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Project No: 312614

Design & Access Statement

Prepared for:

centrica
Business Solutions

Proposed Solar Arrays, Carpenters Factory Glossop

Dinting Lodge Industrial Estate
Glossop, U.K.
SK13 6LE

Contents Amendment Record

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Acknowledgement

This report has been prepared for the sole and exclusive use of Centrica Business Solutions (Centrica) in accordance with the scope of work presented in Mabbett & Associates Ltd (Mabbett) Letter Agreement (312543/ASL/SB Rev 3.0), dated 7th March 2023. This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete or subject to change, Mabbett may wish to revise the report accordingly.

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Section 1.0: Introduction

1.1 Introduction

Mabbett and Associates Ltd (herein referred to as Mabbett) have prepared this Design & Access Statement (DAS) on behalf of Centrica Business Solutions (herein referred to as "the Applicant") to accompany a full planning application to High Peak Borough Council (HPBC) for the construction and operation of a proposed circa 0.999 MW solar farm development with associated infrastructure on land at Carpenter Ltd, Dinting Lodge Industrial Estate, Glossop, SK13 6LE (hereinafter referred to as the "Proposed Development").

The description of the Proposed Development is as follows:

"Proposed solar array, supporting energy infrastructure and associated site works incorporating, temporary access, landscape enhancement and security fencing."

1.2 Scope of Report

This DAS has been prepared in accordance with the following legislation, policy and guidance:

- Part 9(3) the Town and Country Planning (Development Management Procedure) (England) Order 2015[1];
- National Planning Practice Guidance (NPPG): Design: process and tools[2];
- NPPG: Making an application[3];
- CABE, Design & Access Statements: how to write read and use them[4];
- High Peak Borough Council Adopted Local Plan 2016[5]; and
- High Peak Design Guide Supplementary Planning Document[6].

The aim of this DAS is to:

- Set out the narrative for the design of the Proposed Development.
- Identify the design principles and concepts that have been applied to the Proposed Development.
- Set out the key steps taken to appraise the context of the Proposed Development and the subsequent design.
- Identify how the Proposed Development is considered to be a suitable response to the Application Site and its setting, taking account of baseline information.
- Identify access for end users and how this corresponds with policies contained within the HPBC Adopted Local Plan.

The remainder of this DAS is structured as follows:

- Section 2: Application Site Context;
- Section 3: Environmental Considerations;
- Section 4: Design Solution;
- Section 5: Access;
- Section 6: Conclusion; and
- Section 7: References.

This DAS should be read in conjunction with the following documents prepared to accompany the planning application:

[1] The Town and Country Planning (Development Management Procedure) (England) Order 2015. Available online: https://www.legislation.gov.uk/uksi/2015/595/article/9/made
[2] Department for Levelling Up, Housing and Communities and the Ministry of Housing, Communities and Local Government (2019) planning Practice Guidance: Design: process and tools. Available online: Design: process and tools - GOV.UK (www.gov.uk)
[3] Department for Levelling Up, Housing and Communities and the Ministry of Housing, Communities and Local Government (2021) Planning Practice Guidance@ Making an application. Available online: Making an application - GOV.UK (www.gov.uk)
[4] CABE (2006) Design and Access Statements, how to write, read and use them. Available online: Design and access statements: how to write, read and use them (designcouncil.org.uk)
[5] HPBC (2016) Adopted Local plan 2016. Available online: The Adopted Local Plan 2016 - High Peak Borough Council
[6] HPBC (2018) High Peak Design Guide. Available online: High Peak Design guide 18 (adobe.com)

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- Planning Statement;
- Landscape & Visual Appraisal;
- Preliminary Ecological Appraisal;
- Biodiversity Net Gain Report;
- Phase 1 Contamination Risk Assessment Report;
- Coal Mining Risk Assessment (contained as an Appendix in the Phase I Report);
- Geotechnical Desk Study Report;
- Geotechnical Interpretive Report;
- Exploratory Phase II Site Investigation Report;
- Flood Risk & Drainage Assessment;
- Noise Assessment;
- Construction Environmental Management Plan;
- Construction Traffic Management Plan;
- Historic Environment Assessment; and
- Tree Survey Report.

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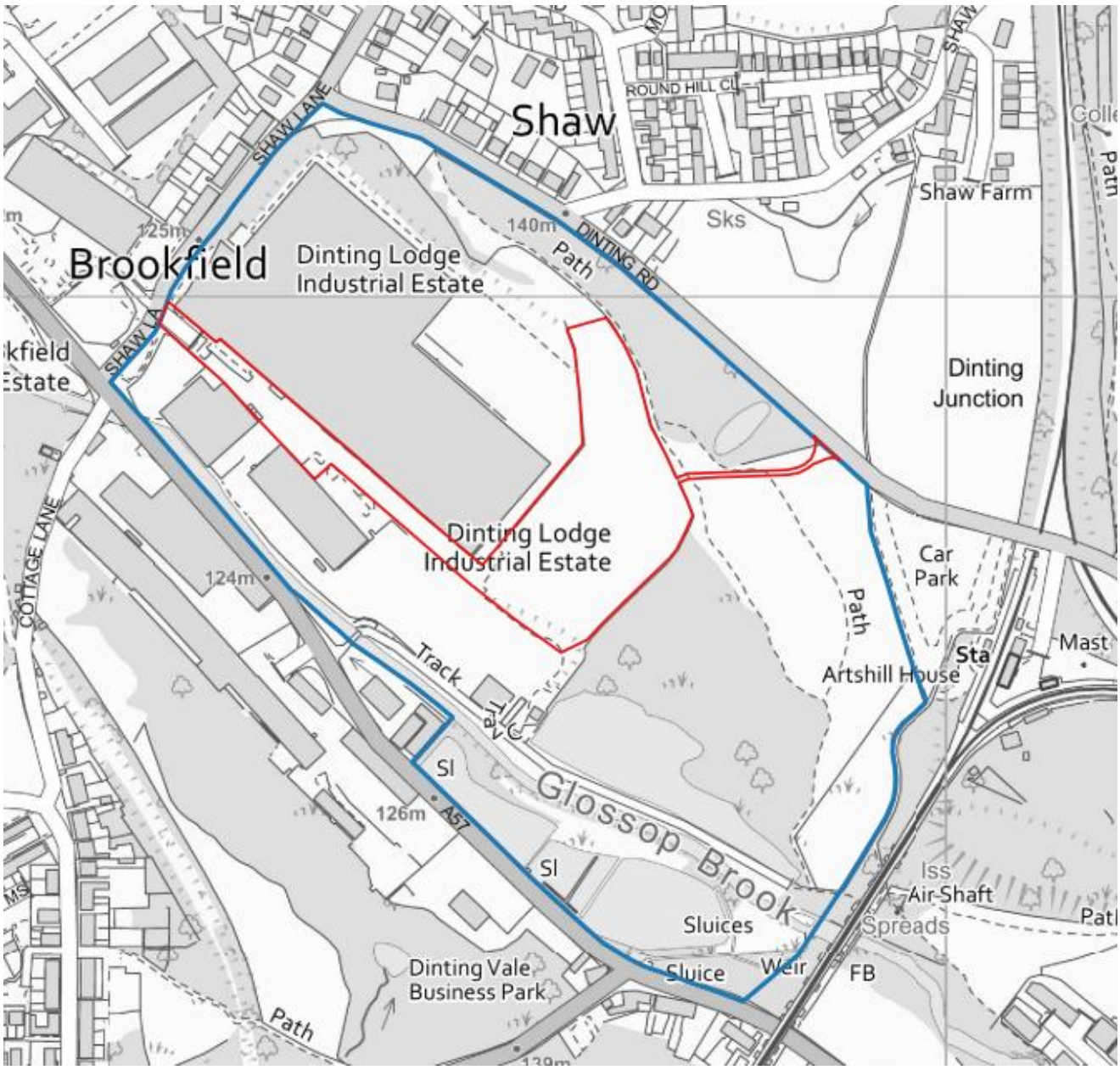
Section 2.0: Application Site Context

