

Swindon Services

784-B048803

Environmental Statement: Non-technical Summary *(updated)*



Document prepared on behalf of Moto Hospitality Ltd

~~October 2023~~ June 2024

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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 This document summarises the Environmental Statement (ES), which accompanies an outline planning application submitted on behalf of Moto Hospitality Ltd (the ‘Applicant’) originally in October 2023, as well as the changes produced to the scheme following submission and feedback received from Wiltshire Council (WC), resulting in a minor update to the ES in June 2024. The comments received are as follows:
- The Landscape Officer was concerned about the lack of sufficient visual mitigation of the Proposed Development along the southern boundary. Therefore, additional landscape screening has been sought by replacing the swale (with wetland meadow planting) with additional native trees in this location; and,
 - The Ecologist Officer was concerned about the lack of clarity on the area boundaries provided, as well as the information provided within the Ecological Impact Assessment in relation to Tree Protection Orders, Great Crested Newt, Reptiles and Bats. Therefore, additional survey work has been undertaken and an Ecological Parameter's Plan has been prepared, that feeds into the final Illustrative Masterplan which meet the Applicant, WC, consultees and general public aspirations.
- 1.1.2 To aid the reader in understanding what has changed since the September 2023 version, the updated chapters include the following text formatting:
- New information that has been added is shown in red font, italics and underlined;
 - Information removed is shown in red font and has been strikethrough;
 - New cells/rows added in tables are shown blue shading, red font, italics and underlined; and,
 - Cells/rows removed are shown in pink shading, red font, italics and strikethrough.
- 1.1.3 The Proposed Development, known as Swindon Services, is a Motorway Rest Area (MRA) that provides 241 car parking spaces; 63 Heavy Goods Vehicle (HGV) parking spaces; coach and caravan parking spaces; amenity building; fuel filling station; new roundabout access from B4005; and associated landscaping, infrastructure and ancillary works at Land at Junction 16 (J16) of the M4 Motorway, Swindon.
- 1.1.4 This document is a summary of the Environmental Impact Assessment (EIA) process in non-technical language. The main ES (Volume 1) and the supporting Appendices (Volume 2) contain detailed information on the project and each of the environmental topics considered.

1.2 THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

EIA Process and Requirements

- 1.2.1 EIA is a formal process guided by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (herein referred to as ‘EIA Regulations’) that identifies and

assesses the potential environmental effects of a project whether these are adverse or beneficial. When a potential negative effect cannot be avoided, mitigation works are proposed to lessen the effect.

- 1.2.2 The EIA results are presented in an ES report, and it forms an important part of the outline planning application decision making process.
- 1.2.3 Prior to making a decision on the planning application, WC as the local planning authority will seek advice from statutory and non-statutory consultees as part of the determination process for the submitted planning application. WC will make the full ES available for examination by members of the public at the Council's offices.

EIA Requirements for the Site

- 1.2.4 In order to determine whether a proposed development requires EIA, a 'screening exercise' is carried out under the EIA Regulations instructions, which identifies a proposed development to need an EIA when meets the criteria set out under the 'Schedule 1' or 'Schedule 2' definitions.
- 1.2.5 In this specific case, the Proposed Development is not listed under Schedule 1 thus EIA is not a mandatory requirement. However, as the Proposed Development has a footprint of 7.27 hectares (ha), exceeding the thresholds established within Schedule 2 of 0.5ha, an EIA may be required. As a result, a screening opinion was requested on 14th of June 2023 from WC and their response was obtained the 15th of June 2023 which advice that an EIA was not required.
- 1.2.6 Despite the negative response (i.e., EIA is not required), the Applicant has decided to carried out with the ES in order to produce a robust planning application and demonstrate the sustainable approach and environmental mitigation measures of the project.
- 1.2.7 To determine the environmental subjects/topics to be further assessed within the ES, an informal 'scoping' stage was undertaken through professional judgement of specialists from each area. The outcome of this scoping stage identified the following topic to be assessed:
- Traffic and Transport;
 - Noise and Vibration;
 - Air Quality;
 - Landscape and Visual;
 - Hydrology and Flood Risk; and
 - Ecology.

1.3 SITE LOCATION AND DESCRIPTION

- 1.3.1 The site is located immediately adjacent to J16 of the M4 motorway, with the B4005 (Hay Lane) running along its western and southern perimeters, and the M4 motorway forming its northern boundary. The location is situated at approximately 1 km southwest of the community of Freshbrook and 5 km from the city centre of Swindon. The location falls within the jurisdiction of WC and its approximately postcode is SN5 8UD.

- 1.3.2 The location and area of the Proposed Development is shown in Figure 1.1 below.
- 1.3.3 Beyond to the north, opposite to the M4 motorway, the area has been developed for urban purposes and encompasses a diverse range of land uses. Among the closest developments in this vicinity are car dealerships, the Holiday Inn Express hotel, and warehouses. Beyond these aforementioned developments in the northern direction lies the residential locality known as Freshbrook.
- 1.3.4 Located to the east of the site are expanses of agricultural fields, characterised by internal boundaries that are demarcated by hedgerows and trees. A mainline railway is situated 200m to the east. To the western side of the property, there are further fields, portions of woods, and a solar farm. Towards the southern direction, the landscape consists mostly of open farmland, with a Butterfly World and Farm Park located around 450m southeast of the site.
- 1.3.5 The agricultural areas are mainly in arable use and bound by a network of mature hedgerows, although some of which have been replaced by fencing. The site lies within the Swindon-Calne Rolling Clay Lowland Landscape Character Assessment (LCA).
- 1.3.6 The application proposed will comply with the following as per Circular 01/2022:
- Be available 24 hours a day throughout the year;
 - Provide free parking for a minimum of 2 hours for all vehicles permitted to use the facility;
 - Have free-to-use toilets with hand washing facilities, and at least 1 changing places toilet and 1 for people with disabilities, and no need to make a purchase during opening hours; and
 - Access to a free-of-charge telephone for emergency use, Wi-Fi and power points available for device charging.

