

DESIGN AND ACCESS STATEMENT

Symmetry Park, Merseyside

RESERVES MATTER 2 PLANNING APPLICATION

Document Prepared for:

Tritax Symmetry Merseyside 1 Ltd

22604-UMC-XXXX-XX-DN-A-2001-Design & Access Statement _P01



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00 CONTENTS

01.0 Introduction

- 01.1 Statement Overview
- 01.2 The Brief
- 01.3 Report Content and Structure

02.0 Planning Policy

- 02.1 Local Policy Context
- 02.2 National Planning Context

03.0 Site Context

- 03.1 Site History
- 03.2 Site Aerial Image
- 03.3 Existing Site Photographs
- 03.4 Existing Site & Surroundings
- 03.5 Site Constraints
- 03.6 Urban Framework and Existing Land Use

04.0 Key Design Principles

- 04.1 Key Principles
- 04.2 Key Principles Analysis
- 04.3 Schematic Plot Principles Diagram
- 04.4 Development Aspirations

05.0 Development Proposal

- 05.1 Illustrative Masterplan
- 05.2 Illustrative Site Plan
- 05.3 Unit 2 Elevations
- 05.4 Unit Appearance Description
- 05.5 Unit Appearance Diagram
- 05.6 Unit 2 Warehouse Floor Plan
- 05.7 Unit 2 Roof Plan
- 05.8 Office Floor Plans
- 05.9 Gatehouse Design
- 05.10 Proposed Use
- 05.11 Proposed Amount
- 05.12 Scale, Height and Massing

06.0 Access

- 06.1 Vehicular Access
- 06.2 Pedestrian and Cycle Access
- 06.3 Pedestrian Access - Internal

07.0 Sustainability and Crime Prevention

- 07.1 Crime Prevention
- 07.2 Access and Movement
- 07.3 Cameras and CCTV
- 07.4 Lighting
- 07.5 Physical Protection
- 07.6 Sustainability

08.0 Landscaping

- 08.1 Proposed Landscaping

09.0 Summary

- 09.1 Summary

01 INTRODUCTION



01 INTRODUCTION

01.1 STATEMENT OVERVIEW

This document has been prepared as part of the supporting documentation for a **Reserved Matters 2 Planning Application** submitted to **Knowsley Metropolitan Borough Council** for the proposed development located at Cronton Road, south of the M62, Huyton, Liverpool in the Knowsley Metropolitan Borough. The location of the site is shown on UMC planning drawing 22604-UMC-XXXX-SI-DR-A-0601-Location Plan.

The total proposed Masterplan boundary has an area of **125 acres/50 hectares**.

The total proposed application boundary has an area of **83.77 acres/ 33.90 hectares**.

This Application supports a hybrid application that encompasses a full detail application for Unit 1, Symmetry Park & RM1 application that have been submitted and granted consent

The site can be accessed from the Cronton Road which runs to the south of the site.

This Design and Access Statement has been prepared by UMC Architects on behalf of **Tritax Symmetry Merseyside 1 Ltd** (the applicant).

KEY PRINCIPLES TO BE ADHERED:

- Clear circulation routes for vehicles and pedestrians.
- The scale of development must consider place making principles through a hierarchy of roads, pavements built form, and spaces between buildings.
- High quality architectural language for the industrial development which should allow the buildings to sit comfortably within the surrounding context.
- Building forms should be uncomplicated as well as reflecting and complimenting the area.
- Materials should respect the setting of the buildings and provide consistency across the site.
- Key landscaping features to increase the quality and success of the development and employees who use the park.
- External compounds need to be sensitively located and screened.



01.2 THE BRIEF

The purpose of this document is to initiate the design and how this continues to be attainable by further analysis of the principles relating to access, appearance, landscaping, layout and scale.

The Reserved Matters 2 Planning application is for the erection of a **25,278m² (272,091ft²) (GIA)** single unit development, gatehouse and security facilities, service yards and HGV parking, plant, vehicular and cycle parking, landscaping, pedestrian and cycle infrastructure and green infrastructure and associated development. The proposal seeks approval of planning for the provision **25,278m²/272,091ft² (GIA)** of employment floorspace and ancillary offices (**Use Class E(g)**).

The documents contained within the planning application provide details of the proposed development, whilst this statement describes the design principles including building design, layout, access, scale and landscaping.



Proposed Site Plan

01.3 REPORT CONTENT AND STRUCTURE

This document contains a summary of the site context, analysis of the surrounding areas and an explanation of the design evolution.

This document explores how the physical characteristics of the scheme have been informed by the design process and explains the steps taken in the process, culminating in the proposed design solution.

This is in accordance with the requirements of the planning application processes. The Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2020 sets out the requirements for Design and Access Statement.

The statement is structured as follows:

Section 1.0

An introduction to the site and outline of the project brief.

Section 2.0

An explanation of the relevant national and local planning policy.

Section 3.0

A site context evaluation, containing a description of the existing site and surroundings.

Section 4.0

An evaluation of the key principles considered in the design stage, including site constraints and opportunities, design principles and a description of the scheme evolution.

Section 5.0

Discusses the development proposals of the proposed design, covering proposed: usage, amount, layout, scale and massing, appearance and landscaping.

Section 6.0

Outlines the vehicular and pedestrian access to and around the site.

Section 7.0

Covers the project's sustainability principles and envisaged crime prevention measures.

Section 8.0

Offers a summarising statement for the illustrative proposal.