2.1 Introduction

For the purposes of this DAS, the term 'Application Site' refers to the red line as shown on Image 2.1: Location Plan below.

Image 2.1: Location Plan



2.2 Application Site Description

The Application Site lies to the southeast of the Carpenter Ltd. facility. The Application Site currently comprises rough grassland with areas of woodland both to the north and south of the area identified for the construction of the solar arrays.

The Application Site covers an area of approximately 2.35-hectares (Ha) of sloping, rough grassland. The northern boundary of the Application Site is open, with the other boundaries defined by fencing. There are scattered incidences of scrub vegetation on site; although, interior tree cover is absent. There is no evidence of the Application Site being managed or used for grazing.

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The Application Site is bordered on its eastern extent by woodland, whilst there are a number of ponds in vicinity. The vegetation found along field boundaries is further strengthened by the presence of surrounding riparian vegetation, woodlands, shelterbelts, structure planting, and planted field boundaries.

The existing industrial built form in the Dinting Lodge and Brookfield Industrial Estates coupled with woodland tree cover and surrounding local settlements and residences generally limits visibility of the Application Site. As a result, open views into the Application Site are largely limited to the immediate vicinity, primarily adjacent local routes.

From further afield, the Application Site is often difficult to distinguish from its surroundings; although, its identification is aided by the presence of existing built form and the Carpenter Ltd Facility.

In broad terms, the Application Site can be considered as relatively enclosed with industrial built form, and woodland cover often visually filtering exterior and interior views.

Image 2.2: Photograph of Application Site

2.3 Surrounding Area

The Application Site lies to the southeast of the Carpenter Ltd facility, towards the east of the Dinting Lodge Industrial Estate. The immediate locality is industrial to the west, with residential areas located approximately 150m to the north of the Application Site. Towards the east and south, the character of the area is predominantly woodland with some agricultural fields. The A57 is located directly to the west of the Application Site and Dinting Road is located to the east.

2.4 Accessibility

Throughout the construction phase, a temporary access road would be constructed from Dinting Road to the east, where an existing junction is present. This temporary road would lead to a temporary construction

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compound (considered as permitted development and not included within the planning application) and the solar array area.

The Carpenter Ltd Facility is accessible from Shaw Lane. Permanent access to the Proposed Development for ongoing operations and maintenance would be gained via the existing car park at the Carpenter Ltd. facility that will lead directly to the proposed solar arrays.

2.5 Planning History of Application Site

The Application Site lies on land southeast of the Carpenter Ltd. facility. There are several planning applications associated with the operations onsite at this facility. Those which are associated with the Application Site are set out within Table 2.1 below.

Table 2.1: Planning History of Application Site

Reference Number	Description of Development	Year Determined	Decision
HPK/2020/0073	Demolition of existing building, partial dismantling of second building, construction of new building elevation, realignment of existing kerbs, formation of new access road and on-site staff car parking facilities, bunded off-load area and extension of existing trailer park hardstanding area.	2020	Approved
HPK/2013/0568	Proposed alteration & extension of existing workshop office facilities including the enclosure of electrical sub-station, re-cladding, erection of new canopy & other external works.	2013	Approved
HPK/2012/0472	Retention of a 2 metre Pallisade Fence along the kerb of the site towards the existing entrance barrier.	2013	Approved
HPK/2009/0496	Extension to the NE corner of the main industrial building to provide an additional 12160 sq metres of floorspace, associated engineering works, tree removal and landscaping works.	2010	Approved
HPK/2006/0630	Hazardous substance storage.	2006	Approved

2.6 Site Selection

The Application Site has been selected for the following reasons:

- The Application Site and lies adjacent to the Carpenter Ltd. facility who would utilise the energy generated by the Proposed Development, reducing their reliance on fossil fuels and contributing towards HPBC carbon neutrality. Any excess electricity would be exported to the local electricity distribution network;
- Sufficient distance from potentially sensitive residential receptors;
- Sufficient distance from potentially sensitive environmental receptors;
- Located within an area of rough grassland of Agricultural Land Classification Grade 4, therefore not suitable for agricultural use;
- The Application Site is largely screened by woodland to the north and industrial features to the north and west; and
- The Proposed Development lies within close proximity of the local highway network, with the A57 sitting adjacent to the west and Dinting Road running along the eastern boundary.

