



R. Collard Ltd

124 CARDIFF ROAD, READING

Sustainability Statement





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Sustainability Statement

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1 EXECUTIVE SUMMARY

WSP has been instructed by R. Collard Ltd to undertake a Sustainability Statement to support the planning application of the Proposed Development at 124 – 128 Cardiff Road, Reading, RG1 8PQ.

Full planning permission is sought for the extension of the existing waste facility, including the demolition of the building adjacent to the existing site, and construction of a new 922m² building.

Sustainability Statement Overview

The Proposed Development will aim to meet the highest levels of sustainability throughout the scheme and meet all local relevant policy requirements in this area. This document outlines how the scheme aims to meet local policy for ensuring sustainability, whilst exploring how it can go further.

The objectives of the Sustainability Statement are focused on reviewing the applicable requirements set by the Building Regulations and Reading Borough Local Plan (adopted in November 2019) and propose strategies to meet the development's sustainability and water conservation targets.

The following key issues have been the drivers behind the development of the masterplan, and are the areas focused upon, each explaining policies addressed:

- Sustainable Design and Construction

The proposed development will meet, or exceed where practicable, the Building Regulations Part L2A 2013, and will include roof and wall construction of insulated composite panels which will be manufactured off site and assembled on site, reducing use of raw materials and construction waste. No HVAC designed into development so building would be low energy.

- Adapting to Climate Change

Development to consider the use of on-site renewables to support the EV charging points. The flooding and drainage assessment and recommendations have considered projected climate changes trends, and extension of green verge at the front of the development will support potential to add shading to site, in line with requirements based on climate change trends.

- Waste Minimisation and Storage

Due to the nature of the existing and proposed development being a waste recycling and recovery centre means that sustainable use of construction and commercial waste materials is promoted and executed. Waste hierarchy is considered, and waste is stored safely as per existing environmental permit, with waste volumes remaining unchanged as a result of the proposed development.

- Pollution (water, and noise)

There were some sources of potential contamination highlighted in the preliminary land assessment. Recommendations made to undertake further assessments to determine risk level based on hardstanding of the site being a receptor break.

- Biodiversity and Ecology

This site is not part of the green network or covered by statutory or non-statutory site designation. Bat surveys were completed to assess for roosting bats in building to be demolished and suitability of new building to include external bat housing. No bat roosts were found in existing building to be demolished.

- Flooding and Drainage

The site is designated as flood zone 2, according to Environment Agency consultation, which indicates moderate flood risk. A flood risk assessment has been completed based on all risks (pluvial, fluvial, and surface water), and consideration made to climate change trends in recommendations.

- Car and Cycle (EV charging)

The site is situated within a good local transport network to encourage use of public transport for employees. There is no projected increase in commercial vehicles planned as part of the proposed development. Plans do include the addition of two EV charging points at the front of the site.

2 PROJECT BACKGROUND

The Proposed Development is located at the land immediately adjacent to West facing envelope of the existing waste building operated by R. Collard Ltd (124 – 128 Cardiff Road, Reading, RG1 8PQ). This site is located 2.2 miles North East of Reading Centre, and 1.2 miles North East of Reading Train Station.

The existing building is located on the north side of Cardiff Road, close to the junction with Trafford Road. The surrounding area is predominantly industrial, with ancillary offices to these functions. The site is located within the Richfield Avenue 'Core Employment Area'. The site is also within Flood Zone 2, an Air Quality Management Area, and an area of potential contaminated land. The mainline railway line is to the south of the site.

Full planning permission is sought for the extension of the existing waste building, following demolition of 124 Cardiff Road to facilitate. The proposed floor area would be approximately 922m², including any linkways to existing building, and will have the same height.

Figure 2-1 - R.Collard Ltd (existing building) is indicated with red mark (Left), and the plot for proposed redevelopment and extension of existing waste site is indicated by the red boxes.