02 PLANNING POLICY



02 PLANNING POLICY

02.1 LOCAL POLICY CONTEXT

Applications submitted:

- Hybrid Application - **20/00494/HYB** (consent granted)
- Reserved Matters Application 1 (consent granted)

The Knowsley Local Plan Core Strategy (KLPCS) (Jan 2016)

The Land South of M62 is located within the Knowsley Sustainable Urban Extension (Policy SUE2c) as one of the 9 sites that has been removed from Green Belt and allocated to provide additional land to meet development requirements up to 2028 and beyond. The policy confirms that Land South of M62 will deliver at least 22.5 hectares of logistics, storage and distribution uses (within Use Class B8) or other appropriate employment uses within the Liverpool City Region key economic sectors subject to application of the sequential and impact tests. Policy SUE2 indicates that site-specific requirements will be prepared for some of the sites in the form of a Supplementary Planning Documents (SPD) providing a spatial framework for development. The SPDs in reference to Land South of M62 will be stated in this document.

Policy SUE2 - development principles refers to The Sustainable Urban Extensions Principles of which Land South of M62 is a part of, The Policy demonstrates that the site should be of;

- Deliver sustainable development
- A High design quality and connectivity with adjacent urban development.
- Demonstrate a comprehensive approach to the development of the relevant Sustainable Urban Extension and to infrastructure provision.
- Provide good transport linkages
- Protect or enhance historic and architectural assets where appropriate.
- Address flood risk
- Provide a clearly defined edge to the developed area

The Policy SUE2c highlights that development at Land South of M62 should ensure:

- Safe and convenient highways access for the sites together with a well-connected internal road system.
- Provision for public transport, walking and cycling, which enhance linkages within the area and surrounding areas.
- Public Open Space (POS) within a wider green infrastructure integrating with existing POS.

02.2 NATIONAL PLANNING CONTEXT

National Planning Policy Framework - Adopted July 2021

The NPPF is underpinned by a presumption in favour of sustainable development with significant weight afforded to the need for the planning system to support economic growth. This document is material to the determination of the application, it is underpinned by the 'presumption', which for decision taking means "approving development proposals that accord with the development plan without delay". Furthermore, the NPPF places great weight on delivering sustainable economic development and to respond positively to wider opportunities for growth.

Relating to building a strong and competitive economy, Paragraph 81 states that:

'Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation⁴², and in areas with high levels of productivity, which should be able to capitalise on their performance and potential'.

Paragraph 82 of the NPPF recognises that planning policies should not hinder economic development and encourages LPA's to address any potential barrier to investment such as poor environment or lack of infrastructure. It states that policies should be flexible enough to accommodate needs which were not anticipated when preparing the development plan and that the Local Plan should:

'Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations'.

The NPPF also encourages authorities to review their employment land regularly and also to maintain flexible policies that are able to react to market signals.

03 SITE CONTEXT

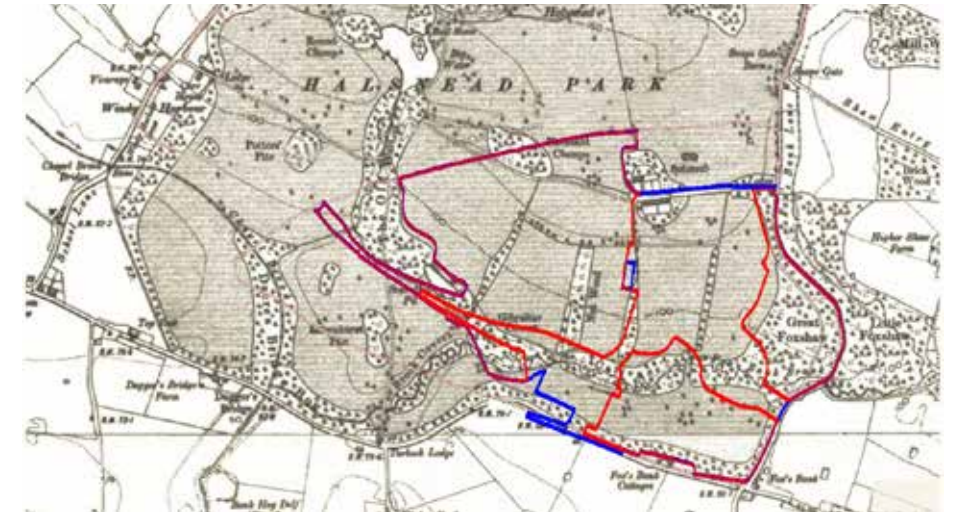


03 SITE CONTEXT

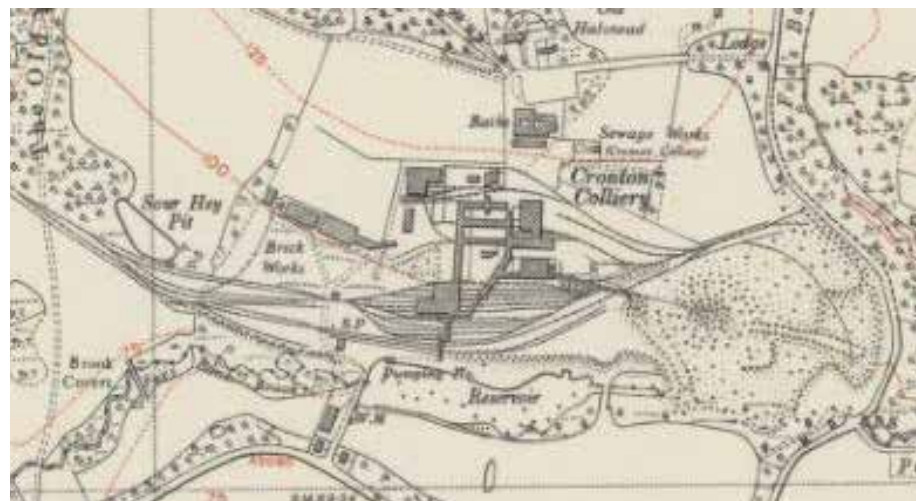
03.1 SITE HISTORY

The Cronton Colliery from 1913 to 1984 occupied most of the Land South Of M62 it was linked to the railway network. The colliery site lay completely derelict for years until it was acquired by English Partnerships, The government's national regeneration agency, As part of the National Coalfield Programme. In 1995 the site was partially restored by removing both the colliery infrastructure and major earthworks. The colliery site's ownership was transferred to the Northwest Regional Development Agency in 1999 and it has passed the Land Reclamation Trust in the autumn of 2007.