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2.7 Application Site Context

The NPPG: Making an application, states that a "*development's context refers to the particular characteristics of the Application Site and its wider setting. These will be specific to the circumstances of an individual application and a Design and Access Statement should be tailored accordingly."*

At present, the surrounding landscape is primarily characterised by the combination of gently undulating farmland interspersed by river valleys on the fringes of the Pennine Hills. Pastoral and arable farming is characteristic as is the presence of moorland hills, mature estate and farm woodlands, forestry and woodland blocks, and roadside treelines and hedgerows. Woodland and forestry blocks are generally geometric in form, and follow field patterns and ridgelines, which presents a slight visual contrast with the riparian woodlands that follow the courses of rivers and tributary watercourses. Field ponds are also found throughout the area.

Settlement is generally concentrated along river valleys. The settlements are generally well served by a variety of transport routes, with individual estate properties largely sited across agricultural areas. There are also scattered rural communities and individual farm properties in upland areas.

The local landscape is further influenced by daily industrial, agricultural, woodland, and quarrying activities, and regular train services which create visual movement in the landscape.

The western extents of the town of Glossop lie approximately 500m east of the application site. The town provides for many formal recreational activities, with Public rights of Way (PRoWs) and cycling routes also providing informal recreational opportunities between the town, countryside, and surrounding hills.

Overall, land within the surrounding area is considered to be largely utilised for agricultural, and woodland purposes as well as everyday activities associated with local residents. The combination of residential, recreational, and industrial land uses with agricultural and woodland management activities plays an important role in defining the surrounding landscape context.

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Section 3.0: Environmental Considerations

3.1 Introduction

A number of environmental assessments have been undertaken for the Proposed Development. These assessments have been undertaken to identify the baseline conditions onsite, which in turn has influenced the design process. This section of the DAS identifies environmental or technical considerations within and close to the Application Site, and how they relate to the design process.

3.2 Landscape & Visual

3.2.1 Landscape Character

The landscape assessment contained within the accompanying Landscape and Visual Appraisal considers the effect of the Proposed Development on the Landscape Character Types (LCTs) covering the Application Site and the surrounding area.

The landscape character typologies and boundaries used to form the basis of character assessment in the LVA consider the key characteristics summarised in the Landscape Character of Derbyshire[7] and associative online LCT map and description dataset[8].

According to the Landscape Character Assessment (LCA), the Application Site lies in the Settled Valley Pastures LCT. Other LCTs located within approximately 5km of the Application Site include Riverside Meadows, Enclosed Moorland, Moorland Fringe, and the Urban area of Glossop.

3.2.2 Landscape Designations

A landscape designation is an area of landscape identified as being of importance at international, national, or local level. Landscapes are designated in relation to their special qualities or features which warrant special consideration through the planning system.

According to the High Peak Local Plan[9],there are no statutory or non-statutory landscape designations covering the Application Site. The Peak District National Park lies over 2km from the Proposed Development (shown in grey). With regards to Historic England's Inventory of Registered Parks and Gardens[10], the closest to the Application Site is Howard Park, which lies over 1km east.

The Werneth Low Country Park also lies within a 5km distance of the Application Site.

3.2.3 Visual Receptors

The LVIA considers a number of visual receptors, including:

- **Residential properties, including individual residencies and settlements**: The largest settlement in relation to the Proposed Development is considered to be Glossop. The town also comprises the distinct settlements of Hadfield, Tintwistle, Simmondley, Charlesworth and Gamesley.
- **Transport routes**: There are several A-class, B-class, and local roads (including C-class and unclassified roads) within the 5km study area, including the M67, the A57, and the A626.
- **Recreational routes**: Including the National Cycle network Route 62, the Pennine Bridleway, Crown Edge Way and the local Public Right of Way (PRoW) network, including Glossop FP 62, Glossop FP 65, Glossop FP 189, and Glossop FP 201.

[7] Derbyshire County Council, 2003. Landscape Character of Derbyshire
[8] Derbyshire County Council, 2023. Derbyshire Mapping Portal. Available at: https://www.derbyshire.gov.uk/council/partnerships/derbyshire-mapping-portal/derbyshire-mapping-portal.aspx. Accessed May 2023

[9] High Peak Borough Council, 2016. High Peak Local Plan
[10] Historic England, 2023. Search the List: Map Search. Available at: https://historicengland.org.uk/listing/the-list/map-search?clearresults=true. Accessed May 2023

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3.3 Ecology

An Ecological Assessment has been undertaken for the Proposed Development, which has included the following:

- A desk study, to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence;
- An Preliminary Ecological Appraisal of the site using the UK Habitat Classification Methodology (UKHab Ltd, 2023) to map and record habitat types and dominant vegetation, including any invasive species, and an assessment for evidence of protected fauna or habitats capable of supporting such species;
- An assessment of the potential ecological features present, any constraints they pose to development of the site and any recommendations for further surveys, avoidance, mitigation, compensation or enhancement measures that are needed (as appropriate).
- Great crested newt eDNA sampling to determine their presence/ absence at ponds within close proximity to the Application Site.
- Otter survey.

The desk study identified five designated sites within 5 km of the site boundary, including: South Pennine Moors Special Area of Conservation (SAC) (3.2 km east), Peak District Moors Special Protection Area (SPA) (3.2 km north-east), Dark Peak Site of Special Scientific Interest (SSSI) (3.2 km east), Ludworth Intake SSSI (4 km south-west) and Compstall Nature Reserve SSSI (4.6 km south-west). In addition, 10 Local Wildlife Sites (LWS) were found within 2 km of the of the site. The Dinting Lodge Grassland LWS is within the Application Site boundary.

The Habitat Survey identified the following habitats onsite: Lowland meadows (HPI), *Deschampsia* neutral grassland, bramble scrub, other woodland; broadleaved and *Holcus – Juncus* neutral grassland.

In terms of protected species, further surveys were undertaken for GCN and otter. The GCN eDNA survey did not identify the presence of any GCN within the ponds within close proximity to the Application Site. The otter survey found no otter spraint or footprints along the 470 m length of the Glossop Brook that falls within 200 m of the site, but three potential otter holts were identified. Due to the presence of these potential holts, the overall suitability of the Glossop Brook and the fact otter have been recorded within the wider catchment, it is recommended that preconstruction surveys for otter are conducted within six weeks of the proposed construction start date.