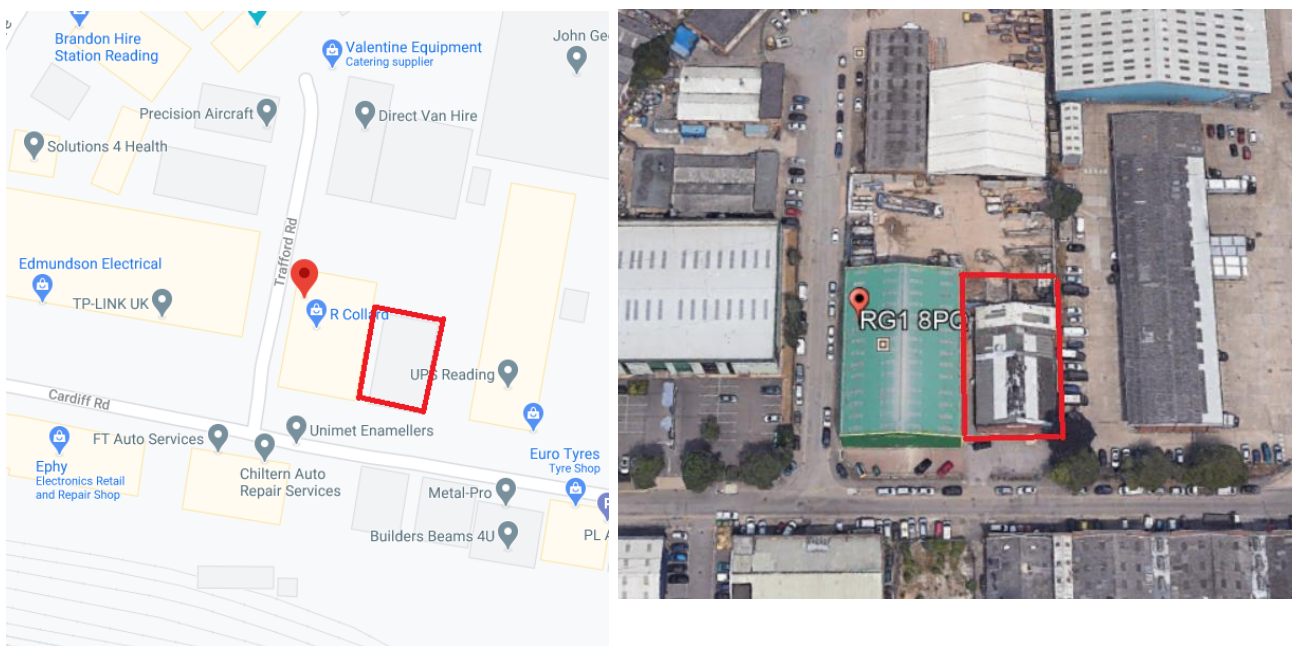


Figure 2-2 - Site Location Map for the Proposed Development (site boundary within red line)