Currently the site is a public access, 22.5 hectares of the 44 hectares site has been allocated as employment land stated on KLPCS. To the south the country park remains and proposals for improved local biodiversity; establish sustainable, low-maintenance native plant communities; and encourage natural wildlife habitats haven been proposed.



Dated 1850 - Former Halshead Park estate



Published 1925

Farmland

Land South Of M62 was occupied by the Cronton Colliery from 1913 to 1984. The surrounding site has predominantly been farmland usage with a relatively small number of agricultural and residential developments.



Dated 2010

Increased Infrastructure

Following World War II the growth of Huyton to the West of the site can be seen through the construction of new housing estates. Urban expansion contributed to the improved of major sewage water treatment works as well as other infrastructures elements in order to serve the surrounding population.



Dated 2020

Industrial & Commercial Expansion

Large scaled areas in commercial and retail facilities have become necessary to provide goods, services and employment to the local communities. a major contributor to the economical growth and prosperity to the Liverpool City Regionand wider north west.

These developments benefit from their geographical location and established transport links. M62 motorway is major links from Liverpool to Hull and the rest of the United Kingdom via the national road network.

03 SITE CONTEXT

03.2 SITE AERIAL IMAGE



03 SITE CONTEXT

03.3 EXISTING SITE PHOTOGRAPHS



01. Two detached housing with dead end road.



02. Single detached house



03. Horse riding Centre



04. Caravan Park



05. Old, Halsnead, Halsnead Farm



06. Interchange Motorway Industrial Estate



07. Sewage Treatment



08. Residential Estate



09. Big water Lake



10. Ring Road serving M62 Motorway



11. Golf Course



12. M62 Motorway



13. Quarry



13. Caravan Site

03 SITE CONTEXT

03.4 EXISTING SITE AND SURROUNDINGS

The site is located close to the Tarbock island junction (M57/M62/Knowsley expressway) to the immediate northwest of the site. Further Northwest approximately 800 meters lies the Huyton Business Park, it is a well-established industrial and trade counter estate, strategically situated adjacent M62/M57 intersection, with occupiers including Acquila, Halewood International, Olympic Foods, Parcel Force, Travis Perkins, Premier Inn and Liverpool Football Club amongst others.

Caravan Park and Cherry Tree Farm reside to the north of the site amongst residential housing. In the Local Plan: Core Strategy the site South Of Whiston which is closer to the northern boundary of our proposed site has been allocated for residential development. Together South Of Whiston and Land South of M62 were formerly apart of Halsnead Park Estate disbanded in 1929.

To the immediate south lies the Quarry(dis) and further south the predominantly is farmland.

To the immediate eastern boundary lies a Caravan Park, further east is farmland bounded by Cronton village.

On the Application Boundary towards the northeastern section currently Unit 01 resides here, it was built as part of the Hybrid Application, which also include the construction of an access road from Croton Road. Moving towards the southeast of the application site, we find the ongoing development of a country park, consisting mainly of topsoil. On the northwest and southwest sides of the application boundary, there are areas of reclaimed landscape as well as sections of ancient woodland. Along Cronton Road and Fox's Bank Lane, you can find a few individual houses.

The site is located within a former Green Belt zone. Forming one of the largest urban expansion identified in the Council's Local Plan: Core Strategy for economic development.