The findings of these assessments have allowed for the development of Biodiversity Net Gain (BNG) calculations and recommendations incorporated into the design of the Proposed Development, including the enhancement of the retained lowland meadow habitat around the solar panels and replacement of the existing *Deschampsia* neutral grassland to the north of the site with lowland meadow grassland. The BNG calculations result in an uplift of 4.37 habitat units across the Application Site.

3.4 Cultural Heritage & Archaeology

A Historic Environment Assessment was undertaken to accompany the planning application. The assessment identifies the Application Site as an area of former farmland, potentially once part of the parkland surrounding a former country house called Dinting Lodge. Dinting Lodge was demolished and redeveloped in the late 20th century. The site has been subsequently modified as a result of works to extend the existing adjacent Carpenter industrial complex and it has been used for landfill for inert construction materials.

Other than Dinting Lodge, no non designated heritage assets are recorded within the Application Site, although it is close to the former extent of the Dinting Vale Printworks, a large calico printworks dating originally from the early 19th century. Dinting Lodge was owned by the Potter family, who established the Dinting Vale Printworks.

There are no designated heritage assets within or adjacent to the Application Site. It is at the periphery of the setting of Melandra Roman Fort and non-designated Dinting Railway Viaduct and Dinting Vale Printworks.

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3.5 Trees & Hedgerows

A Tree Survey has been undertaken which has assessed trees and hedgerows within the Application Site boundary. The species recorded during the survey include:

- common oak;
- wild cherry;
- hawthorn;
- Willow;
- Lime;
- Common alder;
- Ash;
- Silver birch;
- Scots pine;
- Beech; and
- Ash.

Only one minor tree will be lost as a result of the Proposed Development (at the temporary construction site entrance).

3.6 Flood Risk & Drainage

A Flood Risk Assessment has been undertaken to accompany the planning application. Flood risk to the site, in particular the location of the proposed solar panels, is generally low. Approximately 20% of the site to the west through the existing industrial estate is shown to be at risk of fluvial flooding from Glossop Brook, however there are no elements of the Proposed Development that will be placed at significant risk during a flood event. Environment Agency (EA) flood map data also shows the site to sit partially within the reservoir flood extent, though this remains a residual risk.

It is considered that the solar panels will not increase surface water runoff, with any risk of erosion reduced by having well maintained and established vegetation below the drip line. However, it may be beneficial to install a localised sustainable drainage system (SUDS) to control any runoff. It is proposed that any surface water runoff arising the development could be discharged to the watercourse, Glossop Brook, southwest of the site. The surface water arising from the solar panels would be subject to treatment by way of a swale prior to being discharged to the watercourse.

3.7 Noise

A Noise Assessment has been undertaken for the Proposed Development. The Proposed Development has the potential to generate noise throughout the construction phase through the construction of the solar array and associated infrastructure. However, this is for a short duration. In addition, although the solar panels themselves do not generate noise, the associated infrastructure can generate limited noise during the day throughout the operational phase. These components of the Proposed Development have been sited away from potentially sensitive receptors.

3.8 Contaminated Land

Land contamination may arise from a previous use of a site or adjacent land and can have adverse effects on human health, property, water quality and ecosystems. A Preliminary Contamination Risk Assessment (Phase 1) has been undertaken for the Proposed Development. The aim of this assessment is to identify the current condition of the land within the Application Site boundary, building upon historical environmental data.

The Phase 1 identifies the Application Site and surrounding area as having an extensive industrial history, with a print works, associated reservoirs and historic landfills within proximity and encroaching within the development area's boundaries.

An Exploratory Phase II Site Investigation Report has also been undertaken for the Proposed Development following recommendation from the Phase I Report. Suitable recommendations were made in the report in order to refine the risk to human health, controlled water and property alongside the recommendation

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of a Construction Environmental Management Plan (CEMP). A CEMP has been undertaken and submitted alongside the planning application.

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Section 4.0: Design Solution

4.1 Introduction

The CABE Guidance identifies the following criteria in relation to design:

- ***"Use**: What buildings and spaces will be used for.*
- ***Amount**: How much would be built on the site.*
- ***Layout**: How the buildings and public and private spaces will be arranged on the site, and the relationship between them and the buildings and spaces around the site.*
- ***Scale**: How big the buildings and spaces would be (their height, width and length).*
- ***Landscaping**: How open spaces will be treated to enhance and protect the character of a place.*
- ***Appearance**: What the building and spaces will look like, for example, building materials and architectural details."*

Although this Guidance mainly pertains to traditional building development, the same principles apply to the design of the Proposed Development. This Section of the DAS considers the Proposed Development in relation to these criteria.

4.2 Use

It is proposed that the use of the Application Site would be for the development of a ground-mounted solar array and the associated infrastructure. Planning permission is being sought from HPBC for a temporary period of 40-years, following which the Proposed Development would be decommissioned and the land restored.

The Proposed Development has been designed to provide Carpenter Ltd with a source of renewable electricity to support their transition to a low carbon economy. Throughout the operational phase, the land beneath and between the solar arrays would be open for biodiversity enhancement measures, as prescribed within the accompanying Biodiversity Net Gain (BNG) calculations.

The Proposed Development is easily reversible, with minimal disturbance during the construction phase. Therefore, the land would be capable of being restored as close to its original condition, or better, at the end of the operational period. At the end of the 40-year operational period, should the Applicants wish to continue to generate electricity onsite, this would be subject to a full planning application. The removal of all panels and associated infrastructure would be conditioned by an appropriately worded condition on any consent.

4.3 Amount

The Applicants have progressed through a rigorous assessment process to identify the most appropriate renewable energy technology and scale for the needs of the Carpenter Ltd facility. This process has included an assessment of the energy used onsite and the identification of the best technology to meet their needs. This exercise has been developed alongside the environmental assessment process. The outcome of which has resulted in the Proposed Development which would generate 0.999MW of renewable electricity.

The Proposed Development would comprise the following built elements:

- Solar PV arrays;
- Inverters;
- Transformers;
- Customer cabin;
- Onsite cabling;
- Fencing and security measures;
- Maintenance tracks;
- Landscaping; and
- Biodiversity enhancement measures.

