prepared in tandem to address the detailed waste storage and collection arrangements and should therefore be read in conjunction with the DSMP submitted to ECC.



#### 2 SITE LOCATION AND DESCRIPTION

2.1 The site is located approximately 750 metres to the south of Exeter city centre in an area known locally as Haven Banks. The surrounding area is characterised by a range of land uses, including residential, retail, leisure and industrial uses within close proximity. The site's location in context of the surrounding highway network is illustrated by the following extract.



2.2 Haven Road provides a route to the site from the A377 Alphington Street to the west and also serves as the main point of access into Exeter Quayside to the north of the site. The existing access into the site will be retained from Haven Road.



- 2.3 Both sides of Haven Road are marked by double yellow lines in the vicinity of the site, except for the provision of 2 designated disabled parking bays marked adjacent to the pedestrianised zone at the quayside opposite the site. Additionally, there is a section of onstreet pay and display parking bays provided on Haven Road to the north of the site, with the chargeable tariff applied within controlled hours (09:00 18:00, Monday to Saturday, and 11:00 17:00 on Sundays.
- 2.4 Water Lane is also subject to double yellow line kerbside restrictions adjacent to the site and provides sections of on-street parking bays for resident permit holders only to the northwest and south east of the site's access points.
- 2.5 Principal access to Haven Banks is provided from the A377 Alphington Street, which in turn forms a connecting route to Junction 31 of the M5 (via the A30) to the south of Exeter. The site is therefore conveniently located in terms of access from the wider strategic highway network. This is beneficial in that delivery and servicing vehicles require minimal deviation from these major highway links in order to reach the site, subsequently reducing the level of impact on surrounding residential areas.

#### 3 WASTE STORAGE

#### **Capacity Requirements**

- 3.1 With respect to waste storage capacity required for the site, ECC's Residential Design SPD does not define specific storage volumes for flats, stating that "For details of the amount of space required, carry distances and other technical requirements developers should make early contact with Exeter City Council Environment Health Services, Cleansing Department".
- 3.2 RGP has therefore examined the waste storage requirements defined in the British Standards document BS5906. A summary of these standards and the corresponding capacity requirements for each proposed block are provided in the following table.

Table 2 Waste Storage Requirements to Facilitate Weekly Collections (BS:5906)

Block	Waste Arisings Calculation	Weekly Waste Arisings	Equivalent 1,100L bins			
Block A						
Commercial (349 sqm sales area)	volume per m <sup>2</sup> of sales area [10 l] x sales area	3,490L	4			
Residential (22 units)	number of dwellings × {(volume arising per bedroom [70 I] × average number of bedrooms) + 30}	3,740L	4			
Block B						
Commercial (220 sqm sales area)	volume per m2 of sales area [10 I] × sales area	2,200L	2			



Residential (21 units)	number of dwellings × {(volume arising per bedroom [70 I] × average number of bedrooms) + 30}	2,100L	2		
Block C					
Residential (203 units)	number of dwellings × {(volume arising per bedroom [70 I] × average number of bedrooms) + 30}	20,300L	19		
Block D					
Commercial (70 sqm Sales Area)	volume per m2 of sales area [10 I] × sales area	770L	1		
Residential (188 arising per bedroom [70 I] × average number of bedrooms 30}		18,800L	17		
Total	otal N/A		49		

- 3.3 Based on the above calculations, to accommodate a single weekly waste collection from the site, a total 49 x 1,100L Eurobins should be provided. This provision could be reduced where collection frequencies are increased.
- 3.4 It should be noted that the ultimate operation of the 4 commercial units is not yet determined. The above assessment therefore establishes the waste storage requirements of general retail uses. The specified waste storage capacity should therefore be reviewed again in detail following occupation of these commercial properties.

### **Storage Provision**

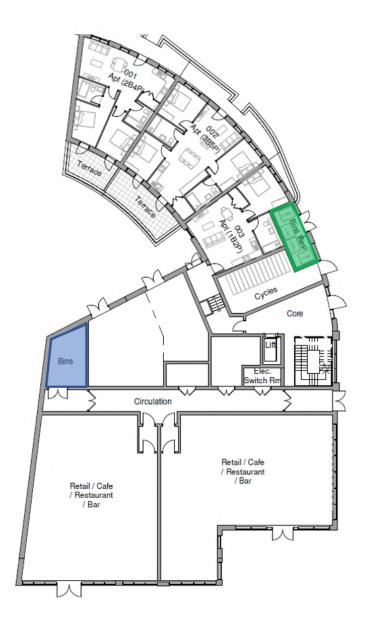
- 3.5 A site-wide provision of 51 x 1,100L Eurobins is proposed to accommodate the waste storage needs of both residential and commercial uses. In accordance with the waste storage guidance summarised above, 45 x 1,100L Eurobins would be provided communally for the use of residents within each block, whilst 6 x 1,100L Eurobins would be provided for the commercial units and management suite.
- 3.6 The required waste storage capacity would therefore be provided within secure bins stores within each block for the communal use of residents. Bins for the commercial units on-site would be securely held within separate refuse stores.
- 3.7 The planned storage capacity would eliminate any need to provide waste compactors within the site.