Site Location - Wider Context

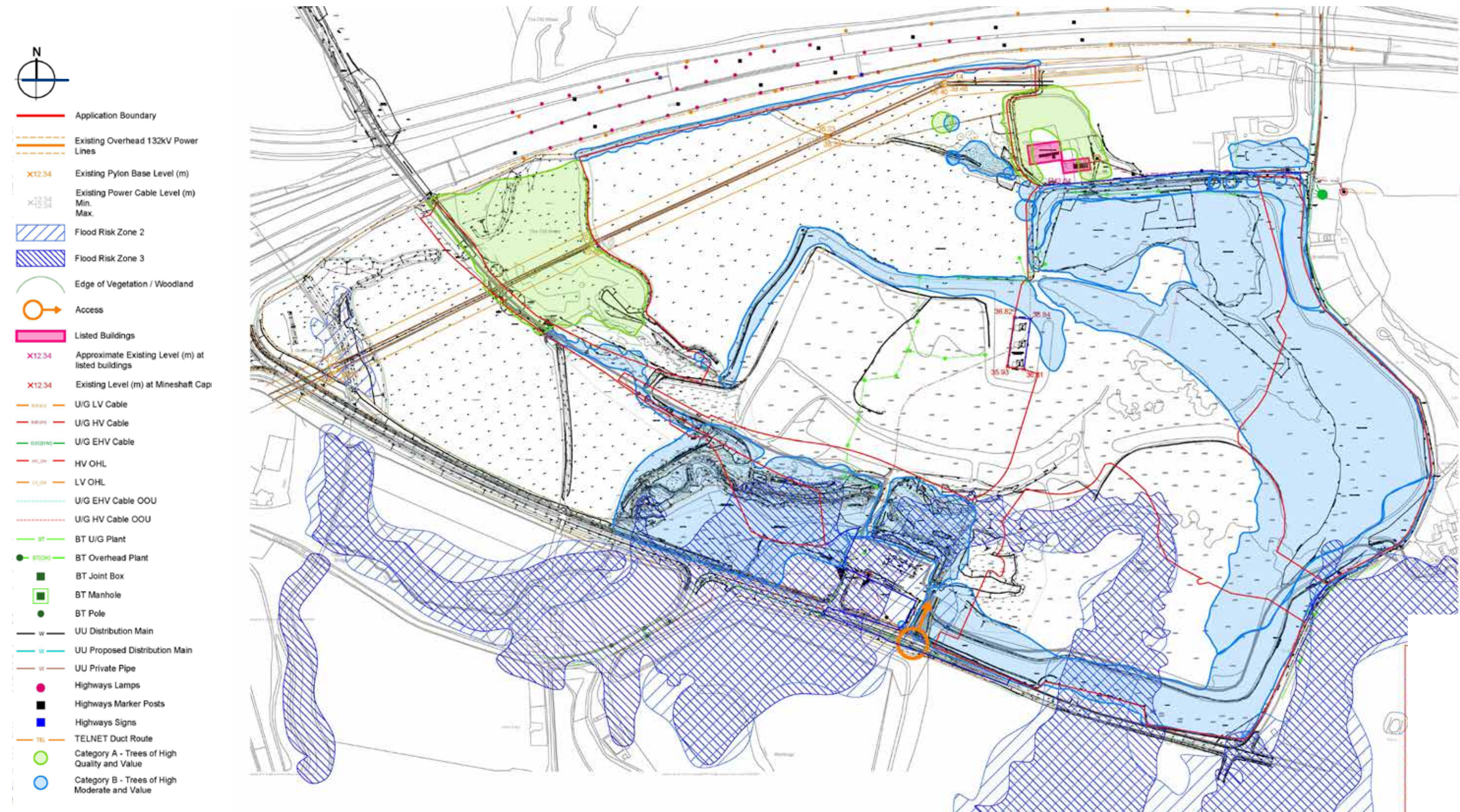


Site Location - Immediate Context

- Masterplan Boundary
- Application Boundary

03 SITE CONTEXT

03.5 SITE CONSTRAINTS



03 SITE CONTEXT

03.6 URBAN FRAMEWORK & EXISTING BUILDING USE

The existing land usage plan shows that there are a range of building and land uses within the local area, these include a number of industrial buildings.

The photographs below highlight the different types and scales of the surrounding buildings. These buildings help to contextualise the scale and use of the proposed development.

The land allocation plan also highlights the residential allocation to the north of the site (South Whiston). The future commercial development that will be introduced to the site through Knowsley Sustainable Urban Extension allocation for employment land.



01.



02.



03.



04.



05.



06.

03 SITE CONTEXT

03.6 URBAN FRAMEWORK & EXISTING BUILDING USE



- Key:
- Industrial
 - Commercial
 - Residential
 - Future Residential
 - Masterplan Boundary
 - Application Boundary

04 KEY DESIGN PRINCIPLES



04 KEY DESIGN PRINCIPLES

04.1 KEY PRINCIPLES

The design process for the application involved an investigation into a variety of different development configurations and sizes in order to arrange a coherent site layout within the site's constraints. A site layout has been developed based on the key principles below:

Character

To create attractive, self-contained and functional buildings with their own identity, which relate well to the neighbouring context as built.

Quality of the External Realm

To create a welcoming environment for staff and visitors alike. Landscaping and integrated footways and road / cycleways will provide a cohesive development.

Scale, Height and Massing

To establish buildings with scale and size which relates to the rest of the development and its surrounding context and are appropriate for their function. Attention should be given to breaking up large façades and to making references to human scale.

Appearance

To create an attractive appearance through the utilisation of appropriate materials for the locality and building type, which are also robust and will not deteriorate with time. Mid-distant views need to be considered when selecting cladding materials and colours.

Functionality

To provide buildings which will meet the long term needs of the occupiers for running efficient and successful businesses.

Standards

To meet the appropriate standards of safety, accessibility, energy efficiency and institutional standards.

Orientation

Ensuring that the buildings provide appropriate frontage to the access and surrounding roads will allow visitors, staff and lorry drivers a clear orientation and reference point on arrival.

Access

Provide a safe and effective access point into the site from the existing infrastructure, allowing segregation of movement between cars, service vehicles, cyclists and pedestrians entering the site.

Movement

Provide a clear, legible and segregated vehicular movement strategy incorporating all road entrances, loading and vehicular parking areas.

View of the Site

Ensure prominent building elevations are suitably treated to include appropriate materials and sensitive landscape treatment.

04.2 KEY PRINCIPLES ANALYSIS

Contribute directly to creating safe, attractive spaces with high quality buildings and landscape.

Proposed unit is sleek and simple in design, with a contemporary colour palette and glazed areas providing a good quality office environment. Key consideration has been given to the landscaping at the park entrance, giving a sense of arrival and a high quality finish to the shared areas.

Create sustainable, well designed buildings, which are good places to work.

The unit has been designed to create a contemporary simplistic aesthetic with high quality materials. The limited and modern colour palette and feature offices facing the internal road, create an attractive façade and a consistent architectural language throughout the site.

The buildings and illustrative site layout should fulfil a required level of security and operational functionality.

The yards are to be securely contained and shielded with fencing and offer secure car parking away from HGV Vehicles where appropriate. Additionally, car parks are overlooked by the office areas.

Ensure inclusive design to allow for a good level of accessibility within and between buildings.

The entire masterplan is suitable for both able-bodied and accessible use. The appropriate amount of accessible parking has been allocated and is located close to the level building entrance where possible.

04 KEY DESIGN PRINCIPLES

04.3 SCHEMATIC PLOT PRINCIPLES DIAGRAM

Notional Views

Key views around the site have directly affected the overall illustrative layout of units across the site.

Green Buffer

Retention of existing trees, proposed areas of trees, and shrubs provide natural screening and maintain habitat zones.

Massing

Hard edges towards site boundaries are mitigated by the orientation of each unit. Feature corners minimises impact in terms of massing to key views.