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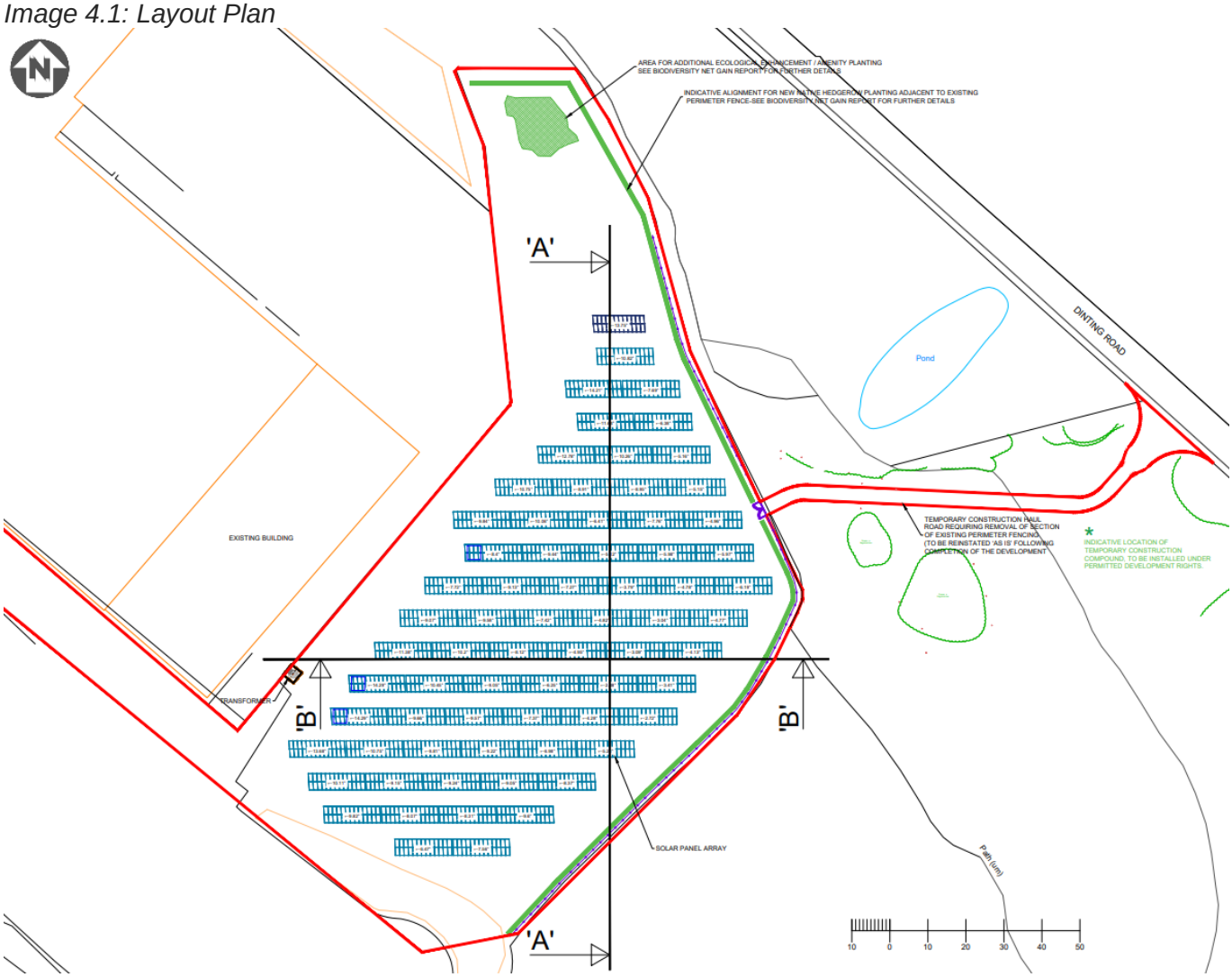
4.4 Layout

The layout of the Proposed Development was finalised taking into consideration of various aspects of the site surroundings, the technical and environmental assessments undertaken to accompany the planning application. These aspects have been considered alongside the need to maximise the energy generation potential of the Application Site and the needs of Carpenter Ltd.

The final layout of the Proposed Development is illustrated on Image 4.1 below.

Image 4.1: Layout Plan



As a result of these technical and environmental assessments, the key site considerations include the following:

- Temporary access point from Dinting Road located to the east;
- PROW that runs along the eastern boundary of the Application Site;
- Distance from residential receptors; and
- Ecological receptors identified onsite, including the Local Wildlife Site, potential presence of protected and notable species, as well as opportunities for enhancement.

The Application Site is well screened through the presence of existing woodland. The proposed layout allows for the recommendation for enhancement of the existing habitats and the creation of a new hedgerow along the eastern boundary of the Application Site. Therefore, further increasing visual screening of the Proposed Development.

4.5 Scale & Appearance

The Application Site covers an area of approximately 2.35-hectares of land. As detailed throughout this DAS, the scale of the solar array has been determined through the technical assessment process

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undertaken by the Applicant and the need for electricity onsite, as well as the environmental considerations.

The dimensions of the built elements of the Proposed Development are discussed below.

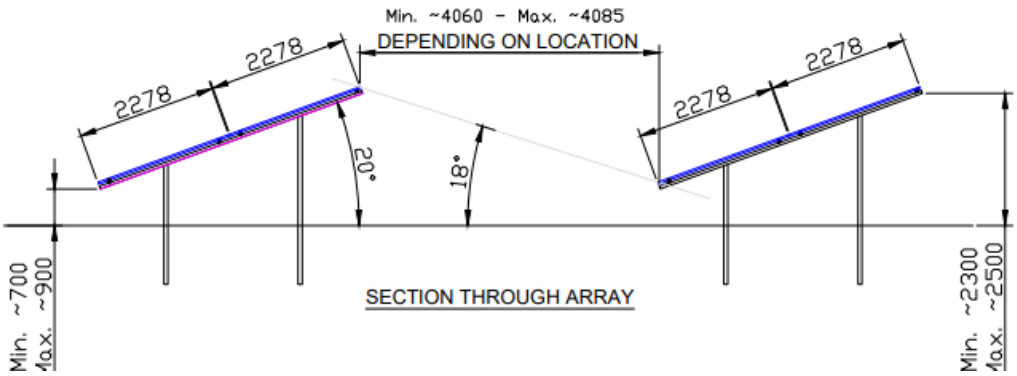
4.5.1 Solar Arrays

The PV modules would be mounted onto static frames which would be orientated to face the south at an angle of approximately 20º to the horizontal. The maximum height of the arrays would be 2.373m, with a lower edge height of 0.8m.