3.8 The following series of extracts illustrate the locations of each refuse store within the site. All stores would be provided at ground floor level of each respective building.



#### Blocks A & B:



Restaurant
/ Bar
220.4 m²

Core

Plant
Terrace

Apt (1B2P)

Apt (1B2P)

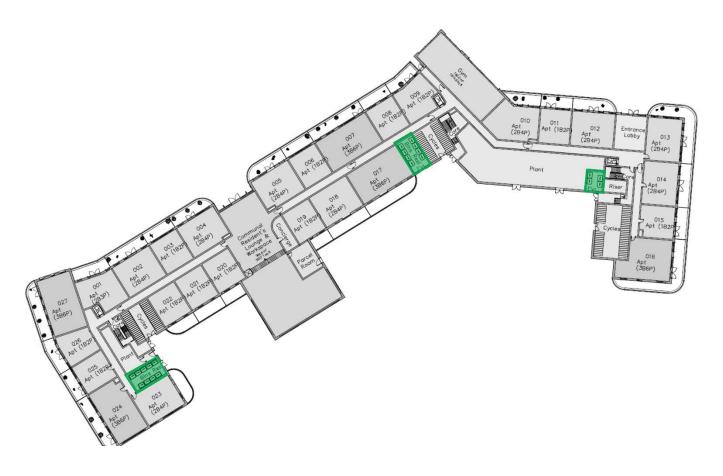
Apt (2B4P)

Ferrace

Retail / Cafe

Block C





Block D:

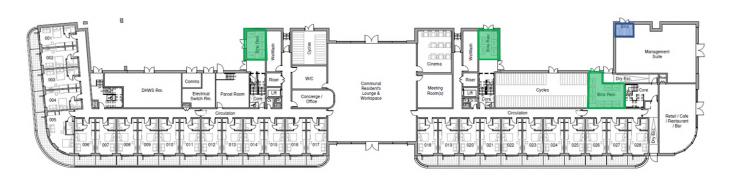


Figure 3 Waste Storage Locations

3.9 Residents would transfer household waste from their apartments to the nearest residential refuse store for disposal. Step-free access is provided from the upper floor apartments to the ground floor refuse stores by way of the lifts provided in each building. Commercial tenants would be provided with separate designated waste facilities, with waste transferred to the various stores provided specifically for the containment of commercial waste.



- 3.10 Each bin store would be secure with fitted locks and would be provided with sufficient lighting to ensure the safe disposal of waste by residents and commercial tenants. Drainage points would also be installed to assist with maintaining clean and functionable storage facilities.
- 3.11 Appropriate signage would be provided at each refuse store to clearly indicate its allocated use, whilst bins would be labelled to instruct site occupants where to separately dispose of recycling and residual waste.
- 3.12 Each bin store is designed to contain enough capacity for the combined 51 x 1,100L Eurobins, as detailed above. Sufficient clearance would be provided within the stores to enable access to each individual bins, as well as for bins to be wheeled out during scheduled collections.

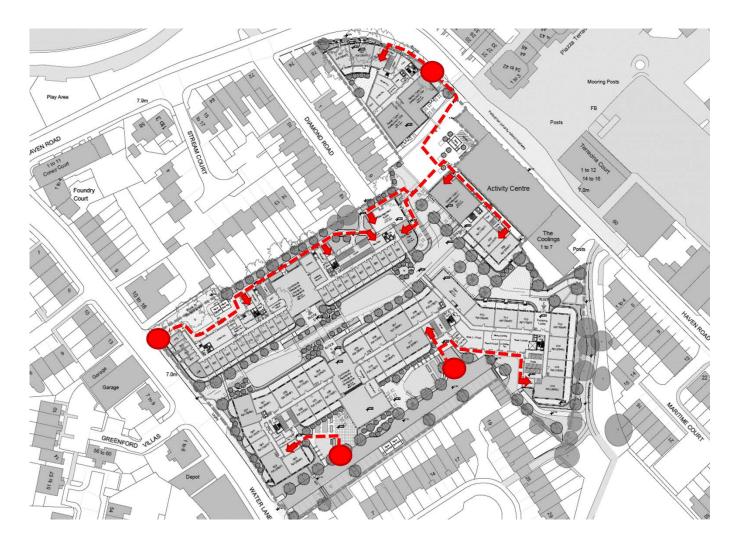
#### 4 WASTE COLLECTIONS

#### **Collection Points**

- 4.1 There would be 4 designated waste collection points to ensure all waste is safely handled and removed from the site. 3 of these collections points would be accessible via Water Lane, accommodating the majority of residential waste generated by the site (from Blocks C and D). A single collection point to the north of the site within the new Haven Road layby would facilitate collections from the remaining residential apartments and commercial units located within blocks A and B.
- 4.2 Each collection point is allocated to reduce waste transfer distances which minimises the duration of collections and improves waste handling procedures undertaken by the collection team.
- 4.3 The various waste collection points and transfer routes from the residential and commercial bins stores are identified on the following extract. A detailed plan illustrating the waste / delivery strategy is attached at drawing 2021/5945/006.