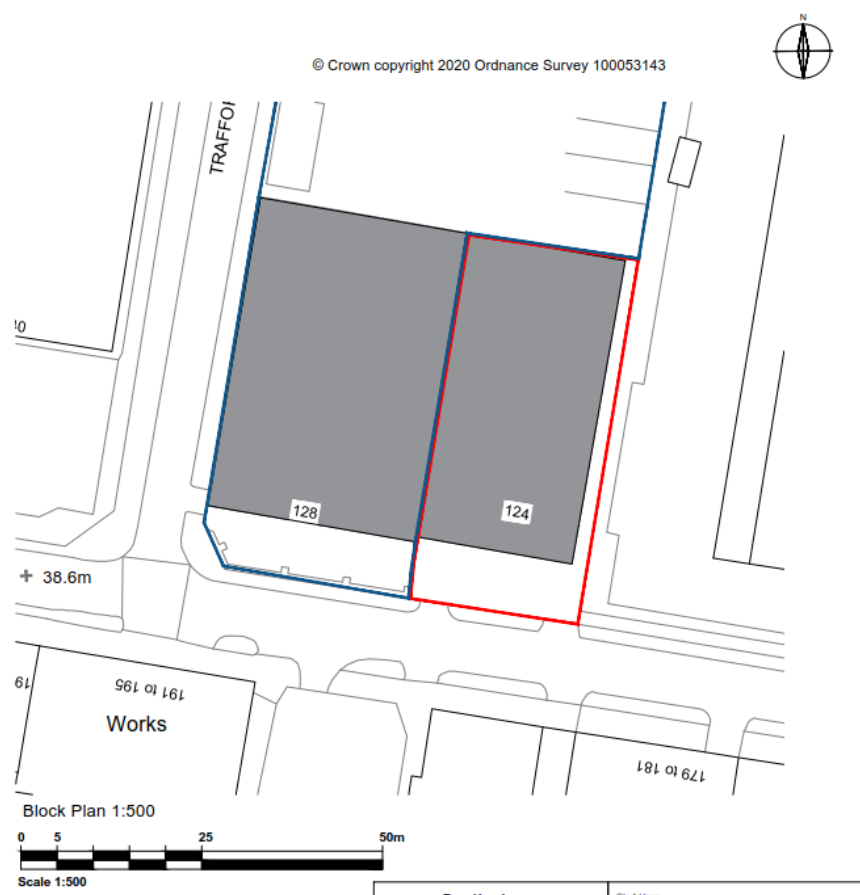
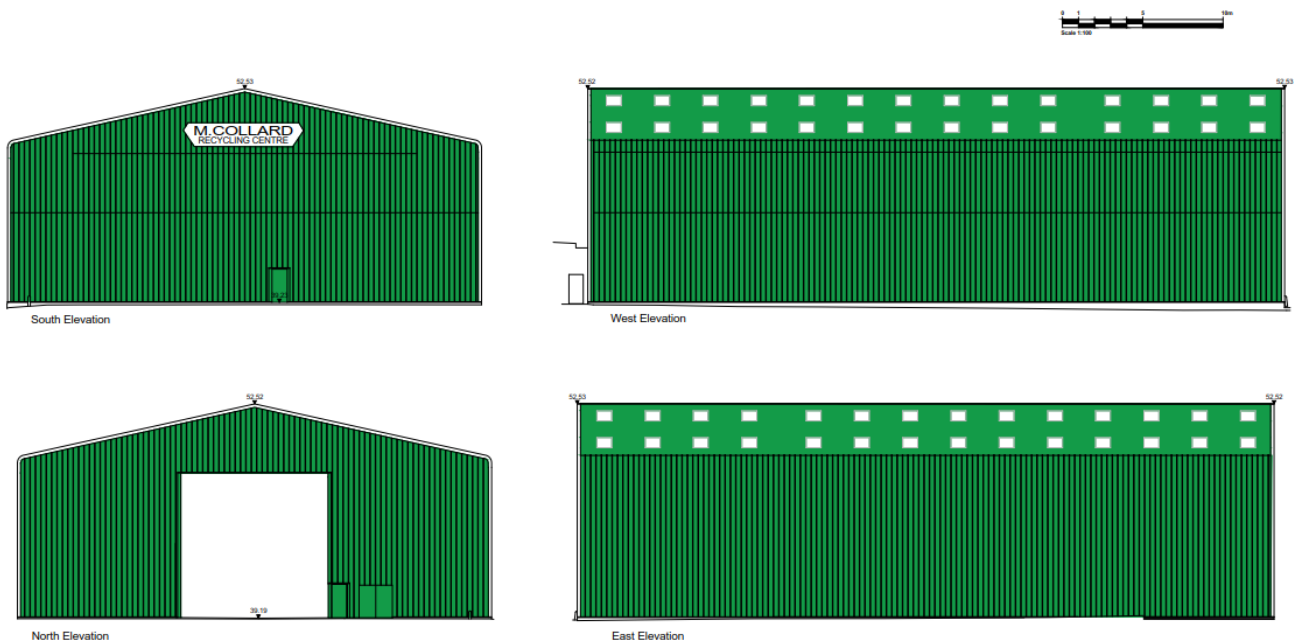


Figure 2-3 - Proposed Development Elevations



3 POLICY CONTEXT

In terms of sustainability, relevant policy applies at both a local and national level.

3.1 NATIONAL PLANNING POLICY FRAMEWORK

The National Planning Policy Framework was updated in 2019, with the key policies relating to sustainability being:

- 2. Achieving sustainable development:
- 14. Meeting the challenge of climate change:

3.2 NEW READING BOROUGH LOCAL PLAN 2019

The Reading Borough Local Plan was adopted in November 2019, with the key policies relating to sustainability being:

- CC2 – Sustainable Design and Construction
- CC3 – Adapting to Climate Change
- CC5 – Waste Minimisation and Storage
- EN12 – Biodiversity and the Green Network
- EN16 – Pollution and Waste Resources
- EN18 – Flooding and Drainage
- TR5 – EV charging