The minimum spacing between the rows of arrays would be approximately 4.06m and the maximum spacing would be approximately 4.085m.

The frames are strong, robust, and not easily damaged, allowing them to withstand environmental pressures. The metal posts would be pile driven into the ground, and therefore would not require concrete foundations. This construction method limits the footprint associated with the Proposed Development allows for the remaining land beneath and between the arrays to remain accessible for biodiversity improvements.

Image 4.2: Solar Array Schematic



4.5.2 Inverters

The solar PV modules would be connected to inverter units to convert the direct current produced by the modules into alternating current, which is compatible with the local electricity distribution network. The inverter units proposed comprise string inverters, which would be located on the back of the solar array mounting system.

4.5.3 Transformers

Transformers are required to control the voltage of the electricity generated by the Proposed Development, prior to reaching the substation. There would be one transformer station associated with the Proposed Development.

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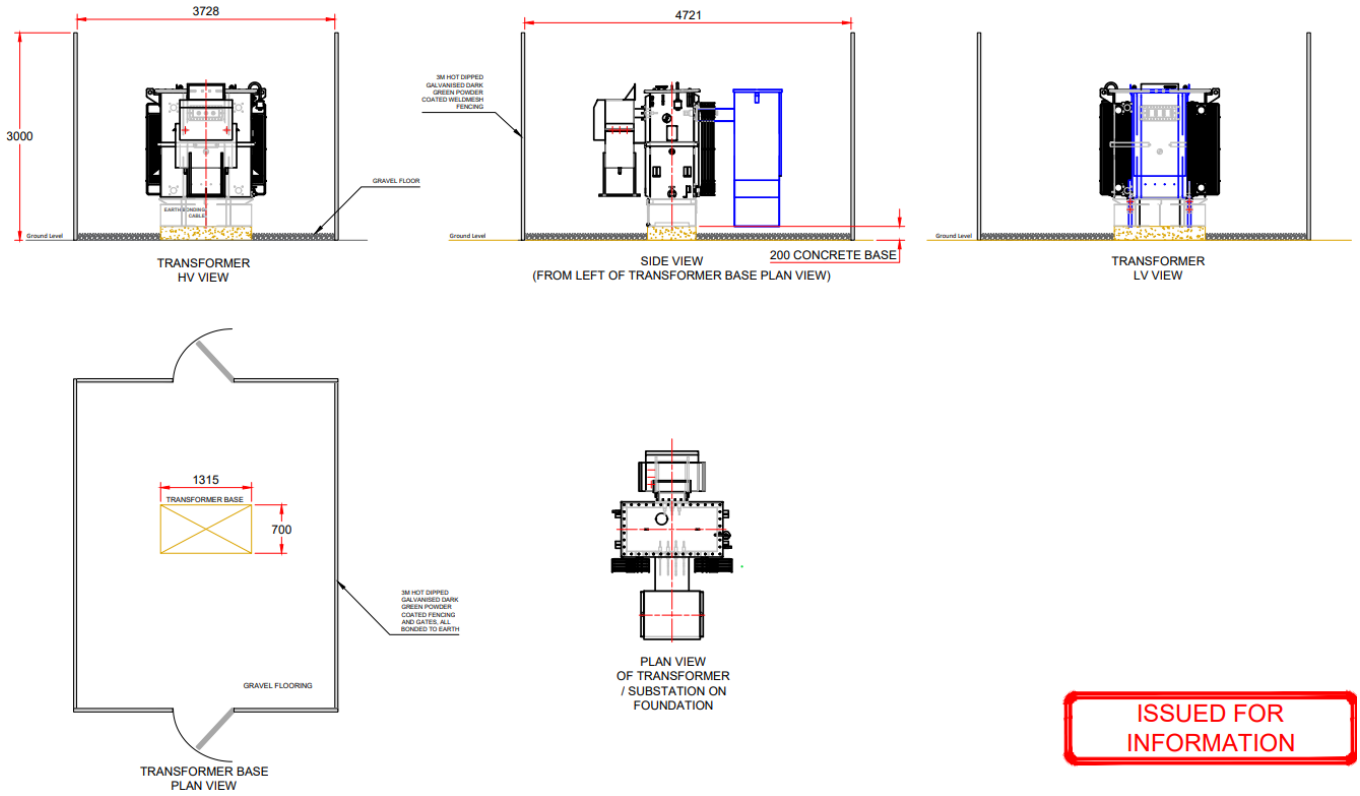
Image 4.3: Transformer Plan



4.5.4 Construction Compound

A temporary construction compound would be located within proximity to the temporary access route. This compound would allow for the laydown of materials and vehicle parking throughout the duration of the construction phase. The temporary construction compound does not form part of the planning application and with be dealt with as Permitted Development.

4.5.5 Onsite Cabling & Point of Connection

Onsite cabling would connect the electrical infrastructure across the site. The cabling would be buried in trenches.

4.5.6 Security Measures

The existing perimeter security fencing will be retained and made-good as necessary.

4.5.7 Access and Maintenance Tracks

Maintenance tracks would be constructed within the boundary of the Application Site to provide access to the infrastructure. These tracks would be constructed utilising type 1 crushed aggregate and would measure 4m in width.

A temporary construction access track would be constructed from the existing junction located on Dinting Road to the east of the Application Site.