Figure 4 Waste Transfer Routes & Collection Points



- During scheduled waste removals, the collection team would wheel bins from the storerooms to edge of the carriageway at the nearest designated collection point. Step-free access is provided between the refuse stores and the corresponding kerbside collection point.
- 4.5 Collection teams will be instructed to carefully ensure that the correct number of waste / recycling bins are returned to each storeroom following the emptying of bins into collection vehicles.

#### Vehicle Access

4.6 Waste collections associated with Block C would be carried out on-site within the retained service road provided from Water Lane to the rear of the building, where a turning head would be provided to ensure vehicles can manoeuvre prior to departing the site in a forward gear back onto Water Lane.



- 4.7 In order to demonstrate the anticipated refuse collection arrangement for Block C within the site, RGP has undertaken a swept path assessment to illustrate the required manoeuvring of a large refuse collection vehicle when accessing the rear servicing area. Drawings 2021/5945/010 and 2021/5945/011, attached, demonstrate access by a large refuse vehicle within the site's main servicing area to the rear of Block C. Sufficient space would be provided within the turning head to facilitate the manoeuvring of these vehicles, enabling safe and convenient egress in a forward gear onto Water Lane.
- Collections from Block D would take place from Water Lane, adjacent to the private driveway to the rear of Block D. During scheduled collections, residential management staff would be present on-site to transfer bins to the edge of the carriageway for collections to take place. Drawing 2021/5945/009, attached, demonstrates that a refuse collection vehicle could stop adjacent to the site to undertake collections, whilst retaining enough space for traffic to pass on Water Lane without encroaching the marked bus cage on the opposite side of the carriageway. The dropped kerb provided adjacent to Water Lane at the Block D service yard would be extended, enabling step-free access bins to be wheeled safely to the back of the collection vehicle.
- 4.9 The new layby on Haven Road to the northeast of the site would accommodate all collections from Blocks A and B, as demonstrated by the swept path assessment shown on drawing 2021/5945/012, attached. Vehicles would arrive at the layby from Haven Road in a forward gear prior to undertaking collections at the site. Following the completion of loading, vehicles would egress the layby in a forward gear back onto Haven Road before navigating the local road network towards the A337 as part of planned collection route to other sites in the surrounding area.
- 4.10 For full details regarding the suggested routing plan for delivery and servicing vehicles, waste operatives should refer to the DSMP prepared to accompany the planning application in support of the proposed redevelopment.

#### **Collection Frequencies**

- 4.11 Residential refuse collections would be arranged by ECC as part of an existing planned route to local properties along Haven Road and Water Lane. Commercial collections would be scheduled to be undertaken by a private waste contractor, such as Veolia, for example, which already operates collection routes in the locality.
- 4.12 Although ECC typically arranges fortnightly collections for most individual dwellings, weekly collections are scheduled for city centre developments and those with larger waste arisings. It is therefore anticipated that weekly waste and recycling collections would be scheduled by ECC for the residential units at the site. As per the waste capacity guidance set out in British Standards document 5906, a single weekly collection would suffice to accommodate the needs of the site, based on the proposed provision of 45 x 1,100L Eurobins for the communal use of residents.



- 4.13 At the time of writing, ECC schedule both refuse and recycling collections on Wednesdays through the local area. It is therefore envisaged that the site would comprise part of a preplanned collection route along Haven Road / Water Lane to existing properties nearby.
- 4.14 As with the residential uses, the commercial waste storage capacity provided on-site for the commercial properties would enable weekly collections to take place to accommodate the projected waste arisings for these uses of the site. It is envisaged that a shared collection arrangement would be co-ordinated between the 4 commercial properties within the site.
- 4.15 Therefore, a total of 4 weekly collections would take place from the site, accommodating refuse and recycling generated by each of the residential dwellings and commercial units.

#### 5 MANAGEMENT MEASURES

#### **General Procedures**

- 5.1 This WMP is prepared as a standalone planning document which is anticipated to be used predominantly by the site occupants / management and the respective waste contractor to provide reference to the necessary waste storage, collection and management procedures. This document would also be used periodically by ECC for review purposes. A hard (paper) copy of this WMP will be kept on-site at all times, whilst an electronic copy would also be retained by site management.
- It is the duty of care of the site management that all waste is managed in accordance with the procedures as set out within this document. A summary of waste management measures should be included and clearly defined within relevant sub-contract documents, and a copy of this document should be made available to all agents as necessary.
- All refuse collections will be scheduled outside of the conventional highway peak hour periods (08:00-09:00 and 17:00-18:00 hours), in order to reduce any impact of servicing activity on the local highway network. Additionally, collection contractors will be instructed to not carry out overnight collections where possible to prevent any disturbance to the residential properties on-site. The delivery schedule also aims to reduce any potential conflict with neighbouring properties as far as reasonably possible.
- To assist in minimising the duration of refuse collections, respective management of the commercial units and residential buildings will ensure that a member of staff is available prior to collections to greet the contracted collection team and unlock the refuse stores in preparation for scheduled collections. Staff of the commercial units will also ensure that access to their respective refuse store is kept clear at all times and to safely remove any items obstructing the store.