3.3 LOCAL POLICY RESPONSE

Policy	Description	Summary	Scheme response
Reading Borough Local Plan 2019			
CC2	Sustainable Design and Construction	- All minor non – residential constructions (for which this developed was classified in pre-assessment), is required to meet the most up to date BREEAM ‘Very Good’ Standard as a minimum. - All non-residential developments should incorporate water conservation measures so that predicted per capita consumption does not exceed the appropriate levels set out in the applicable BREEAM standard (Very Good =)	- After liaising with Reading Borough Council, a BREEAM assessment is not required for this proposed development, however, development will, as a minimum, meet Building Regulations Part L2A 2013, seeking to exceed this where possible. - Kingspan Insulated Composite Panels, with a U value of (TBC) will be used on the roof and walls, and low energy lighting will be used throughout. - Any construction waste can be recycled and recovered on site, as part of the existing site operations. - No HVAC will be present in the proposed development so building will be classified as low energy use. - On site renewables (solar PV) will be considered in design.

Policy	Description	Summary	Scheme response
CC3	Adaptation to Climate Change	- Wherever possible, buildings should be orientated to maximise opportunities for heating/ventilation (passive design). - Buildings should be designed to maximise resistance and resilience to climate change (solar shading, thermal mass, appropriately coloured materials exposed to sunlight, and green and brown roofs. - Include trees and other planting where appropriate as part of landscape scheme to provide shade and connect habitat (native plants selected to be adaptable to predicted changes in climatic conditions. - Minimise impact of surface water runoff with effective drainage and incorporating resilience measures in case of river level rises.	- Proposed development has no HVAC planned as no need to condition the indoor climate so will be a low energy use building. - Building designed to meet and exceed where possible the Building Regulations Part L2A 2013, and will consider the inclusion of renewables through solar panels to ensure long term energy capacity and security on site. - Roof lights installed as part of composite roof to maximise natural lighting, with low energy lighting to supplement where needed. - Installing EV charging points to promote and facilitate the use of electric vehicles. - Flooding and Drainage Risk Assessment and Recommendations based on climate change trends up to 2100 to exceed the typical 60-year building life cycle. - Extension of small green verge at front of development with potential to add in flora to add shading and support species.

Policy	Description	Summary	Scheme response
CC5	Waste Minimisation and Storage	- Development should demonstrate measures to minimise the generation of waste in construction, use and life of building, and promote more sustainable approaches to waste management (reuse and recycling of construction waste, and a well-designed space to facilitate waste storage, reuse, recycling, and composting)	- The very nature of the existing development and proposed extension to the site is to promote the recovery and recycling of construction and commercial from the local area. The additional building will allow for the installation of more advanced equipment to increase recycling rates, helping to contribute to the Reading Borough Council Sustainability Targets. The site currently accepts maximum of 75,000 tonnes of waste per annum, and the extension will allow this capacity to be increased, and recycling in a more efficient and sustainable way, adopting the waste hierarchy. - Waste will continue to be segregated on arrival to the facility and stored in safe levels as per environmental permit.

Policy	Description	Summary	Scheme response
EN12	Biodiversity and The Green Network	- On all sites, development should not result in a net loss of biodiversity, and should provide a biodiversity net gain wherever possible - Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable - Provide new tree planting, -wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.	-The development does not sit within the Reading Borough Green Network and is already a developed industrial area so will not result in a net loss of biodiversity. - A single bat survey was completed at request of LPA Ecology Consultee, which confirmed no roosting bats. - Existing green strip at the adjacent to the road at the front of the development is being made wider (1.5m) and flora added will target a broad variety of species as site and surrounds only currently being used by common and widespread species. - Land assessment highlighted growth of invasive species Buddleia on the Western Boundary so treatment/removal should be considered if other flora is added.