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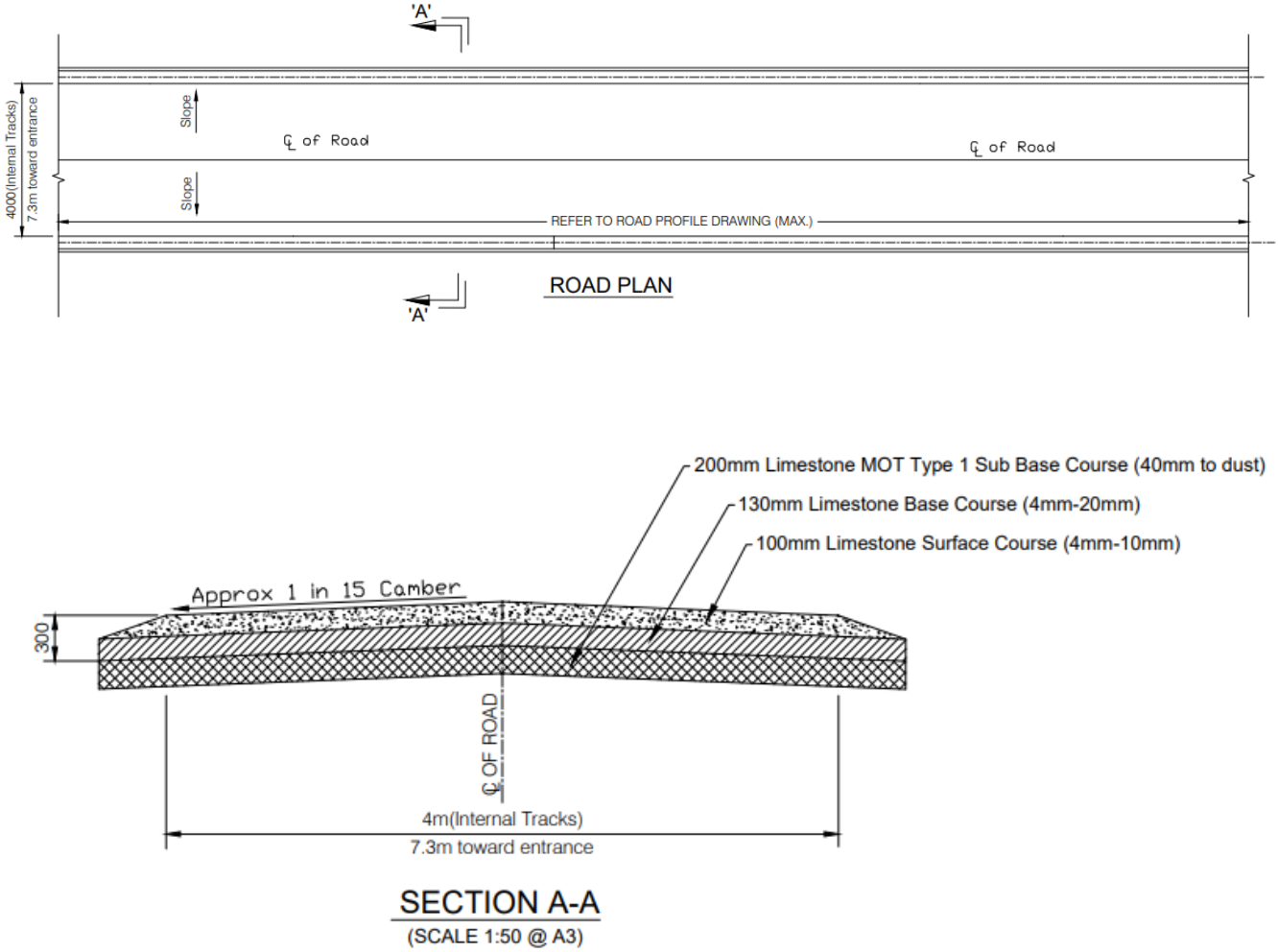
Image 4.4: Haul Road Cross Section



4.6 Landscaping

The potential impact of the Proposed Development upon the landscape resource has been a key consideration from the early feasibility stages. In order to mitigate against potential impacts upon the landscape, landscape enhancement measures have been incorporated into the layout of the Proposed Development.

Currently, the Application Site lies within a landscape where woodland tree cover is prevalent; although, field boundaries are commonly defined by treelines or hedgerows that are often in decline. As a result, the Application Site is thought to benefit from hedgerow planting along the existing fence line that borders the Application Site to assist in visually containing the Proposed Development and bringing additional amenity and biodiversity value to the local area.

The inclusion of hedgerows could further improve integration of the Proposed Development into the existing landscape framework; allowing the development to settle into its surroundings and become an accustomed feature.

Additional landscape mitigation and enhancement measures to be considered include:

- Native hedgerow and scrub planting within the Application Site in order to:
  - Create excellent habitats for a range of wildlife as they act as a refuge, as wildlife corridors, as nesting habitat for birds, as linear features for bats and provide fruit, seed and invertebrate forage; and
  - Improve the landscape connectivity of the site to the wider landscape.
- Native tree planting;
- Restoration of degraded wildflower grassland;
- Enhancement of the retained lowland meadow habitat around the solar panels; and

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- Replacement of the existing *Deschampsia* neutral grassland to the north of the site with lowland meadow grassland.

The recommendations made within these documents align with the recommendations set out within the Ecological Assessments and Biodiversity Net Gain calculations.

4.7 Design & Mitigation Recommendations

The design response reacts to existing baseline conditions; acknowledging the characteristics of the local landscape, topography and visual resource by:

- Limiting land take to the minimum required for safe and effective construction of the Proposed Development;
- Designing out the requirement for any major earthworks, eliminating the need for cut-and-fill operations, or disturbance to existing levels;
- Designing the layout of the solar PV array to align with existing topographic levels, whilst ensuring the panels are oriented to face south to maximise solar gain;
- Designing the layout of the solar PV array to avoid shading from existing and proposed planting;
- Landscape enhancement measures along the length of the adjacent PRoW;
- Native hedgerow, scrub and tree planting; and
- Enhancement of the retained lowland meadow habitat and replacement of the existing *Deschampsia* neutral grassland with lowland meadow grassland to enhance the biodiversity value of the Application Site.

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Section 5.0: Access

5.1 Introduction

As outlined within the NPPG: Making an application, "*Design and Access Statements must also explain the applicant's approach to access and how relevant Local Plan Policies have been taken into account. They must detail any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the Proposed Development. Applicants must also explain how any specific issues which might affect access to the Proposed Development have been addressed.*"

5.2 Pre-Application Consultation

5.2.1 Highways Authority

Consultation has been undertaken with Derbyshire County Council Highways Authority in relation to the Proposed Development, including initial written feedback and a virtual meeting. Discussion was undertaken around the proposed temporary construction road from Dinting Road, visibility splays, as well as the content of the accompanying Construction Traffic Management Plan (CTMP).