Figure 1.1 Site Location Plan



1.4 SITE PLANNING HISTORY

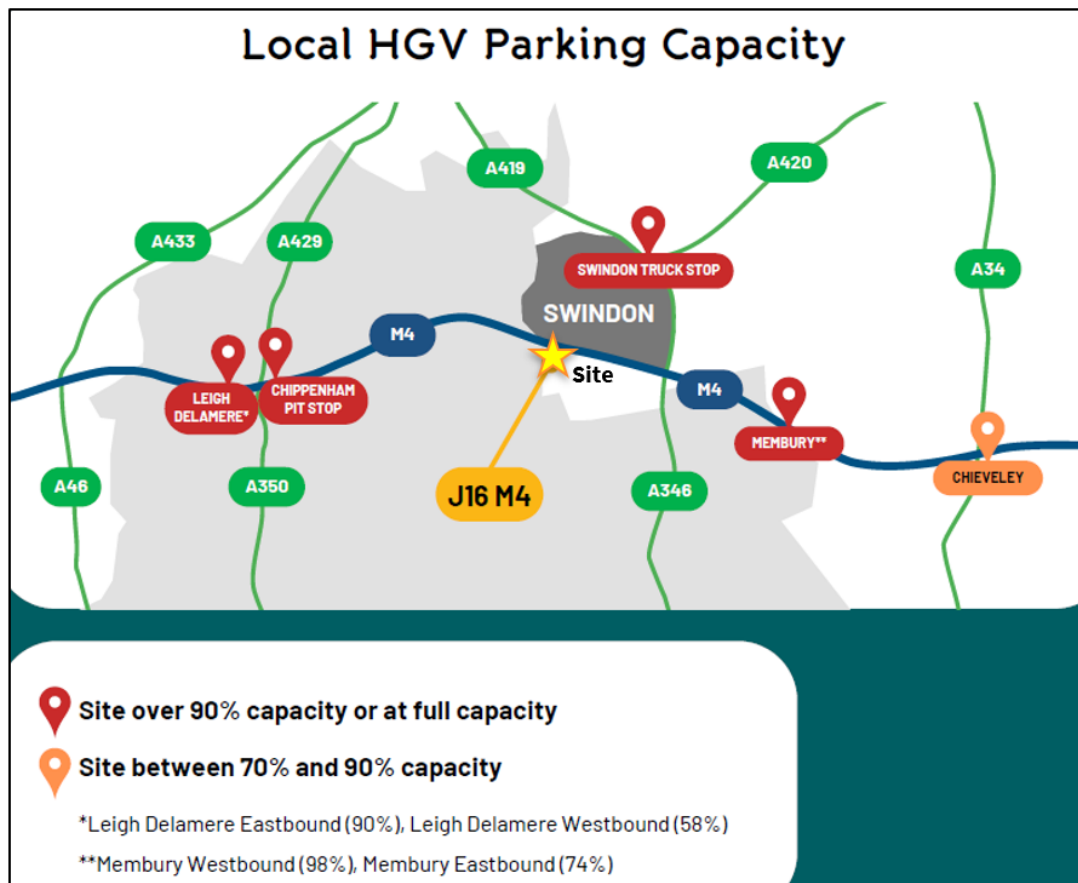
1.4.1 The proposed site does not have previous planning applications reported within the WC planning portal.

2.0 SCHEME DEVELOPMENT AND DESCRIPTION

2.1 BACKGROUND AND NEED

- 2.1.1 The Government has implemented regulations on the Drivers' Hours website to promote the well-being of drivers and ensure safer journeys. These regulations specify the maximum hours of driving for Heavy Goods Vehicles (HGVs), bus and coach drivers, and also propose that motorists of other vehicle types take a minimum break of 15 minutes after every 2 hours of driving.
- 2.1.2 However, it is important to note that the current placement of motorway services does not adequately meet the criteria and recommendations for drivers and motorists. This is mostly owing to the significant distances between existing services and the limited availability of parking spots.
- 2.1.3 The HGV parking facilities at sites such as Swindon Truck Stop and Chippenham Pit Stop have reached their maximum parking capacity, resulting in HGV drivers resorting to resting and making stops in inappropriate areas such as laybys and industrial estates (see Figure 2).
- 2.1.4 On this basis, to ensure the recommended stopping distances stated by the National Planning Policy Framework (NPPF) and the Strategic Road Network (SRN), the delivery of a sustainable development under the Policy Paper on Sustainable Development, and to improve safety in the SRN, a MRA should be provided between Junction 14 and 18 of the M4.

Figure 2.1 Locations and Capacity



2.2 ALTERNATIVES AND SITE DEVELOPMENT

- 2.2.1 The Proposed Development is strategically located in open countryside with minimal settlements in the area. It also sits to the south of Swindon, a built-up area with several services such as transport and commerce. The MRA also has direct access to J16 of the M4 which is a key part of the SRN for transportation of goods and connection between important cities such as Bristol and London. A sequential test produced has also identified no suitable sites for the MRA on junction 14 and junction 18 of the M4.
- 2.2.2 Various layouts have been contemplated to address changes in the development throughout the process of design evolution. This design has developed in order to meet a key of objectives created in response of the detailed appraisals undertaken. These objectives are below:

Figure 2.2 Project objectives



- 2.2.3 Originally investigated as a comprehensive MRA, the site subsequently evolved into that of a truck stop. Subsequently, the concept redirected its attention towards a combination of hybrid trucks and electric vehicle (EV) offerings. After thorough examination of local and regional issues, it is now being suggested as a future-proofed MRA that encompasses 50 high-powered EV charging stations and the potential to facilitate 100% EV charging capability for all vehicles.

- 2.2.4 A series of baseline environmental studies such as ecological and archaeological surveys were undertaken at the site. The results of these surveys have identified constraints and opportunities that have been used to refine the layout and characteristics of the early design stages (such as those shown in Figure 2.3 below), leading to a final Illustrative Masterplan shown in Figure 2.4 which meet the Applicant, WC, consultees and general public aspirations. A series of 4 evolving design options, up to the October 2023 scheme, is shown in Figure 2.3 below.