- The property management will ensure that all signage and information stickers on, and within, the refuse store are clear. Replacement signage will be ordered by site management when necessary. This includes labelling on bins to assist with the correct sorting of waste and recycling.
- Management would also request the services of a cleaning company in the unlikely occurrence that large spillages occur within the refuse stores or should any issue be identified regarding the condition of bins on-site. Owing to the design of the refuse stores and their location away from the public highway, spillages within the store would not affect pedestrian or vehicle movement along either Haven Road or Water Lane.
- 5.7 Although no machinery is required on-site for storage or transfer of waste (I.e. a fork-lift or electric tug), collection staff would be fully trained for the use of such machinery if its use was implemented at the site.
- Regular discussions should be held between the respective commercial and residential management at the site to share waste collection schedules and to ensure no ongoing issues / conflict arises from the allocated use of the various refuse stores.

#### Residential Management

- Residents would be informed with a summary of the waste storage and collection arrangements through the provision of a welcome pack when moving into the building, with any updates provided on the residential notice boards.
- 5.10 Discussions should be held periodically between the residential management services and their appointed maintenance teams to ensure that the condition of the refuse stores is maintained to an appropriate standard and to identify any potential issues with upkeep of communal bins on-site.
- 5.11 A point of contact within the property management and their details should be presented to residents so that any issues regarding the sue of the refuse stores can be reported and subsequently addressed by the appointed maintenance team.
- Any anti-social behaviour observed within the refuse stores, including fly-tipping, should be promptly recorded by the residential management and where necessary, reported to the relevant authority such as ECC or the local police service.



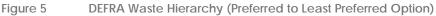
#### Commercial Management

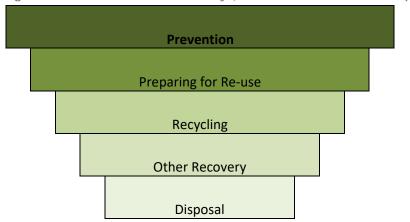
- 5.13 Waste collections should be co-ordinated by each commercial property within the site in order to consolidate the quantity of required collection vehicle trips. Shared waste collections would provide both financial benefits to the commercial tenants on-site and environmental benefits by significantly reducing vehicle miles generated for waste collection purposes.
- 5.14 Management of the commercial uses will be instructed to inform employees of the refuse / recycling processes to ensure that they are fully aware of the requirements. This approach will be maintained via up-to-date information placed on the staff notice board.
- All refuse collections will be appropriately monitored / recorded to maximise efficiency of waste removals from the site. Over the course of the tenancy, the commercial occupants will inform the Council of any significant alterations made to the refuse collection schedule (i.e. any required increase in frequency of collections).
- 5.16 All receipts for commercial waste removals and notes on the tonnage of transferred waste will be retained for monitoring purposes, to accompany the checklist that would be presented to ECC if required.
- 5.17 The management of each respective commercial property should consider the potential to prepare a code of conduct, outline essential management measures, such as collection timings, route planning and refuse store maintenance. It would be requested that privately contracted collection teams sign an agreement of the code of conduct which would be enforced by the commercial management on-site.
- 5.18 The commercial units should periodically review the content of this WMP to ensure that all procedures remain relevant and up-to-date. Such reviews should account for and address the waste management strategy and its interaction with other site functions, such as parking, fire safety procedures, impact on neighbours, the local highway network and visitor access, for example.

#### **Environmental Management**

- 5.19 The combined measures outlined above would contribute towards reducing the environmental impact of waste generated by the site. The following measures provide further environmental strategies to minimise the impact of waste storage and collections.
- Residents and commercial tenants should be made aware of the key principles of the Waste Hierarchy (**Figure 5**, below), as outlined by the Department for Environment, Food & Rural Affairs (DEFRA).







- 5.21 This gives top priority to preventing waste in the first instance and provides a procedure to follow when waste is created, including re-using, recycling, recovery and the disposing of waste as a worst case.
- The commercial management will be made aware of the Transport for London's Fleet Operator Recognition Scheme (FORS). Although the site is located outside of London, it is considered appropriate for the site management to understand the FORS scheme and to appoint FORS compliant contractors where possible. To further minimise the impact of waste collections, the site management will be encouraged to utilise waste removal companies that are active members of FORS.
- FORS is a voluntary scheme which aims to raise the standard of the fleet and freight industry by improving operators' performance with regards to safety, fuel efficiency, economical operation and vehicle emissions. Major waste removal companies, such as Veolia and Biffa, are current accredited operators, confirmation of which can be found at <a href="https://www.fors-online.org.uk">www.fors-online.org.uk</a>.
- Any future waste contractors appointed to carry out the management and disposal of waste generated by the hotel will be approved by the Environment Agency's licensing process to ensure sustainability measures are upheld.
- 5.25 Following the opening of the site, operational targets should be set by site management to encourage staff procedures that further enhance sustainability of waste disposal. Resident behaviour is difficult to manage and waste management processes cannot be easily enforced. Stringent targets for residential recycling are therefore not appropriate to be monitored as part of this process. Once baseline data is obtained for the commercial uses pertaining to proportions of recyclable waste, the general waste tonnage and volumes of food waste generated, site-specific targets should be set to decrease the quantity of non-recyclable waste. These targets should be set out based on 'SMART' criteria, as follows:



Specific
Measurable
Achievable
Realistic
Time-bound

#### 6 DEVON WASTE AUDIT STATEMENT

- In order to provide initial estimates to the projected waste tonnage and sorting, RGP has referred to Devon's Waste Audit System template which is contained in Appendix B of the Devon County Minerals and Waste Development Framework (July 2015). Although the Council's waste audit primarily considers construction waste, it is advised that annual commercial waste tonnage is forecast for new developments.
- 6.2 With specific regard to residential waste arisings, the guidance document states that:
  - "For residential development, it is understood that the waste generated and how it is managed it not within the control of the applicant, although steps can be taken to influence this... Therefore, an estimate of the total waste to be produced annually based on available figures should be given for all years until the development is built out."
- 6.3 The following assessment therefore gives an estimate of the residential waste tonnage based on the British Standards arisings calculations. It is assumed the projected arisings would include a 50% split of residual waste and recycling (glass & paper / card).
- As the ultimate occupiers of the commercial properties are yet to be established, the types of waste generated by each unit cannot be confirmed. The following assessment should therefore be revised following the confirmed operation of the commercial properties following first occupation of the site. Input to the assessment should also be given by the contracted waste collection service, where applicable.
- 6.5 The estimates provided in the assessment below are based on assumed types of waste typically generated by the respective uses of the site. The volume of waste arisings corresponds to the British Standards guidance, whilst the tonnage is calculated based on EA conversion factors:
  - i) 25% Solid residual waste (0.58 conversion factor);
  - ii) 25% Paper & card waste 0.32 conversion factor);
  - iii) 25% food waste (0.61 conversion factor);



iv) 25% glass waste - (0.53 conversion factor);

Table 3 Devon Waste Audit Statement – Summary of Waste Tonnage

Table 5				illiary or wa				
Material	Annual Quantity							
	Total estimated amounts (tonnes)	% to be re-used on-site	% to be re-used off-site	% to be recycled on-site	% to be recycled off-site	% to be recovered	% to be landfilled	
Commercial & Industrial Waste	106.08	1	0	0	56	0	43	
Solid residual waste	30.16	0	0	0	0	0	100	
Paper & card waste	16.64	5	0	0	95	0	0	
Glass waste	27.56	0	0	0	100	0	0	
Food Waste	31.72	0	0	0	50	0	50	
Household Waste	730.16	0	0	0	42	0	58	
Solid residual waste	420.57	0	0	0	0	0	100	
Paper & card waste	116.82	0	0	0	100	0	0	
Glass waste	192.76	0	0	0	100	0	0	
Hazardous	0	N/A	N/A	N/A	N/A	N/A	N/A	
Total	836.24	<1	0	0	44	0	56	

- 6.6 It is worth noting that the estimated total waste tonnage represents a particularly robust volume, with the above calculations assuming that the maximum weekly waste arisings are generated continuously over the course of the year.
- 6.7 Of the total annual waste generated by all uses of the site (approximately 840 tonnes), in the region of 44% of the total tonnage is anticipated to be recycled, with the remaining 56% tonnage comprising residual waste for landfill.



Future waste management targets should be set using this baseline data to encourage a greater tonnage of waste being re-used and recycled.