Noise Control

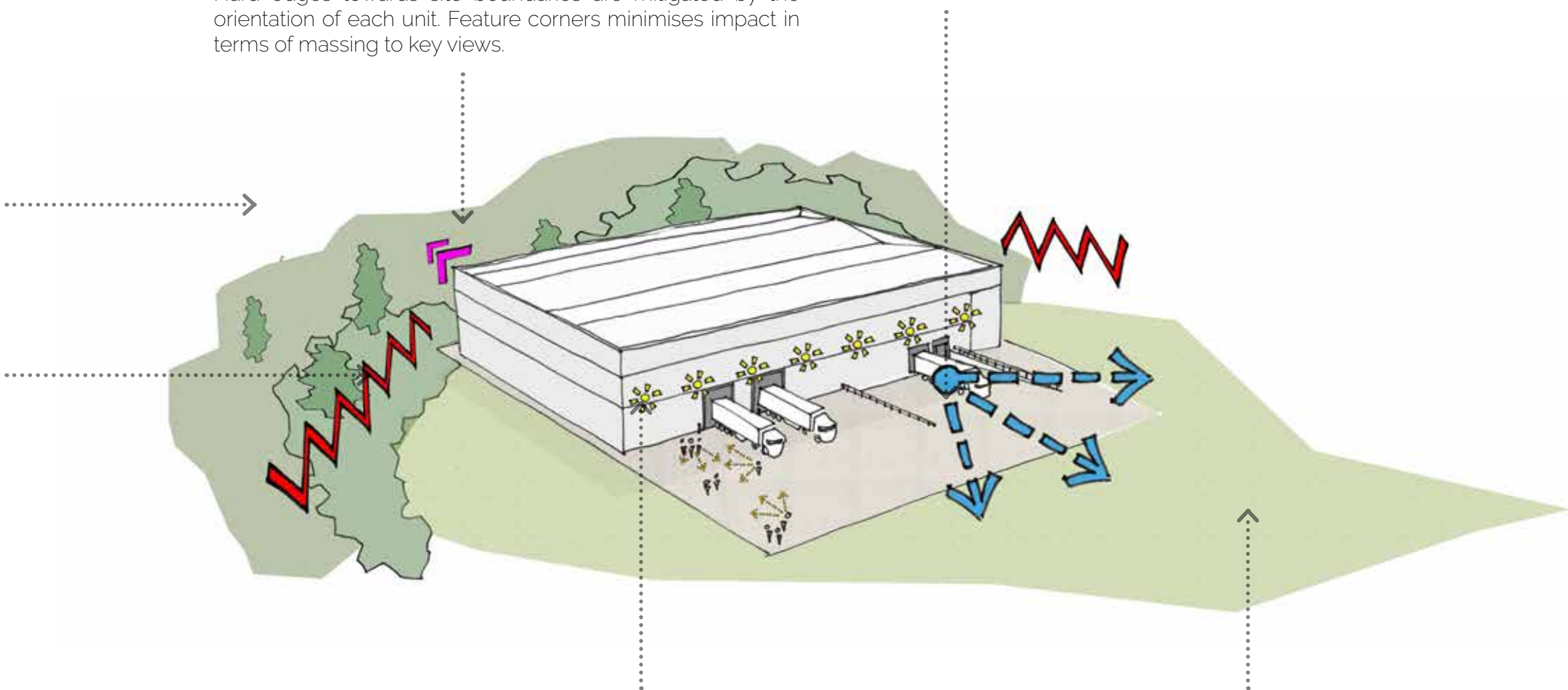
Site yards are often the area in which most noise from machinery and workers is produced. Inward facing site yards limit noise projected into the surround area.

Lighting

Lighting to service yards will be designed to minimise light spill beyond plot boundaries.

Amenity

The green space provided within the site is envisaged to better the existing landscape.



Key Principles Diagram

04 KEY DESIGN PRINCIPLES

04.4 DEVELOPMENT ASPIRATIONS

In the context of the KLPCS, SPDs, and main site access, infrastructure and strategic landscaping, the planning application sets out a series of Key Design Principles which provide an overarching framework for the approach to the layout and design

These are the "big moves" that will make Land South of M62 a best-in-class employment park.

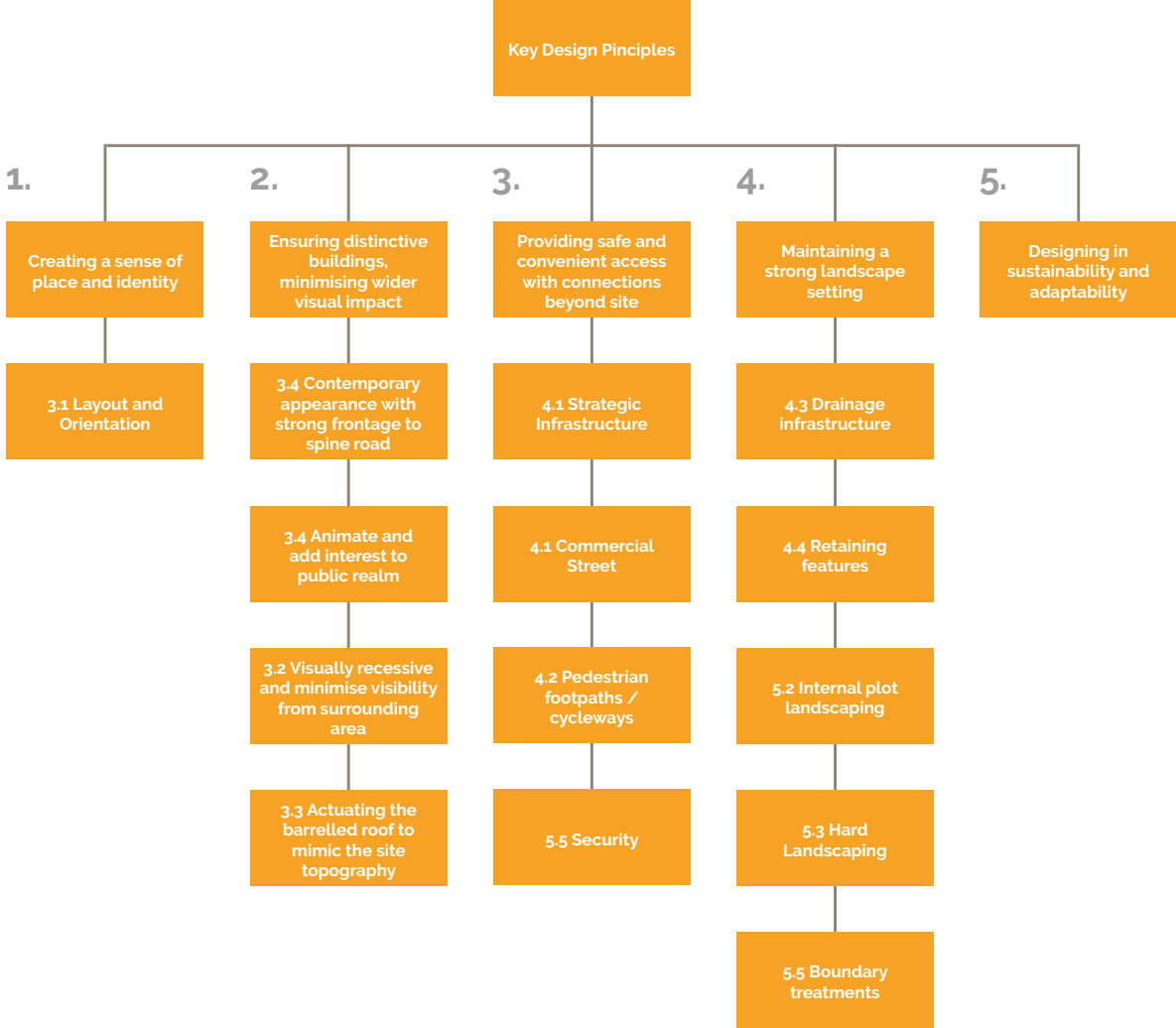
KDP1: Creating a sense of place and identity for Land South of M62 through developing a common architectural language and orientating buildings to provide legible wayfinding around the site and avoid sensitive receptors on site.