Figure 2.3 Some Early Design Stages



Design changes to October 2023 Scheme

- 2.2.5 The Illustrative Masterplan of the September 2023 submission is shown in Figure 2.4, the following feedback was received from WC:
- The Landscape Officer was concerned about the lack of insufficient visual mitigation of the Proposed Development along the southern boundary. Therefore, additional landscape screening has been sought by replacing the swale (with wetland meadow planting) with additional native trees in this location; and,

- The Ecologist Officer was concerned about the lack of clarity on the area boundaries provided, as well as the information provided within the Ecological Impact Assessment in relation to Tree Protection Orders, Great Crested Newt, Reptiles and Bats. Therefore, additional survey work has been undertaken and an Ecological Parameter's Plan has been prepared, that feeds into the final Illustrative Masterplan shown in Figure 2.4 which meet the Applicant, WC, consultees and general public aspirations.

Figure 2.4. Illustrative Masterplan of the October 2023 Scheme



2.3 DEVELOPMENT DESCRIPTION

Overview of the Scheme

- 2.3.1 The site is 7.3ha in size and it has an irregularly shaped with most of the area being a greenfield land in agricultural use. The internal boundaries are composed by hedgerows and scattered trees.
- 2.3.2 The MRA development at Swindon has the following description:
“Outline application (with Access to be determined) for development of a new Motorway Rest Area (MRA) to provide up to 241 car parking spaces; up to 63 Heavy Goods Vehicle (HGV) parking spaces; coach and caravan parking; amenity building; fuel filling station; new access from B4005; and associated landscaping, infrastructure and ancillary works.”
- 2.3.3 An ‘outline application’ or ‘outline scheme’ is the type of proposal with exact design details (e.g., the dimensions of the areas and buildings proposed) have not been decided yet and a range of parameters have been proposed instead.
- 2.3.4 *The extent of Proposed Development, are identified on the plans contained in Figure 3.2 – 3.5, which include:*
- *Figure 2.5. Illustrative Masterplan (Updated): The proposal is depicted on the illustrative masterplan, which has been tested to demonstrate how it is intended to develop the detailed elements of the scheme.*
 - *Figure 2.6. Land Use Parameters Plan (Updated): The parameters for the proposed development on which the ES assessments are based is shown in this figure, which also shows the proposed land use of the scheme, the access points and modes of movement.*
 - *Figure 2.7. Illustrative Layout Plan (Updated): It is for indicative purposes only and to demonstrate how the scheme will be achieved.*
 - *Figure 2.8. Ecology Parameters Plan: This plan has been prepared as part of the updates undertaken as a result of the feedback received from WC. Therefore, this plan aims to clarify the parameters proposed for the ecological areas of the Proposed Development.*
- 2.3.5 The land use is based on the provision of a number of services for motorists and drivers composed by a number of areas for development with a gross external area between 200m² to 3,000m². The building heights parameters for the units range from 3 to 12 metres. The shorter building will be the Sub-Station, whilst the larger building will be main amenity building. The parameters are illustrated on Figure 2.6.
- 2.3.6 The exact dimensions of the Proposed Development, which must be within the parameters given as an outline planning application, will be defined in a further stage.

Sustainable Design and Landscaping

Energy Strategy and BREEAM

- 2.3.7 The efficiency of building design is crucial for the reduction of CO₂ emissions and cut down building energy demand therefore a Sustainability and Energy Statement was produced by SDA

Energy Solutions. This statement explains and specifies the measures implemented to reduce energy consumption of which is focused on the main amenity building's heating, ventilation and air-conditioning loads. This building therefore is designed considering the following:

- Optimum orientation of buildings to minimise heat gain/loss in summer and winter;
- Double glazed windows with low emissivity to reduce unwanted heat;
- Provision of shading to reduce the possibility for uncomfortable temperatures inside the building during summer;
- Adequate insulation and airtightness levels with super insulated roof to reduce unwanted heat;
- Maximisation of daylight opportunities through glazing and rooflights to decrease artificial lighting energy consumption;
- Provision of a light system with LED lights with high lighting efficacy and lighting controls such as absence/presence detection and daylight linked dimming to reduce lighting energy consumption;
- Installation of photovoltaic (PV) panels on the canopy of the HGV and private vehicle fuel filling station;
- Exploration of natural ventilation opportunities through openable windows and rooflights; and
- The use of thermal mass materials to reduce embodied carbon of the building, keeping stable internal temperatures and therefore reducing energy consumption.

Finally, it is stated that the Proposed Development does not consider the use of fossil fuels and natural gas for its services.

- 2.3.8 A Building Research Establishment Environmental Assessment Methodology (BREEAM) rating of Excellent is sought. This certification ensures buildings meet sustainable construction, operation, and design standards by assessing distinct areas of evaluation.

Landscape and SuDS

- 2.3.9 The proposed landscaping has been designed to achieve a percentage over 10% of biodiversity net gain and to respond to the setting and qualities of the site, with trees, vegetation, planting, and water attenuation sites designed throughout the site, enhancing and thriving wildlife habitats in the area.
- 2.3.10 *The Proposed Development will also provide a minimum of 10m woodland bunded buffer along the edge of the B4005 will provide substantial visual mitigation and softening of views toward the Proposed Development from receptors to the south of the site.*
- 2.3.11 The main amenity building will be the central part of the scheme, which will contain a sustainable approach by incorporating a green living roof with wildflowers, containing an elaborated rainwater harvesting feature with the objective of reducing water consumption. Furthermore, the drainage strategy of the scheme utilizes Sustainable Drainage Systems (SuDS) to provide both storage and treatment of the surface.

Highway Works

- 2.3.12 The site is well located with regards to the local road network and public facilities/services due to its proximity to Swindon. The main point of access to the Proposed Development will be a new roundabout to the southeast of the site off the B4005 which has further connection with the M4 through J16.
- 2.3.13 The proposal includes a potential link to a footway outside the southern boundary of the Site, adjoining the B4005, which will allow for enhanced pedestrian connectivity from the Site and nearby public transport links. These works are deemed as improvements to the highway and will be agreed through discussions with the Applicant, Council and Highways Department.

Construction Activities and Programme

- 2.3.14 Given that the site is undeveloped, demolition is not required.
- 2.3.15 The construction works are assumed to take place between November 2025 and January 2027 (indicative), subject to timely granting of planning permission(s), and will require the following stages:
- Enabling works (earthworks and utilities);
 - Landscape and ground profiling;
 - Installation of drainage tanks and infrastructure;
 - Construction of a motorway services;
 - Installation of services and commissioning; and
 - Landscaping and internal fit out.
- 2.3.16 The selected main contractor will prepare a detailed construction and procurements programme identifying key tasks and milestones to ensure that enhancement of the project is properly resourced and sequenced in accordance with the overall project duration. Environmental impacts will be managed through a Construction Environmental Management Plan (CEMP).