Policy	Description	Summary	Scheme response
EN16	Pollution and Water Resources	- Development only permitted where it is not damaging to the environment and sensitive receptors through noise, land, or light pollution, or where adequate water resources, sewerage and wastewater treatment infrastructure will be in place to support the proposed development prior to occupation. - Development will only be permitted on land affected by contamination where it is demonstrated that the contamination and land gas can be satisfactorily managed or remediated so that it is suitable for the proposed end use and will not impact on the groundwater environment, human health, buildings and the wider environment, during demolition and construction phases as well as during the future use of the site.	— The development is located within an air quality management area but impacts from the demolition and proposed re-development during the construction and operational phase would be “Not Significant”. — The land assessment observed that due to previous uses of the site, there is likely to be a presence of heavy metal inorganics, asbestos, and petroleum in the ground around the site. Although, due to the fixed foundations of the planned redevelopment will likely mean these will have little/no effect on the employees, it is recommended a ground investigation is completed in compliance with standard BS10175, and a generic quantitative risk assessment, as well as gathering sampling of soil, groundwater and surface water.

Policy	Description	Summary	Scheme response
EN18	Flooding and Drainage	- Development will be directed to the lowest risk areas of flooding in the first instance (set out in NPPF, and considering Climate Change) - Flooding from all sources will be considered (fluvial, ground water, surface water, and sewer flooding). - Where possible development should be designed to reduce flood risk both on and off site - Smaller schemes are encouraged to incorporate SuDS where possible - Runoff rates should aim to reflect greenfield conditions and, in any case, must be no greater than the existing conditions of the site	- The development is situated in flood zone 2, an area with a relatively probability of flooding (0.1 – 1%) - Consideration of the flood resilience and safety of the Proposed Development from fluvial flooding for events up to the 1 in 100-year fluvial flood event with 35% allowance for climate change in accordance with the latest GOV.UK and Environment Agency Flood Risk Assessment Climate Change Allowances. - Consideration of surface water runoff from the site and proposal to ensure that there is no increase in surface water runoff from the Proposed Development from the existing Site layout and drainage regime, which should be further assessed as part of the detailed design.

Policy	Description	Summary	Scheme response
TR5	Car and Cycle Parking (EV charging)	- Development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport. - For non-residential developments, 10% of spaces should provide an active charging point.	- Two EV charging points are to be added to the car park at the front of the development. - Existing cycle parking provisions will remain in place, and extension will be considered. - Development is located on good local public transport routes, so employees encouraged to utilise public transport. - No additional service vehicles will be used by R. Collard despite additional capacity so no issues on local roads/junctions.

4 SUSTAINABILITY STATEMENT

The purpose of this Sustainability Statement is to explain how the Proposed Development will address sustainable development issues, relevant policies and meet current best practice standards.

A sustainable approach is presented as the desired result for human development as well as the means with which to balance current and future social, economic and environmental needs. This is taken to mean:

“improving the quality of human life while living within the carrying capacity of supporting ecosystems”

(Caring for the Earth: A Strategy for Sustainable Living (Union of Conservation Scientists (IUCN), United Nations Environment Programme (UNEP) and World-Wide Fund for Nature (WWF))

The following key issues have been the drivers behind the development of the masterplan, and are the areas focused upon, each explaining policies addressed:

- Sustainable Design and Construction
- Adaptation to Climate Change
- Waste minimisation and storage
- Pollution and Water Resources
- Biodiversity
- Flooding and Drainage
- Transport (EV)

4.1 SUSTAINABLE DESIGN AND CONSTRUCTION

All new buildings constructed in England and Wales must meet the minimum requirements of the UK Building Regulations. Specifically, with regards to energy and carbon compliance, all buildings must meet the building regulations Part L ‘Target Emission Rate’ (TER) requirements for the Part L revision which is current at the time of initial construction works. The requirements of Part L2a: 2013 will apply to the proposed development.

Building Regulations are set to become more stringent in 2021 and beyond, increasing the reduction of CO₂ emissions required. New commercial buildings must contribute towards the UK achieving net zero goals by 2050, as well as the short term 4th and 5th carbon budgets, by demanding increase in fabric standard (thermal insulation and glazing), better heating equipment which support decarbonisation, and inclusion of renewables.

The proposed development will meet and make efforts to exceed the minimum requirements of Building Regulations Part L2A 2013 Baseline, incorporating high levels of fabric efficiency (Kingspan Insulated Composite Panels on Wall and Roof), low energy lighting, and consideration of renewable energy sources. Renewable energy in the form of solar panels is considered for application, if cost effective as the building has no HVAC systems. Installing the EV charging points may increase electricity demand on site if utilised, so consideration will be made to ensure sufficient electrical capacity, and supply derived from a renewable supplier.