5.3 Local Planning Policies

The main policy contained within the adopted High Peak Local Plan that is considered relevant to access and the Proposed Development is Policy CF 6: Accessibility and Transport. Policy CF 6 states:

"*The Council will seek to ensure that development can be safely accessed in a sustainable manner. Proposals should minimise the need to travel, particularly by unsustainable modes of transport and help deliver the priorities of the Derbyshire Local Transport Plan.*"

The Policy goes on to state measures to achieve sustainable patterns of development, those considered relevant to the Proposed Development include the following:

- *"Requiring that all new development is located where the highway network can satisfactorily accommodate traffic generated by the development or can be improved as part of the development.*
- *Requiring that new development can be integrated within existing or proposed transport infrastructure to further ensure choice of transportation method and enhance potential accessibility benefits.*
- *Ensuring development does not lead to an increase in on street parking to the detriment of the free and safe flow of traffic."*

A Construction Traffic Management Plan (CTMP) has been prepared and submitted to accompany the planning application. The CTMP has considered the impact of the Proposed Development on the surrounding transport network. The main transport impacts will occur during the construction stage. Once operational, the solar farm will generate a very small number of vehicle trips.

The construction period is expected to last between 3-6 months. At peak times, there are expected to be 10 workers on site, which could generate 5 vehicle trips in each of the AM and PM peak periods, although these are unlikely to coincide with peak times on the road network. Staff will be expected to arrive on site by 7am and will typically depart between 15:00 and 18:00.

There is a strong sustainable transport network in the area, so the opportunities exist for construction workers to travel sustainably. It is also noted that the accessibility review has not flagged any major gaps in provision that could put construction HGV movements in conflict with active travel users. Good standard facilities are in place and no specific measures have been identified to safeguard the pedestrian of active travel users beyond the good practice measures identified above.

It is considered that with the CTMP in place, traffic associated with the construction stage of the proposed development can be minimised and managed efficiently and without major detriment to existing users in the area.

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5.4 Site Access

There will be two locations where access would be taken into the Application Site. There would be a temporary construction access point taken from Dinting Road and a permanent access point taken from the existing Carpenter Ltd facility once the site is fully operational.

The temporary access would be taken from an existing access point on the southern side of Dinting Road at the location which will be designed in accordance with the standards provided in the Design Manual for Roads and Bridges (DMRB) to accommodate HGV movements. A preliminary design for the upgraded temporary access point along with visibility splays and swept path analysis are contained within the accompanying CTMP.

The first 15m of the access road will be surfaced to prevent mud and debris from being deposited onto the public road.

5.5 Route to Site

Construction traffic would arrive from either direction on the A57. Vehicles will then travel 250m north-east on Shaw Lane, at which point they would turn right, and follow Dinting Road for a further 450m to reach the construction site access junction.

Construction traffic would retrace this route when leaving the site.

5.6 Construction Traffic Management

The construction phase of the Proposed Development is expected to occur over a six-month period. During this period there will be a combination of HGV's for the component deliveries and cars/vans for construction staff. HGV movements are expected to be most intense throughout the first 6-weeks of construction, tailing off towards the final weeks. Car/van movements are expected to be constant throughout. The number of vehicles accessing the Application Site should not raise concerns in respect to highway safety.

In summary, the following management measures can be implemented as part of the Proposed Development:

- An official Construction Traffic Route has been identified, between the A57 and the site, which will run along Shaw Lane and Dinting Road.
- Deliveries would be scheduled to access the Application Site outside of typical busy periods and during standard working hours only.
- Warning signs will be in place along Shaw Lane and Dinting Road. These will:
  - Warn general traffic, and other road users (pedestrians, cyclists or equestrians) about the presence of construction traffic; and
  - Direct construction traffic to the site, ensuring that they do not stray off the identified construction route.
- Temporary closure of the PRoW that runs along the eastern boundary of the Application Site throughout the construction phase for public safety reasons. An alternative route is available along the footpath on Dinting Road.
- Any damage caused to the public highway during the Proposed Development would have to be rectified at cost to the Applicant.
- All vehicles would be required to clean their wheels prior to leaving the Application Site.

Throughout the operational phase, vehicles would access the Application Site through the existing Carpenter Ltd access road. During this period, vehicle access would be limited to visits for routine maintenance checks, vegetation management and any repair works required.

5.7 Public Access

In the interest of health and safety, and prior to construction commencing, the Application Site would be secured through the erection of security fencing to limit public access.

With the temporary access junction and access track in place, it is acknowledged that there is an impact on an existing PRoW. The PRoW is designated as Glossop FP 189 and extends in a southeast direction

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from Dinting Road through the site to join another PROW (Glossop FP 62) that runs in a north-south axis on the east side of the site and joins other footpaths to the southeast of the site.

It is proposed to temporarily close the affected footpath for the duration of the construction works with a diversion route put in place along Dinting Road to join the existing PROW on the east side of the site. The diversion would be signposted, and the PRoW would be re-opened on completion of the construction works.

The existing PROWs and the proposed diversion route are indicated by Image 5.1 below. It is noted that the crossing point on Dinting Road for FP201 would be relatively unaffected by the proposed temporary access point.

Image 5.1: Existing PRoWs and Proposed PRoW Diversion

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Section 6.0: Conclusion

This DAS is an evidence-based submission prepared with reference to the Town and Country Planning (Development Management Procedure) (England) Order 2015 Part 9(3). It includes a review of the current planning context surrounding the Application Site, existing site conditions, and the process carried out to design the Proposed Development.

This DAS contains details of the investigations and technical studies undertaken by the appointed consultant team, with the findings from the various appraisals contributing to design development.

The conclusions of the reports demonstrate that the Proposed Development can be successfully delivered on the Application Site without leading to unacceptable levels of environmental effects. The resulting development proposals show how the Proposed Development can respond positively to the local landscape setting whilst additional mitigation measures have been incorporated to minimise any potentially adverse effects, and to create connections between existing vegetated areas; thereby enhancing the biodiversity value of the Application Site.

For these reasons, and because the Application Site could be restored to its pre-development state with limited intervention after its 40-year life period, it is respectfully requested that HPBC grant Full Planning Permission for the Proposed Development.

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Section 7.0: References

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