Figure 2.5 Illustrative Masterplan *(Updated)*



Figure 2.6 Land Use Parameter Plan **(Updated)**

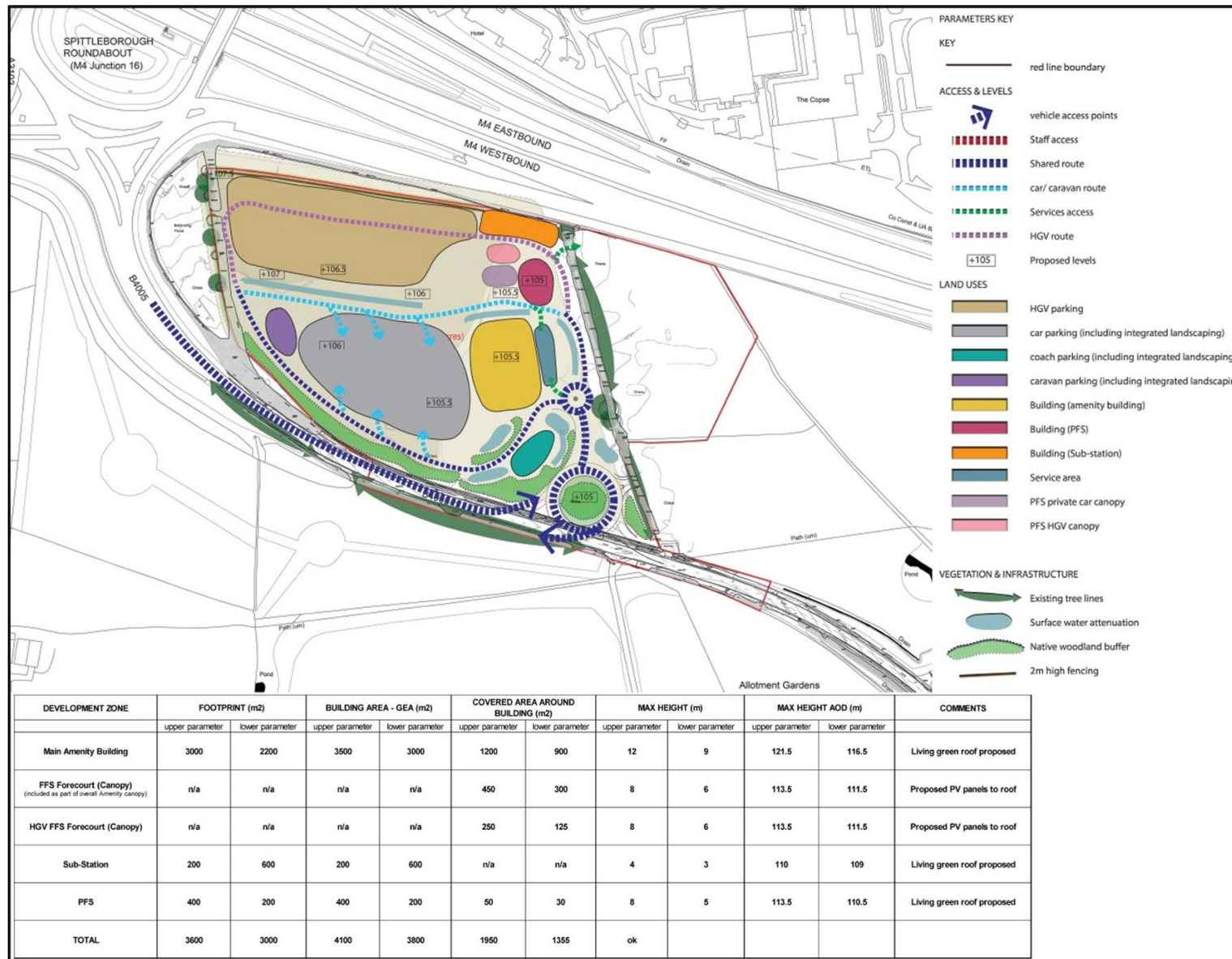


Figure 2.7 Illustrative Layout Plan (Updated)