KDP2: Ensuring that prominent buildings are distinctive, including offices which relate to human scale and operational requirements, whilst minimising the wider visual impact of large warehouse elements through use of ground levels, breaking up facades and screening service yards

KDP3: Providing safe and convenient access for all users of the site including employees, suppliers or distributors, visitors and the local community, ensuring good connections beyond the site

KDP4: Maintaining a strong landscape setting which creates views and legible routes to and from buildings, connects with the surrounding landscape, and further enhances biodiversity

KDP5: Designing in sustainability from the start across all aspects from building, infrastructure and landscape design, whilst allowing for adaptation and later enhancement to meet occupier requirements



Design Guide hierarchy of principles

The following sections set out how these principles are applied across Building, Infrastructure and Landscape Design.

05 DEVELOPMENT PROPOSAL



05 DEVELOPMENT PROPOSAL

05.1 ILLUSTRATIVE MASTERPLAN



Illustrative Masterplan

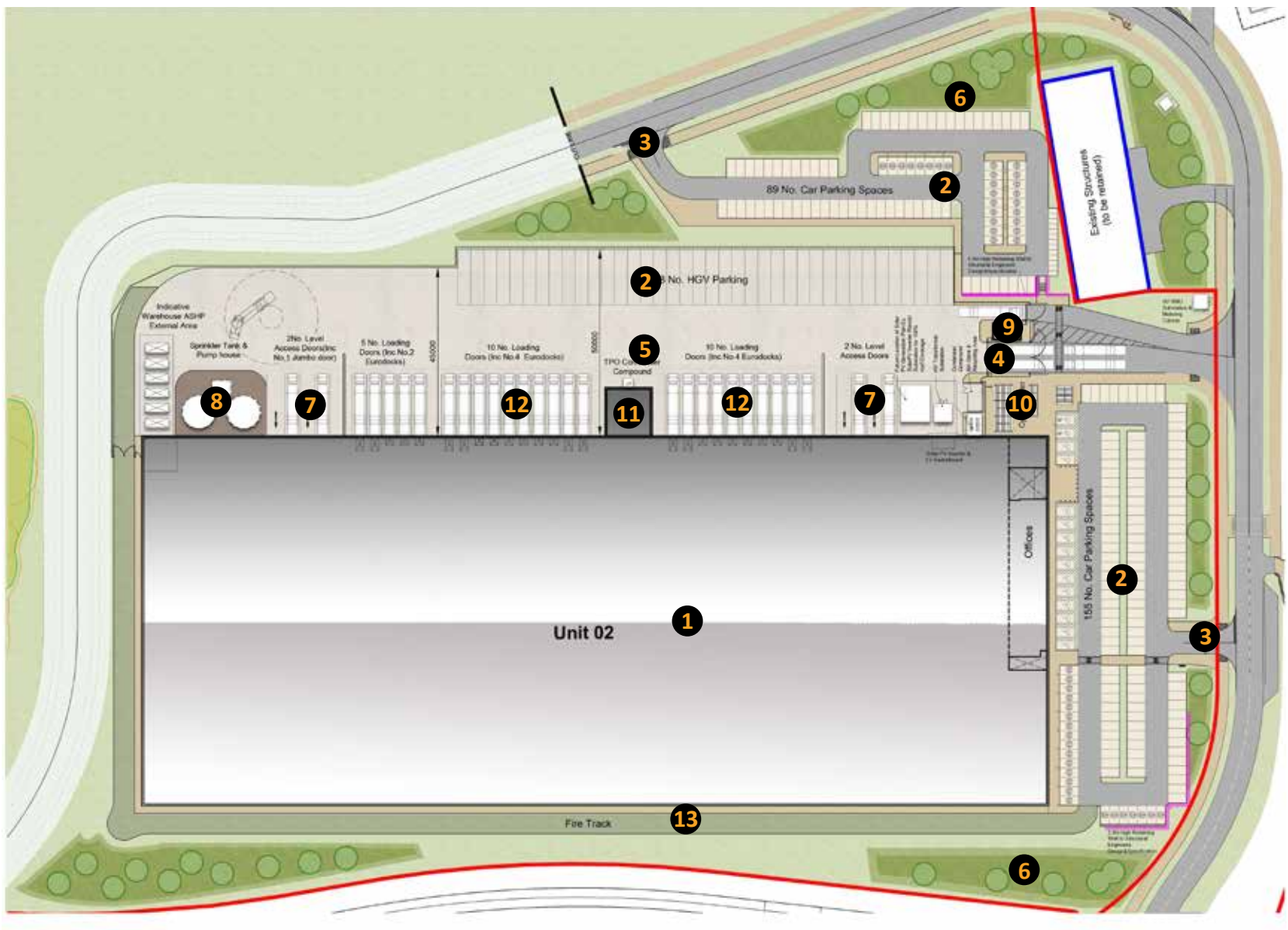
Unit 2	
Warehouse Area	- 254,420 sq ft (23,636m ²)
Office GF Core (Inc. FE Core)	- 1,357 sq ft (126m ²)
Office FF & SF	- 13,014 sq ft (1,209m ²)
Transport Office (2 St.)	- 3,000 sq ft (279m ²)
Gatehouse	- 300 sq ft (28m ²)
Total Area	- 272,091 sq ft (25,278m²)