4.2 ADAPTATION TO CLIMATE CHANGE

The proposed development consists of a single storey warehouse which will house equipment to facilitate the recycling and recovery of construction and commercial waste. The building walls and roofs will be constructed of Kingspan composite insulated panels, which are constructed off site and assembled on site. This contributes to a reduction in embodied carbon and reduces construction waste. These composite panels are thermally efficient, keeping internal areas warmer in winter months and cooler in summer months. The building will be constructed to a minimum of Building Regulations Part L2A 2013 and exceeded where possible. The proposed development, as will the existing development, will not have any HVAC installed so will be termed a low energy building, supporting my maximising natural light through roof lights, and supplemented by low energy lighting if required.

The installation of on-site renewables will be considered (solar PV), as this will help to overcome challenges of energy capacity and energy security arising as a result of climate change. This would also help support the 2 EV charging points being installed at the front of the development.

Flooding and drainage risk assessment and recommendations have been based on climate change trends up to 2100, which suggest a possible increase of 30% precipitation through winter months by 2080 (worst case scenario), and green spaces at the front of the site is to be extended to support potential planting of trees, which may help provide shading to the site, given the projected rise in summer temperatures by 2080.

4.3 WASTE MINIMISATION AND STORAGE

The existing and proposed development will continue to be operated by R. Collard, as a waste recycling and recovery centre. The site currently accepts 75,000 tonnes of waste per annum, and the extension would allow for the installation of more advanced equipment, capable of increasing efficiency of recycling and recovery processes, which will help contribute towards the sustainability targets of Reading Borough Council. Commercial and Construction that may otherwise be sent to landfill or energy to waste plants is collected and is recycled, and baled for re-use and recover, which shows adoption of the waste hierarchy.

Through the demolition of the existing building, the construction waste can be collected and managed in the same way as for the clients, with recycling and recovery prioritised. Any waste that cannot be recovered on site, is sent to the waste to energy plants, where energy is used to supply district heat networks.

Waste is segregated and stored safely at the existing site, as per conditions of environmental permit. This will remain unchanged as part of the proposed development.

4.4 POLLUTION AND WATER RESOURCES

The preliminary risk assessment (land and water pollution) has been completed in accordance with, and considering the following:

- Part 2A Environmental Planning Act 1990
- National Planning Policy Framework 2019
- Reading Local Borough Plan 2019
- Environment Agency and Land Contamination Risk Management 2020
- CIRIA C552 'Contaminated Land Risk Assessment' 2001

Due to the historical uses of the site as metal works, builders' yards, and for licensed industrial activities, there are numerous sources of potential contamination (made ground asbestos, heavy metals, inorganics, and hydrocarbons). However, the preliminary risk assessment concluded that the risks of these contaminants were low/moderate. The proposed development is to be covered by 100% impermeable hardstanding/building cover so direct contact pathways (dermal contact, ingestion, and inhalation) are unlikely as the hardstanding will create a break in the pathway. The hardstanding will also minimise leaching of surface water to subsurface/shallow groundwater, and usual best practise during demolition of damp suppression and wheel washings will further minimise potential contamination through dust.

However, to further determine risks, and provide recommendations, the preliminary risk assessment for Land and Water suggests the following:

In order to satisfy planning conditions, an intrusive ground investigation is likely to be required at the Site. The ground investigation should be compliant with current UK guidance e.g. BS10175 and include a Generic Quantitative Risk Assessment (GQRA) to allow the assessment of identified plausible contaminant linkages and if remedial measures may be required. Geotechnical testing could also be undertaken to inform foundation design for the future redevelopment. It is recommended that the ground investigation is designed based on the following technical objectives:

- Soil, groundwater and surface water sampling for contamination;
- Groundwater and ground gas monitoring;
- Provision of a GQRA to assess risks to human health and controlled waters; and,
- An assessment of potential foundation design and geotechnical constraints.

In terms of noise pollution from the site, a noise assessment was completed using two local sensitive noise receptors on Cardiff Road and Salisbury Road, in compliance with BS4142:2014 standard. Given the close proximity of the site to the railway, and the nature of the local area being already industrial, neither sensitive receptor will incur significant noise impact as a result of the proposed extension as long as there is no significant change to site activities.