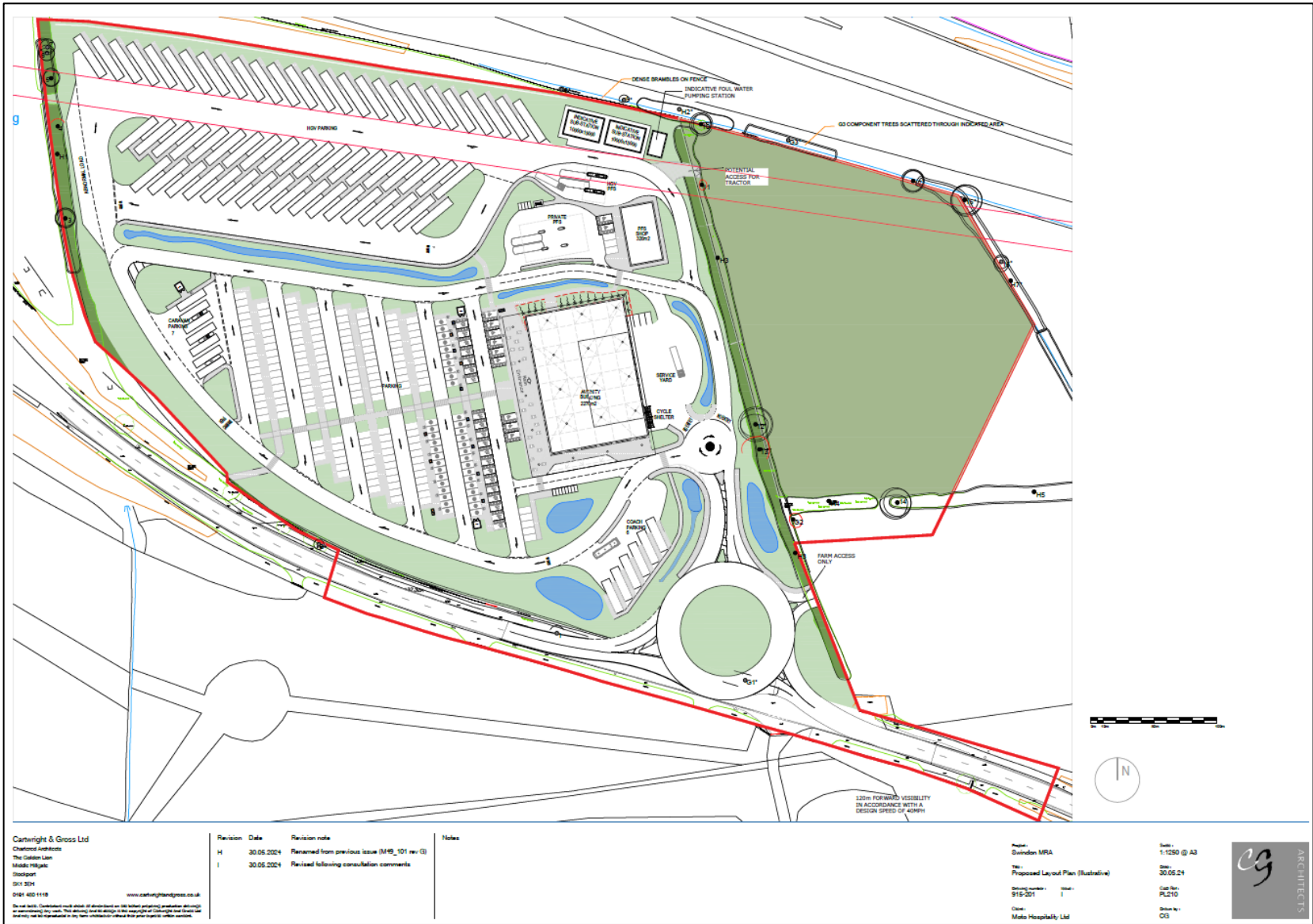
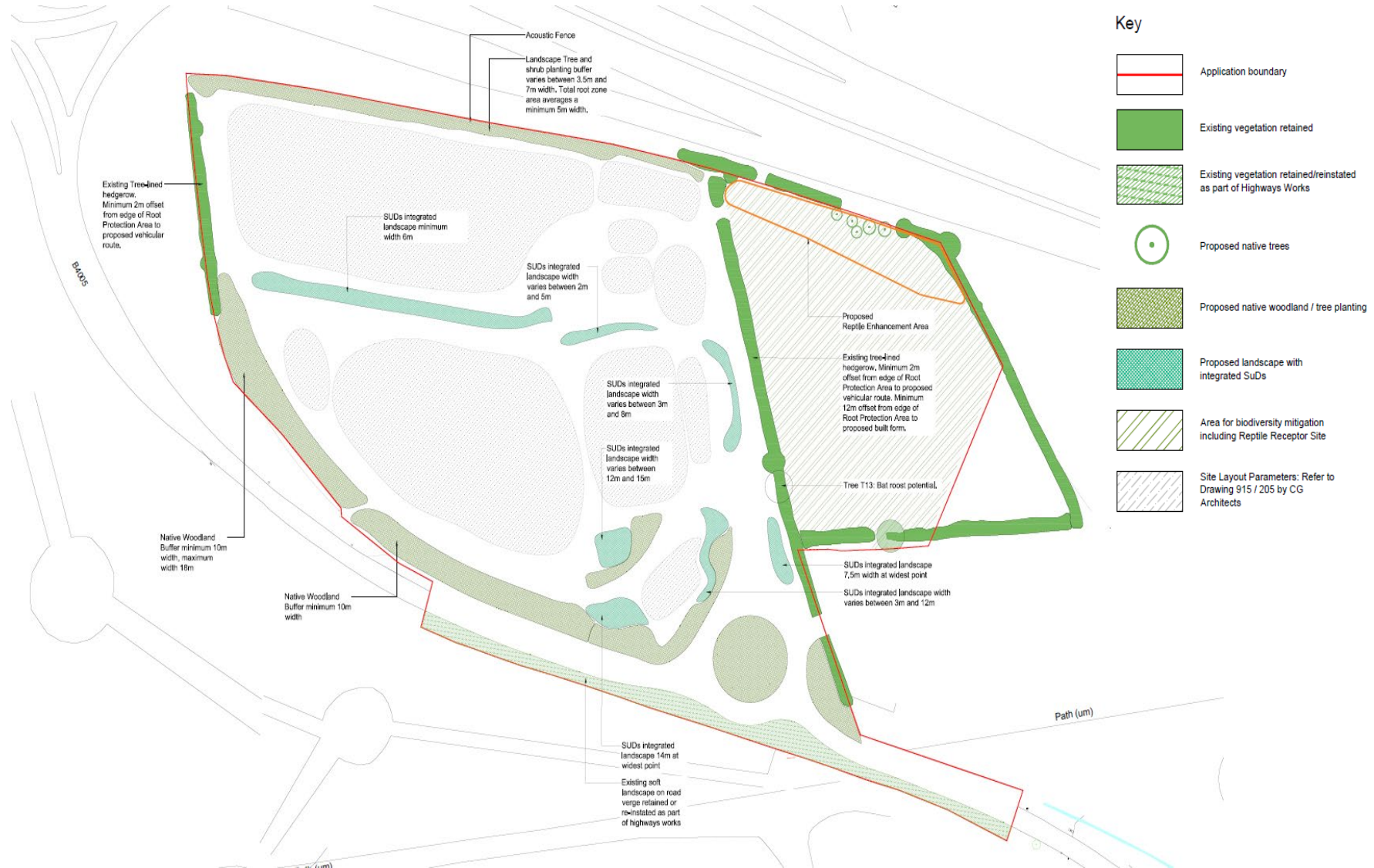


Figure 2.8. Ecology Parameters Plan



2.4 APPROACH TO CONSULTATION

- 2.4.1 Consultation began at the earliest stage of the Proposed Development and included pre-application discussions and public consultations to establish feasibility of the planning application.
- 2.4.2 Moto Hospitality Ltd and the consultant team have conducted discussions with statutory and non-statutory consultees, the local community and landowners, all having an influence over the evolution of the design and the scope of the EIA with the accumulated findings. Overall, the consultation approach included the following actions:
- Engaging with strategic leaderships;
 - Engaging with stakeholders; and
 - Consulting with the local community.
- 2.4.3 To notify strategic leaders, local ward and division members and solicit their comments on the emerging plan, letters and emails were sent out. There were two phases of distribution for such letters. Phase one was focused with engaging with the leaderships within WC, while phase two was sent to Swindon Borough Council due to the Proposed Development's proximity to SBC.
- 2.4.4 Meetings with local stakeholders were initiated through email, which led to modifications to the scheme and feedback of the proposal.
- 2.4.5 Moto Hospitality Ltd issued a Vision document in which they introduced the Proposed Development to the public. The received feedback from the local community and stakeholders contributed to the development of the scheme. Further to this, a consultation leaflet and feedback form was distributed to the local parish council and local councils.