#### 7 SUMMARY AND CONCLUSIONS

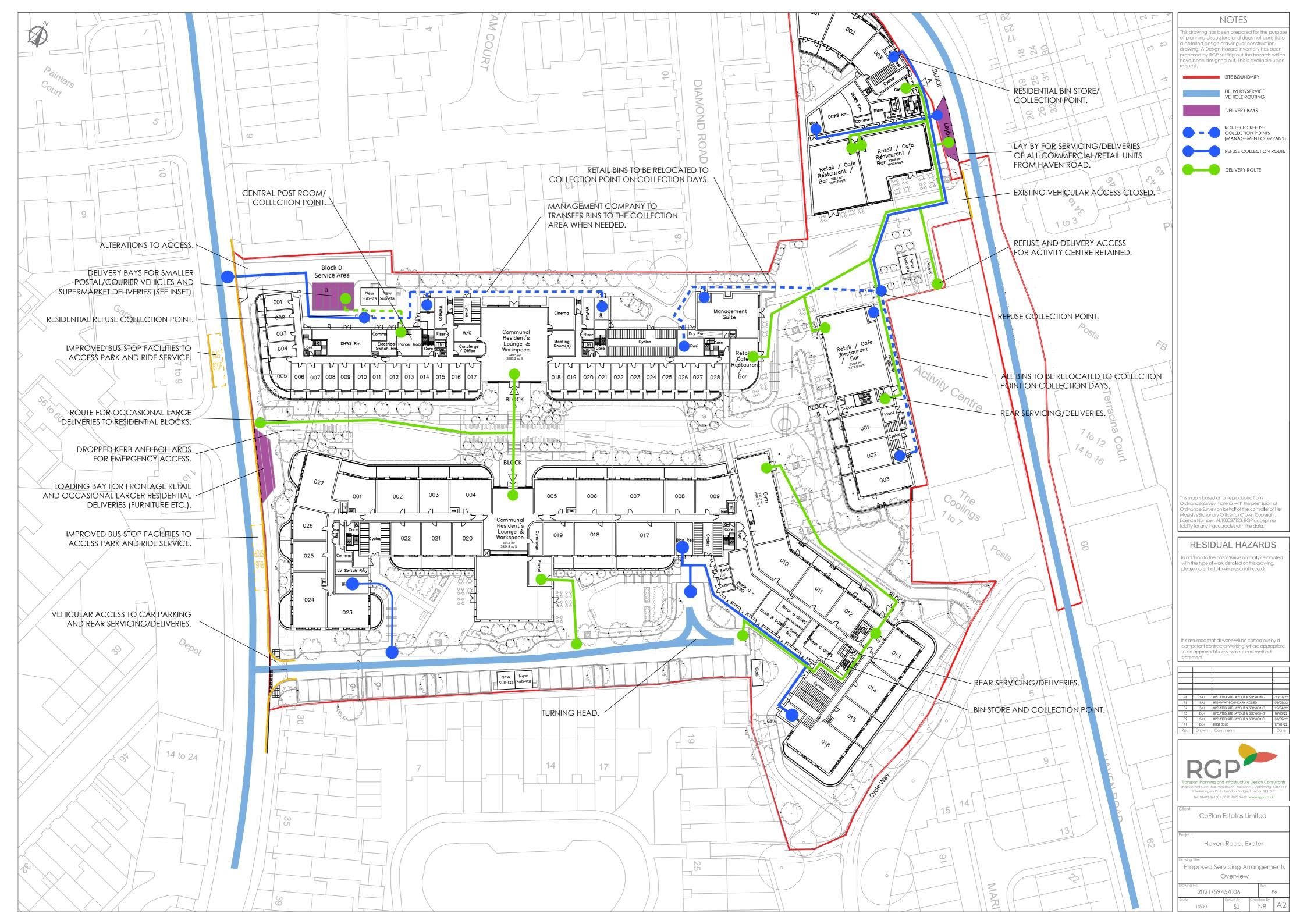
- 7.1 This Waste Management Plan sets out a number of clearly defined procedures relating to the waste storage and removal requirements associated with the proposed redevelopment of Haven Banks Retail Park, Haven Road, Exeter.
- 7.2 This report demonstrates the following:
  - i) The site is considered to be conveniently located in terms of access from the wider highway network owing to its proximity major highway links including the A377, A3015, A30 and Junction 30 of the M5. Minimal deviation from these routes is required by refuse collection vehicles making trips to / from the site, as per the routing plan established in this DSMP;
  - ii) New laybys on Haven Road and Water Lane, respectively would accommodate a proportion of refuse collections, combined with the retained service road from Water Lane. Collections would take place safely and convenient without obstructing the trough-flow of traffic on the adjacent carriageways. Vehicles would manoeuvre at the designated collection points, arriving and departing the site in a forward gear;
  - iii) Secure refuse stores will be provided on-site for the use of the residents and commercial tenants. These stores have been designed in accordance with relevant British Standards waste storage guidance. The stores will be lockable, well-lit with and provided with sufficient drainage. Step-free access will be afforded from the refuse stores to the designated collection points;
  - iv) Residential refuse collections would be coordinated by ECC as part of an existing collection route through Haven Banks. Private collections would be scheduled by the commercial tenants, with an envisaged shared collection strategy to consolidate the number of weekly waste removals from the site. 4 collections would be required at the site per week for the removal of all waste and recycling generated by the combined residential and commercial uses:
  - v) All refuse collections on-site have a typical duration of between 5-10 minutes to complete. Continuous waste removal activity will be ensured during collections to limit any potential impact on the operation of the service yard. There is no requirement for temporary waste holding areas to be provided prior to collections;
  - vi) A range of waste management measures have been defined within this document to be applied by the future residential building management team, as well as the individual commercial management of each respective retail tenancy. The principal purpose of these measures is to reduce the impact of waste storage and collections on site occupants and the surrounding community. The overall waste strategy seeks