Loading Docks	- 25 (Inc No.10 Euro Docks)
Level Access	- 4 (Inc No.1 Jumbo Door)
HGV Parking	- 38
Car Parking	- 244 (Inc. 15 Acc.+ 50 EV)
Cycle Parking	- 100 (10 Shelters)
Motorcycle Parking	- 13

- Masterplan Boundary
125 Acres/50 Hectares
 - 1** Development Boundary
NET PLOT AREA- 13.20 Acres/5.34 Hectares
 - 2** Application Boundary
83.77 Acres/33.90 Hectares
- Refer to "22604-UMC-XXXX-SI-DR-A-0602-Illustrative Masterplan" for the latest drawing.

05 DEVELOPMENT PROPOSAL

05.2 ILLUSTRATIVE SITE PLAN



Proposed Illustrative Site Plan

The proposed site layout is illustrated on UMC Architects planning drawing 22604-UMC-XXXX-SI-DR-A-0603-Site Plan

The following points have been considered in the configuration of the layout.

- Access and manoeuvrability
- Site parking
- Loading capacity
- Development frontage
- Development balance

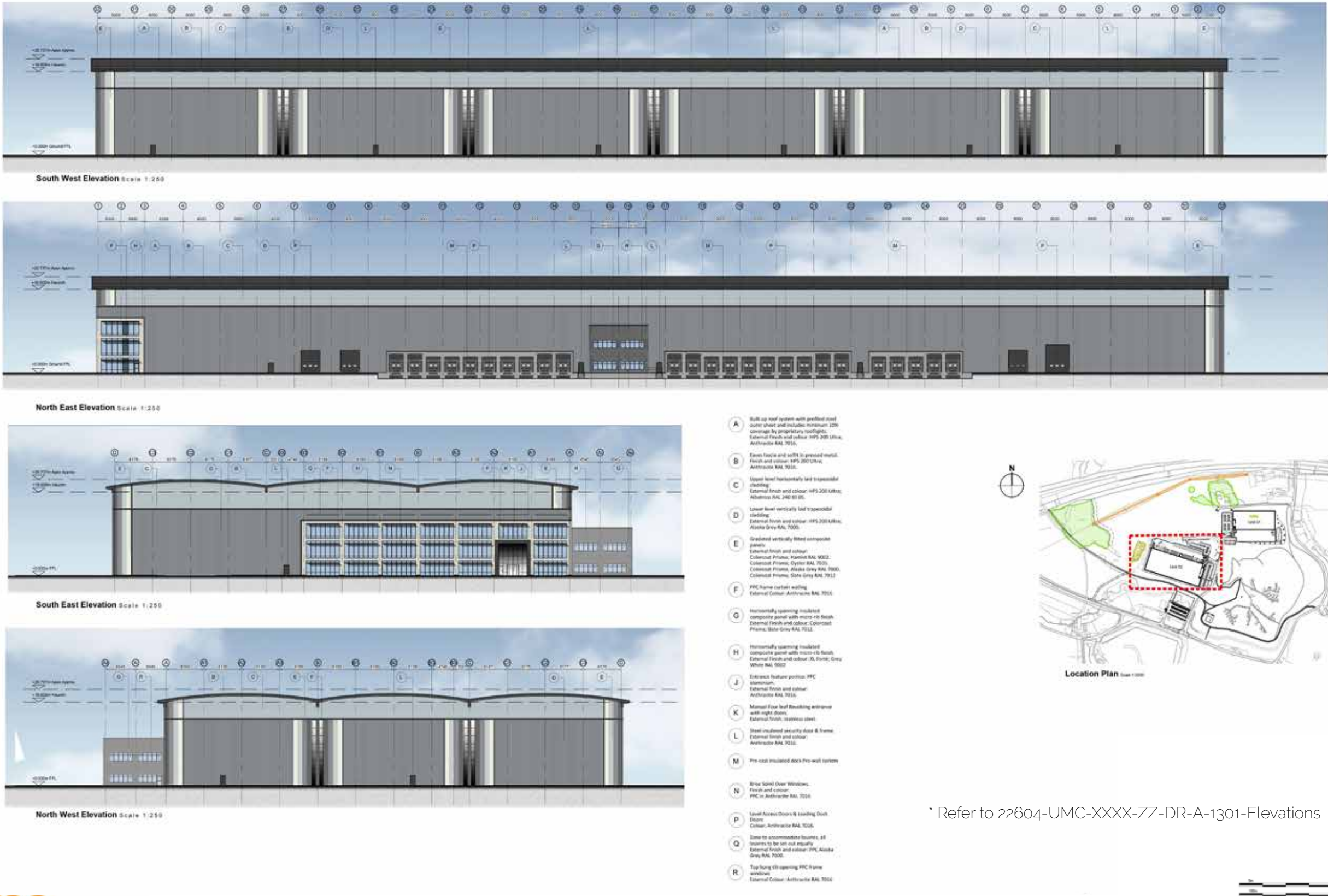
The layout has been designed to make effective use of the site whilst not impacting or restricting the rest of the development. The layout has been designed to ensure efficient use of the site area, while optimising the soft landscaping that surrounds the development. Parking for 244 cars has been provided through the use of a grade level car park, which includes 15 accessible parking spaces and 50 EV spaces positioned within close proximity of the office entrances. Inclusive access throughout the site is achieved, where applicable, with minimum 2m wide paths leading pedestrians from the car park to the ancillary office. Access into the site is sufficient for both disabled and able-bodied pedestrians.