3.0 ENVIRONMENTAL EFFECTS

3.1 TRAFFIC AND TRANSPORT

- 3.1.1 The traffic and transport chapter has been undertaken by Eddisons Ltd and assessed the impacts of the Proposed Development on the local highway network, severance, pedestrian and driver delay, pedestrian amenity, fear and accidents and safety. It also identifies the receptors which are mainly local roads and its users.
- 3.1.2 A standalone Transport Assessment (TA) and Travel Plan Framework accompanies the outline planning application and considers future traffic growth, trip generation, public transport provision and travel plan measures.

Construction Phase

- 3.1.3 The main source of transportation and traffic during the construction phase is related with the delivery of materials and products that will be transported by HGVs, as well as the movement of workers to the site. Other types of sources are summarised as follows:
- Daily site staff and labour;
 - Movements arising from the groundworks;
 - Aggregate and concrete deliveries for early activities;
 - Deliveries of building components and services equipment;
 - Periodic inspections, visitors, and inspectors; and
 - Disposal of waste material.
- 3.1.4 However, the timing and generation of construction traffic is not yet known and will depend upon the contractors selected for the construction of the scheme. In an effort to predict traffic and transport movements, base levels of traffic were used, and a worst-case scenario was evaluated.
- 3.1.5 It was also considered that the access will be located on the B4005, reducing the impact on traffic on the M4 and avoiding road closures. Traffic during construction will be managed through the following measures:
- Working hours and delivery times to coincide with off peak traffic hours to minimise disruption;
 - Covering loads coming to and from site;
 - Use of approved routes to minimise disturbance; and
 - Appropriate vehicle cleaning facilities on site.
- 3.1.6 In conclusion, the scheme will result in minimal effects in traffic flow on most of the road network, excepting of a short section of the B4005 where the effects are potentially significant.

Operational Phase

- 3.1.7 A MRA is not considered to be a type of Proposed Development that generates significant traffic flows during the operational phase but an attractor of a proportion of existing passing traffic. However, given to the access proposed for the scheme, existing motorists and drivers will be deviated from the M4 to the B4005, increasing traffic movements on the latter road.
- 3.1.8 In an attempt to avoid the adverse effects mitigation procedures includes will include a new roundabout on the south-eastern boundary of the site off the B4005. This roundabout will adhere to the current design guidance and enforce the speed limits of vehicles.
- 3.1.9 Furthermore, a footway outside the southern boundary of the Site will be considered to allow for enhanced pedestrian connectivity from the Site and nearby public transport links. These works will be agreed through discussions with the Applicant, WC and WC Highways Department as improvements to the highway.
- 3.1.10 With the above measure implemented, the assessment of the operational phase of the Proposed Development has determined there would be no significant impacts on the receptors identified with the exception of the B4005 which traffic volume will increase due to the deviation of motorists to the site. It is also considered there will be benefits from the provision of new opportunities for drivers to stop and rest, increasing security and safety in the SRN.

3.2 NOISE AND VIBRATION

- 3.2.1 The likely environmental effects on noise and vibration as a result of the Proposed Development has been undertaken by Cass Allen Associates Ltd. Noise surveys and measurements were taken from the site and the surrounding area to ascertain the background noise levels. It describes the baseline of the existing site and wider study area and identifies the main receptors likely to be affected which are:

- Hay Lane Travellers' Site (Residential);
- Spittleborough Farm Residences; and
- Farm House (name unknown).

Construction Phase

- 3.2.2 The likely environmental effect source during the construction effects is considered to be traffic noise mainly caused by HGVs.
- 3.2.3 To ensure that best practice is adopted throughout the development works on site, and to reduce noise levels to acceptable levels, the principal contractor appointed by the Applicant will refer to the guidance provided within BS5228:2009+A1:2014.
- 3.2.4 As well as noise effects, there is the possibility of vibrations effects occurring during the construction works. Given that BS5228 shows typical distances at which vibration levels are just perceptible for construction activities, the Proposed Development is identified to be in a sufficiently distant from sensitive receptors and therefore it is anticipated that vibration impact associated with the construction phase will be negligible.

- 3.2.5 Site works should only take place during agreed working hours to minimise noise impact. Where it is necessary for construction to take place outside of working hours it must be agreed with the local authority and effectively communicated to residents.
- 3.2.6 Due to the early stage of the Proposed Development and the limited information in terms of construction equipment, locations and timetabling of construction activities, it is not possible to accurately predict construction noise levels effects. For this reason, the noise and vibration will be controlled through the CEMP which will ensure that all construction work is carried out in accordance with good practice, resulting in negligible effects.

Operational Phase

- 3.2.7 During the operational phase, it considered the noise and vibration effects of three main sources:
- Off-site traffic during the operational phase;
 - On-site traffic and movements during the operational phase; and
 - Mechanical plant noise during the operational phase.
- 3.2.8 The changes in road traffic noise levels calculated in **Chapter 6: Noise and Vibration** of the ES have demonstrated that the greatest change in noise would be 1.3dBA (decibels) in the B4005 (W of Site Access) which is considered negligible in EIA terms.
- 3.2.9 Also, there is limited information in terms of mechanical plant location and, as a result, it is not possible to carry out a detailed assessment predicting plant noise levels. For this reason and based on the results obtained during the survey, plant noise limits are proposed both during daytime and night-time in order to achieve negligible impact at the nearest sensitive receptors.
- 3.2.10 The distance between the Proposed Development, other sensitive receptors and proposals is considered far enough to mitigate any significant noise and vibration effect caused by the scheme. Therefore, there will be limited residual effects during operation on noise within the site area as result of the Proposed Development layout and mitigation measures.