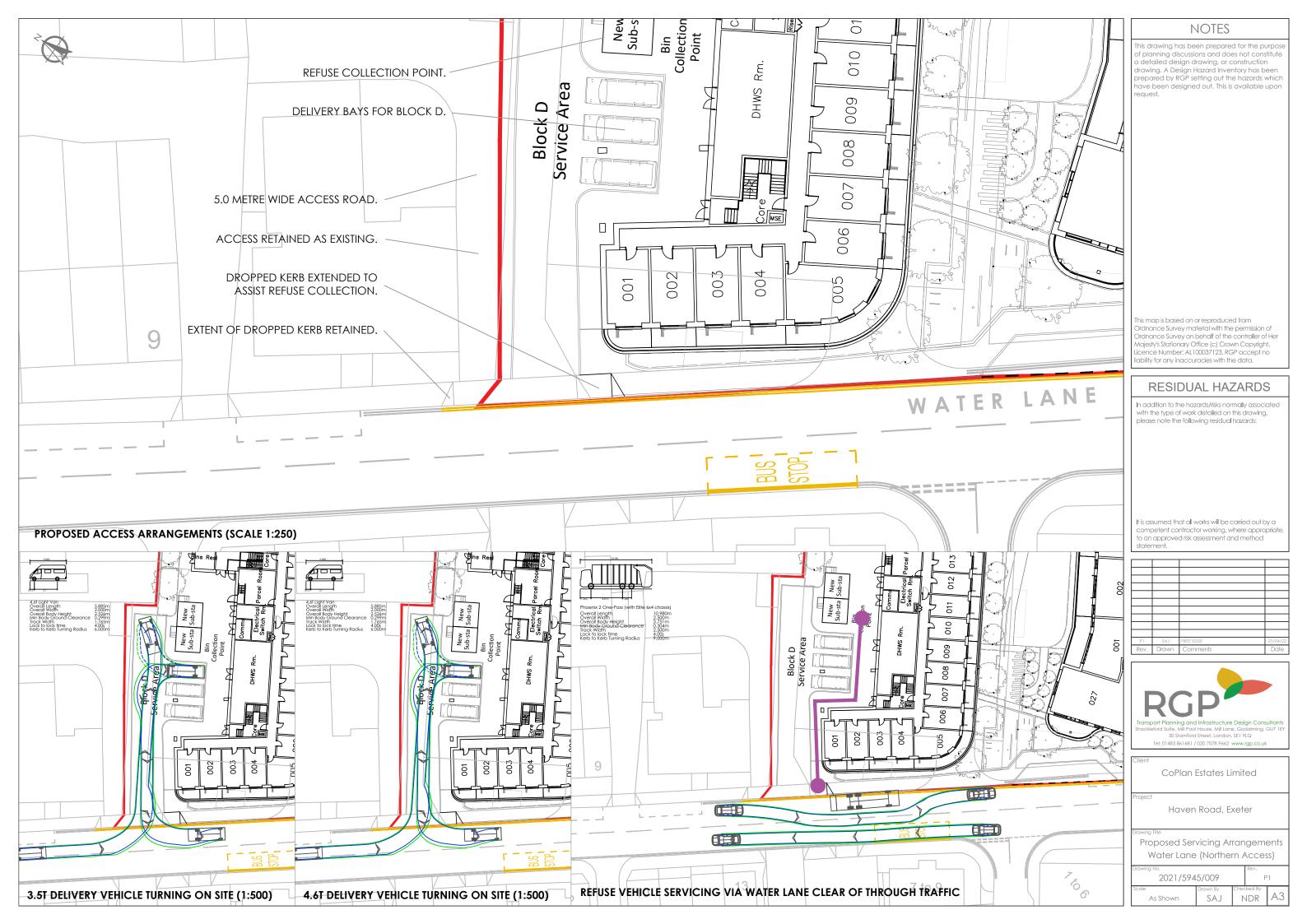


to promote the DEFRA waste hierarchy to reduce residential waste production at the site:

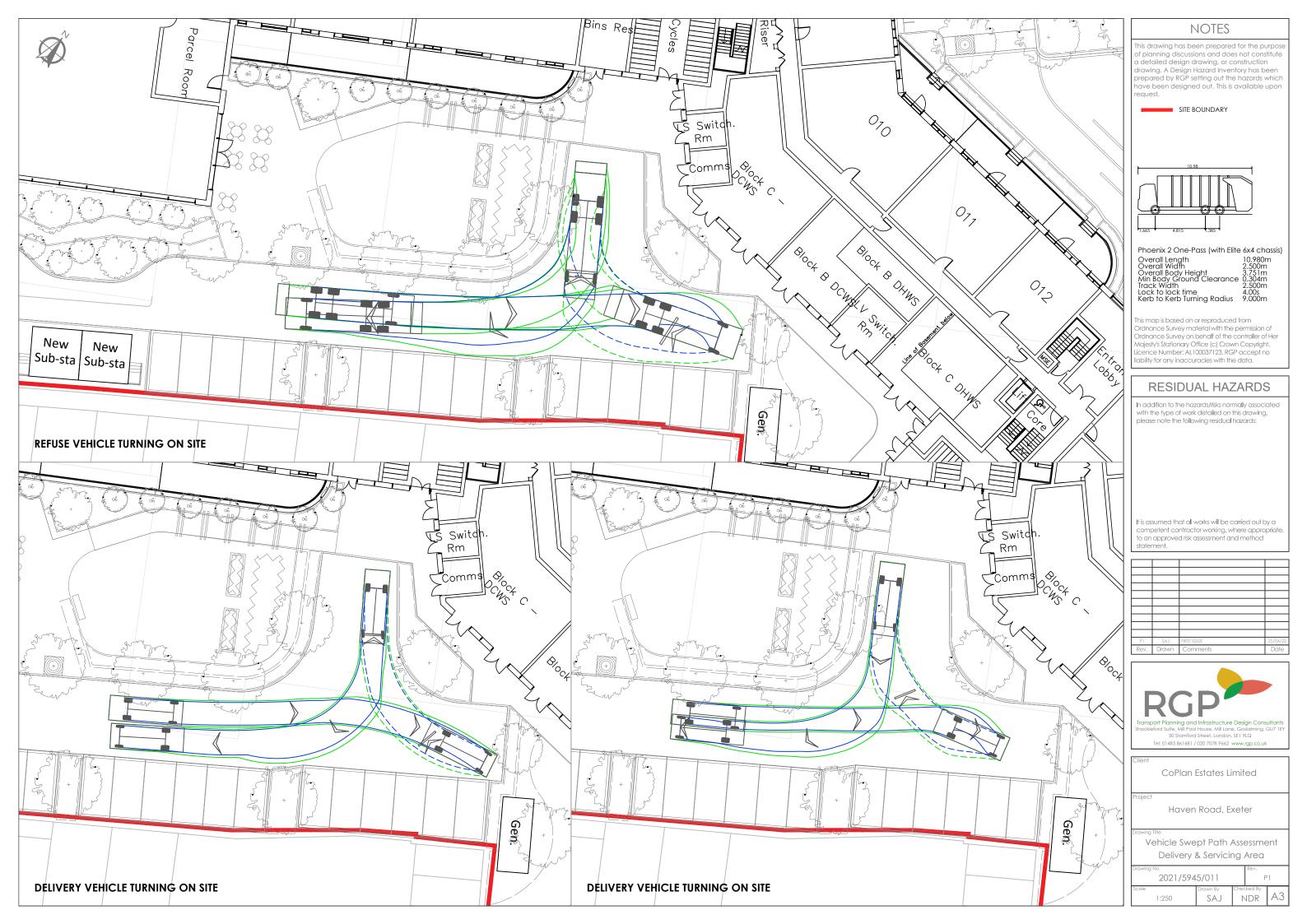


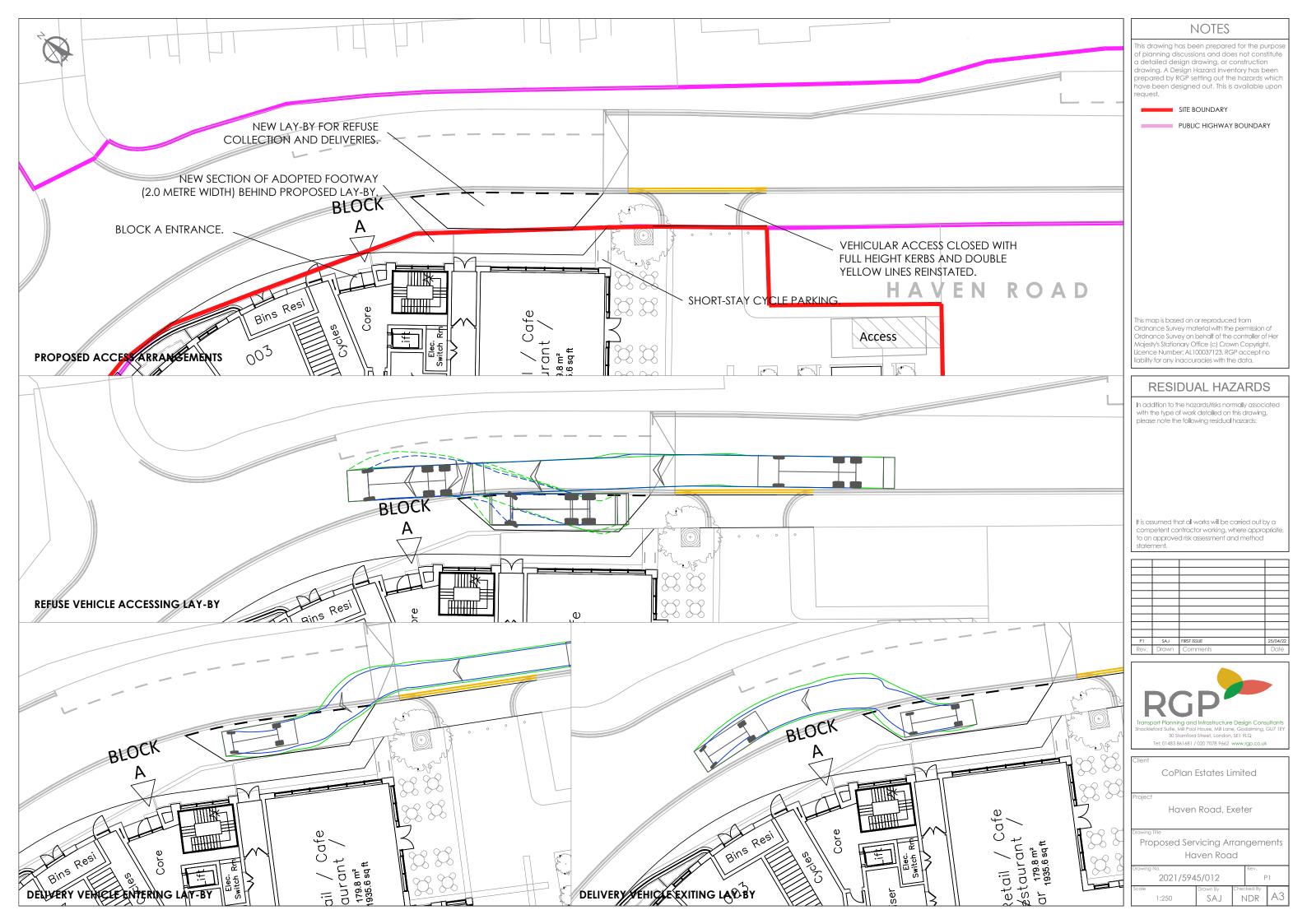
# **DRAWINGS**













## **APPENDIX A**