For further details, please refer to the Preliminary Risk Assessment 'R. Collard – Expansion of Waste Recycling Centre' (December 2020) by WSP UK Ltd, and Noise Assessment Report 'Proposed Development of Waste Transfer Station' (December 2020) by WSP UK Ltd.

4.5 BIODIVERSITY AND ECOLOGY

The development does not sit within the Reading Borough Green Network, and it is not covered by any statutory or non-statutory wildlife site designation. Also, the area is already a developed industrial area so will not result in a net loss of biodiversity.

The bat survey, completed at request of LPA Ecology Consultee, confirmed no roosting bats and given the surrounding urban environment, the existing building to be demolished is considered low suitability to support roosting bats.

Aside from the 1-1.5m verge strip at the front of the site entrance, there are no other green areas on or near the site of proposed development. Approximately 0.2km Northwest of the site are a series of grassland fields, which due to their use for music festivals, are semi-improved/species poor. However, the hedgerows lining these fields and their access roads, and the railway corridor located immediately south of the site are likely to provide some connectivity between foraging and commuting routes for bats. It is therefore recommended as part of the proposed development that installation of bat bricks/ bat tubes (above those required for mitigation and compensation) in fabric of new buildings to increase the roosting opportunities on site for bats.

The land assessment highlighted the growth of Buddleia (invasive species) on Western boundary of the site so treatment/removal should be considered if any other flora is to be added to the site. To improve biodiversity on site, and to provide shading to combat potential effects of climate change, an introduction of flora/trees are considered for the green area at the front of the site, and flora added will target a broad variety of species as site and surrounds only currently being used by common and widespread species.

For further details, please refer to the Preliminary Bat Roost Assessment 'R. Collard – 124 Cardiff Road' (June 2020) by WSP UK Ltd.

4.6 FLOODING AND DRAINAGE

The development is situated in flood zone 2, an area of moderate flood risk, as confirmed in the flood risk assessment (FRA).

The FRA has been completed in accordance with the National Planning Policy Framework (NPPF), and where applicable, informed through Environment Agency.

Despite being located in flood zone 2, the FRA highlighted that risk of flooding is low from all sources assessed (fluvial, pluvial, surface water), and is not expected to cause any increase in flood risk off-site over lifetime of proposed development.

Based on the limited nature and small scale of the Proposed Development and due to the existing site already being 100% impermeable, it is proposed to maintain the existing drainage system as far as reasonably practicable to ensure that the proposed drainage works are proportionate to the scale of works associated to the proposed development and would not increase discharge rates.

Appropriate design calculations to consider the new drainage layout shall be developed post planning as part of the detailed design by the appointed contractor/ consultant and should ensure that consideration is given for the management of surface water runoff for all events up to and including the 1 in 100yr rainfall event with allowance for climate change.

Detailed design will consider the invert level of the receiving sewer, movement of down pipes, carrier drains, drainage channels, gullies, manholes, and pollution prevention control measures (e.g. petrol interceptors for HGV areas) as deemed appropriate in maintaining the existing drainage network.

Where practicable perimeter drainage at the new Site entrances should be installed if levels cannot feasibly remain level or fall into the sites hard paving areas to limit the potential for surface water run-off offsite into the public highway.

For further details, please refer to the Floor Risk Assessment 'R. Collard – Expansion of Waste Recycling Centre' (December 2020) by WSP UK Ltd.

4.7 CAR AND CYCLE PARKING (EV CHARGING)

As the proposed development is an extension of an existing site, and that site is located in an urban industrial area, the road and entrance layout is already conducive to supporting large HGV vehicles. R. Collard Ltd already have a fleet of vehicles including:

- 12 skip vehicles
- 2 refuse collection vehicles
- 3 on site roll on/off vehicles

The proposed development is to allow for more efficient recycled and recovery equipment to be installed on site, not to increase capacity, so there are no plans to increase the number of vehicles or transport traffic to the site.

As part of the development, and in line with Reading Borough Plan (TR5) Policy, the existing cycle parking facilities will be maintained and provision for 2 EV charging points will be installed in the car park at the front of the development. In addition to this, consideration will be made to electrification of fleet vehicles in the near future, and employees will be encouraged to make use of the good local public transport network surrounding the development.

4.8 SUSTAINABILITY STATEMENT – CONCLUSION

The proposed development is set to qualify on all relevant national and local policy regarding sustainability and environmental requirements.



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