3.3 AIR QUALITY

- 3.3.1 The likely environmental effects on air quality as a result of the Proposed Development has been undertaken by Cass Allen Associates Ltd. It considered the effects of pollutant sources, dust and particulate matter arising during the construction phase and exhaust emissions from vehicles travelling to and from the site during the construction and operational phases.
- 3.3.2 A desktop study was undertaken in order to understand the current conditions of air quality on the area. The Swindon Borough Council data has been used due to the limited WC monitoring in the vicinity.

Construction Phase

- 3.3.3 The main potential impact due to air quality is considered to be dust and particular matters emissions provided from construction activities and HGV vehicles and machinery that could affect both human health and ecology receptors within the area.
- 3.3.4 To reduce any effects, the following mitigation measures will be followed:

- Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g., suitable local exhaust ventilation systems;
- Ensure an adequate water supply is available on the site for effective dust/PM suppression/mitigation, using non-potable water where possible and appropriate;
- Use enclosed chutes/conveyors and covered skips; and
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.

3.3.5 With these implemented, the residual environmental effects are considered to be negligible.

Operational Phase

3.3.6 There will be limited effects during operation on the air quality within the site area and surrounding roads as result of the Proposed Development and, where the air quality effect was greater, no sensitive receptors were identified.

3.3.7 While no mitigation is required, best practice measures are included within the site, which will seek to promote sustainable transport for workers by providing a shared cycle and pedestrian access that will them to be connected with the existing crossing infrastructure at J16.

3.3.8 Furthermore, it is expected to see longer term beneficial effects due to the sustainable approach of the Proposed Development, in particular implementation of the 50 EV charging stations and the potential to facilitate 100% EV charging capability for all vehicles.

3.4 LANDSCAPE AND VISUAL IMPACT

3.4.1 The landscape and visual assessment has been carried out by IDP Group. It considers the effects of the Proposed Development on landscape and visual impacts. It describes the baseline of the existing site and wider study area and identifies the main landscape and visual receptors likely to be affected by the Proposed Development.

3.4.2 The site lies within NCA 108 – Upper Thames Clay Vale and the Landscape Character Area is identified as 11A: Calne Rolling Clay Lowland. The assessment identifies the site to be in good condition and moderate on the strength of character due to the influence of prominent urban edges and transport corridors including noise and light pollution.

3.4.3 The site was assessed from a total of 13 viewpoints in order to understand the visual impact that the Proposed Development will have on the people that visit and constantly use the local landscape.

Construction Phase

3.4.4 Construction activities would have a direct effect on the landscape features of the site such as the landscape character and public access through the removal of trees, excavation works, temporary site infrastructure including porta-cabins and haulage routes and large-scale machinery. Measures to limit the construction effects on landscape include retention of much of

the existing landscape infrastructure, limiting lighting spill, temporary fencing around tree protection zones and the site boundary.

3.4.5 Despite these best practice measures, there would remain some adverse effects during the construction phase. Adverse effects will result from:

- Site area change from the existing landscape typology of agricultural grassland to hoarded site with construction compound, vehicular routes and plant machinery Ground preparation work, the manipulation of landform and materials storage;
- Physical Landscape Resource and Habitat; and
- Representative views for road users from viewpoints 1, 2 and 4.

Operational Phase

3.4.6 The design and architecture of the buildings will continue to be developed sensitively to minimize the visual effects during the operational phase, and it will contain a green roof in order to soften the visual impact, reduce glare and create new habitats.

3.4.7 *The south boundary of the Proposed Development will be also enhanced with supplementary tree and scrub planting, strengthening the landscape edge and to provide visual mitigation. This buffer will be a minimum of 10m, widening to 20m at its eastern end and will be substantially comprised of Native woodland tree planting, also incorporating pockets of Sustainable Drainage planting and some woodland edge shrub planting.*

3.4.8 With these measures implemented, a minor beneficial effect will arise from the change of landscape typology of agricultural grassland to the Proposed Development. A sensitive lighting strategy along with an enhancement of habitats and therefore biodiversity will be also undertaken, resulting in an intermediate beneficial effect. The representative views for road users from viewpoints 1, 2 and 4 will remain during operation phase as a minor adverse effect.

3.5 HYDROLOGY AND FLOOD RISK

3.5.1 A Flood Risk and Drainage Assessment has been conducted to consider the likely effects of the Proposed Development in terms of flood risk to existing and new development, risk of pollution to controlled (sensitive) waters and foul and surface water drainage capacity. This assessment deemed the site to be at minimal risk of flooding and considered the following receptors:

- Swindon sewage treatment works (STW);
- Local Residents;
- Construction Plant & Equipment;
- Surface Water Bodies;
- Downstream Developments;
- Flood Zones;
- Local Sewers;
- Groundwater Resources;

- Public Drainage Infrastructure; and
- Unnamed Watercourses.

3.5.2 During this assessment the aquifer designation were classified as unproductive, and no large watercourses were identified within the site boundary. Nonetheless several unnamed watercourses and drains were found around the site boundary.

Construction Phase

3.5.3 Effects during the construction phase are changes to natural drainage regime, pollution risk and flood risk impacts. Surface water runoff may become polluted with suspended solids and contaminants. However, mitigation measures will be secure through a CEMP and water management and quality drainage design, reducing risks of these adverse impacts in the area. In case of water pollution, this polluted water will be discharged into the public network in an appropriate location within the area. Adequate surface drainage and SuDS will be developed to cope with surface runoff created during the construction phase. Incorporation of appropriate overland flow routes (via roadways, green corridor) to move exceedance flows towards an existing drainage ditch will be implemented.

3.5.4 Furthermore, the Proposed Development will be located within Flood Zone 1, avoiding development within areas prone to flooding.

Operational Phase

3.5.5 The possible impacts of the Proposed Development during the operational phase may include increases in impermeable area, increases in contamination sources and foul discharge from the site occupants.

3.5.6 The drainage strategy utilizes SuDS to provide both storage and treatment of the surface water prior to discharge to the downstream watercourse. Furthermore, a site-specific Flood Risk Assessment has been conducted in conjunction with a surface water drainage strategy to reduce the amount of surface water run-off from this site.

3.5.7 With the above design measures implemented, the assessment of the operational phase of the Proposed Development has determined that the impacts listed above could be appropriately mitigated, resulting in minor effect on runoff quantity and quality.

3.6 ECOLOGY

3.6.1 The habitats and species within the site and its immediate vicinity have been identified and assessed through a desktop study, series of site visits and surveys. The surveys undertaken were focused on bats, great crested newts, wintering and breeding birds and general habitat of the site. *As part of the feedback received from WC, an additional survey was undertaken focused on reptiles.*

3.6.2 A Biodiversity Impact Assessment (BIA) was carried out of the proposals by Ecology by Design and other reports were considered such as an arboriculture report and an exterior lighting survey, design and calculation report produced by SKR Lighting Design.

- 3.6.3 During the desktop study one nationally designated site was found within 5km of the Proposed Development and nine locally designated sites were located within 1km of the Proposed Development. No international designated sites were located within 7km of the site.

Construction Phase

- 3.6.4 During the construction phase, the following effects were identified:

- Habitat and biodiversity loss;
- Potential killing or injury of a low population of slow-worms and grass snake during site clearance or construction;
- Potential destruction of active birds' nests during site clearance; and,
- Potential disturbance of bats and birds using the eastern section of the site through light pollution.

- 3.6.5 For this reason, ~~i~~ impact avoidance and biodiversity enhancement have been sought in the first instance by design by retaining most of the ecologically important hedgerows and trees and enhancing key habitat areas on the site, with new and additional boundary habitats. A root protection zone will be also implemented to further protect the hedgerows.
- 3.6.6 A biodiversity enhancement area will be provided to the immediate east of the site to compensate for loss of biodiversity within the site and lead to an enhancement overall, achieving a minimum of 10% biodiversity net gain.
- 3.6.7 Specific considerations in respect of fauna include following the recommendations of the Ecology Assessment in regard to the removal of vegetation to protect nesting birds. Also, a District License for Great Crested Newts will be secured to ensure the favorable conservation status of the species is maintained Light pollution during construction will be kept to the minimum to safeguard bats.
- 3.6.8 Furthermore, further measures will be secured via a CEMP. These measures will include minimising habitat removal and the protection of retained habitats and construction measures to prevent pollution and light spillage on sensitive areas.
- 3.6.9 ~~f~~ Following the mitigation measures, some residual effects are identified in relation to birds, reptiles and biodiversity net gain. The new biodiversity enhancement area, ~~along with the~~ management of sensitive habitat for reptiles and the incorporation of features for foraging and nesting bird species will improve the overall quality of the habitat and will result in minor positive effects.
- 3.6.10 Following implementation of mitigation measures and landscape management options, effects on all other receptors are considered to be non-significant.

Operational Phase

- 3.6.11 At the operational phase, the following effects were identified as intermediate significant effects:
- An increase in the availability and quality of habitats on site; and,
 - Reduction in foraging or nesting habitat for birds.

- 3.6.12 ~~f~~ Following the mitigation measures, some residual effects are identified in relation to birds, reptiles and biodiversity net gain. The new biodiversity enhancement area, ~~along with the management of sensitive habitat for reptiles and~~ the incorporation of features for foraging and nesting bird species will improve the overall quality of the habitat and will result in minor positive effects.
- 3.6.13 Following implementation of mitigation measures and landscape management options, effects on all other receptors are considered to be non-significant.

4.0 SUMMARY

4.1 CONCLUSION

- 4.1.1 The ES has considered how the environment and the local community would be affected by the Proposed Development at J16 on the M4 motorway near Swindon.
- 4.1.2 Various potential environmental impacts are expected to arise from the proposal, both advantageous and disadvantageous. Mitigation and compensation measures have therefore been established to effectively minimise, offset or mitigate any possible adverse impacts.
- 4.1.3 Once these measures have been implemented most of the negative effects will be mitigated and therefore are considered negligible. Some of these significant negative effects are:
- Landscape construction phase: Changes of the current landscape typology of agricultural grassland to site full of construction materials and machinery.
 - Landscape construction phase: The existing resources and habitats of the site will be harmed due to construction works if these are not well protected.
 - Ecology construction phase: Habitat and biodiversity loss due to construction works.
- 4.1.4 On the other hand, beneficial effects are expected from the Proposed Development during operation, which are:
- Ecology operational phase: New Landscape and faunal provision by the creation of areas of wildflower grassland, hedgerows, swales and ponds. The Proposed Development will exceed the 10% biodiversity net gain goal. *It will also have a minor positive impact on reptiles by improving their habitat.*
 - Landscape operational phase: By providing new habitats and achieving a percentage over 10% of biodiversity net gain, the landscape character will be benefited, creating visual amenity as well.
 - Traffic and Transport operational phase: It will promote security and safety within the SRN by providing new rest areas for drivers and reducing distances between the existing MRAs. This will tackle the current shortage of HGVs spaces. It will also allow HGVs, buses and coach drivers to comply with the regime established by the government without making stops in inappropriate areas such as laybys and industrial estates.

4.2 WHAT HAPPENS NEXT

- 4.2.1 The full ES and supporting documents for Swindon Services will be made available by WC for examination by members of the public at the Council's offices. Members of the general public are also welcome to comment on the outline application during the formal consultation period as prescribed by WC for an application of this type. Any responses will be reviewed by project team to consider and address where necessary and will be taken into account by WC in reaching its decision.

- 4.2.2 Printed copies of the Non-technical Summary and ES (including figures and appendices) may be obtained from Tetra Tech, 1 Angel Court, London, EC2R 7HJ.
- 4.2.3 The Non-technical Summary is available for £75, and a limited number of hard copies of the Environmental Statement are available for £500* per copy (plus VAT and p&p). Alternatively, these documents are available as adobe acrobat files on CD from the same address at £75 (plus VAT and p&p) per copy.

Copies of the ES may also be viewed on WBC's online services:

<https://development.wiltshire.gov.uk/pr/s/>