KEY

- 1 WAREHOUSE
- 2 CAR PARK AREA
- 3 CAR ENTRANCE
- 4 HGV ENTRANCE
- 5 SERVICE YARD
- 6 LANDSCAPING
- 7 LEVEL ACCESS ENTRY
- 8 SPRINKLER TANK & PUMPHOUSE
- 9 GATEHOUSE
- 10 CYCLE SHELTERS
- 11 2 STOREY TRANSPORT OFFICE
- 12 LOADING DOCK DOORS
- 13 FIRE TRACK

05 DEVELOPMENT PROPOSAL

05.3 UNIT 2 ELEVATIONS



05 DEVELOPMENT PROPOSAL

05.4 UNIT APPEARANCE DESCRIPTION

The proposed development represents a high-quality unit that integrates thoroughly with the surrounding industrial estate and natural context. The building on site is to be co-ordinated in terms of materials, exemplifying multiple cladding finishes and colours to create to a cohesive development.

Cladding colour and profile designs are utilised to break down the uniformity of the building design, using proportion in width to create an equal distance at each end of the front elevation helps to distinguish each unit. Horizontal glazing elements are designed to correspond to joints in the cladding panels, thus reinforcing this modular aesthetic.

The lighter cladding panels help to soften the building visually, while the darker palette helps to give the overall building form a clean industrial emphasis when viewed from a distance. The roof consists of a Euroclad Elite Plus 1 Built-up Twin Skin Roof System (in Anthracite 7016). There is a continuous flashing boundary (in Anthracite) with gutters and rainwater down pipes to match the cladding.

There will be a combination of horizontally and vertically laid cladding panel systems with an RAL colourchart finish.

Cladding consists of:

Horizontally laid trapezoidal cladding:

HPS200 Ultra: Albatross RAL 240 80 05

Vertically laid trapezoidal cladding:

HPS200 Ultra: Alaska Grey 7000

Graded vertically fitted composite panels:

Colorcoat Prisma: Hamlet RAL 9002

Colorcoat Prisma: Oyster RAL 7035

Colorcoat Prisma: Alaska Grey RAL 7000

Colorcoat Prisma: Slate Grey RAL 7012

Horizontally spanning composite panels with micro-rib finish:

XL Forte: Grey White RAL 9002

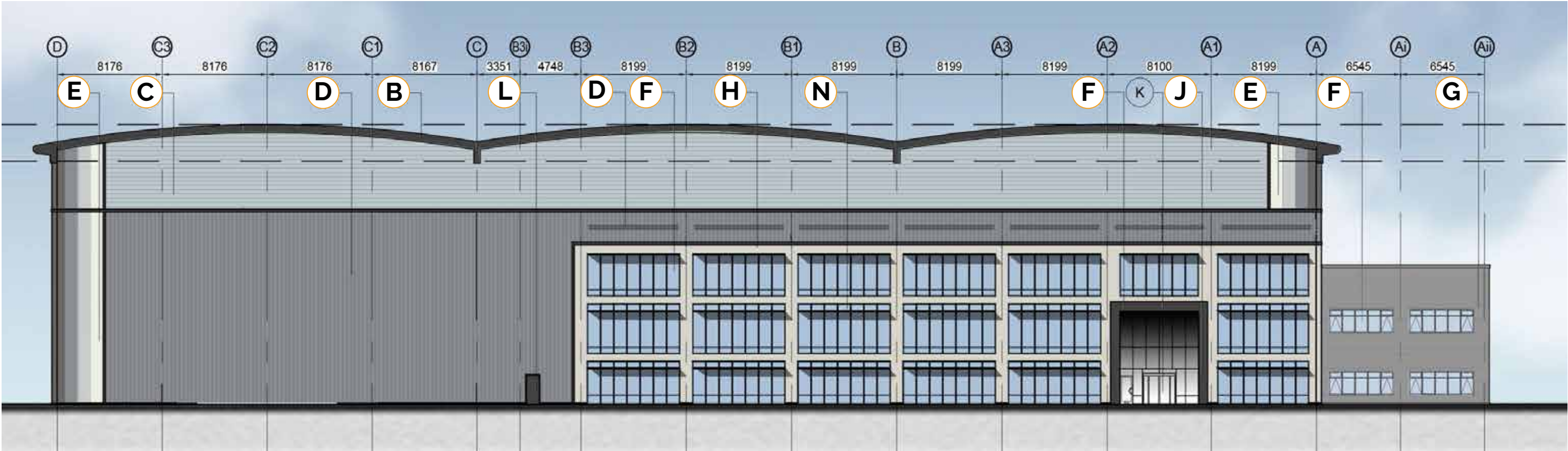
Colorcoat Prisma: Slate Grey RAL 7012

Glazing will be polyester powder coated aluminium framed glazing/curtain walling systems. Entrances are to be treated differently from the rest of the offices to indicate where the access into the office is.

Windows, curtain walling and level access doors will have anthracite frames to match the cladding.

05 DEVELOPMENT PROPOSAL

05.5 UNIT APPEARANCE DIAGRAM

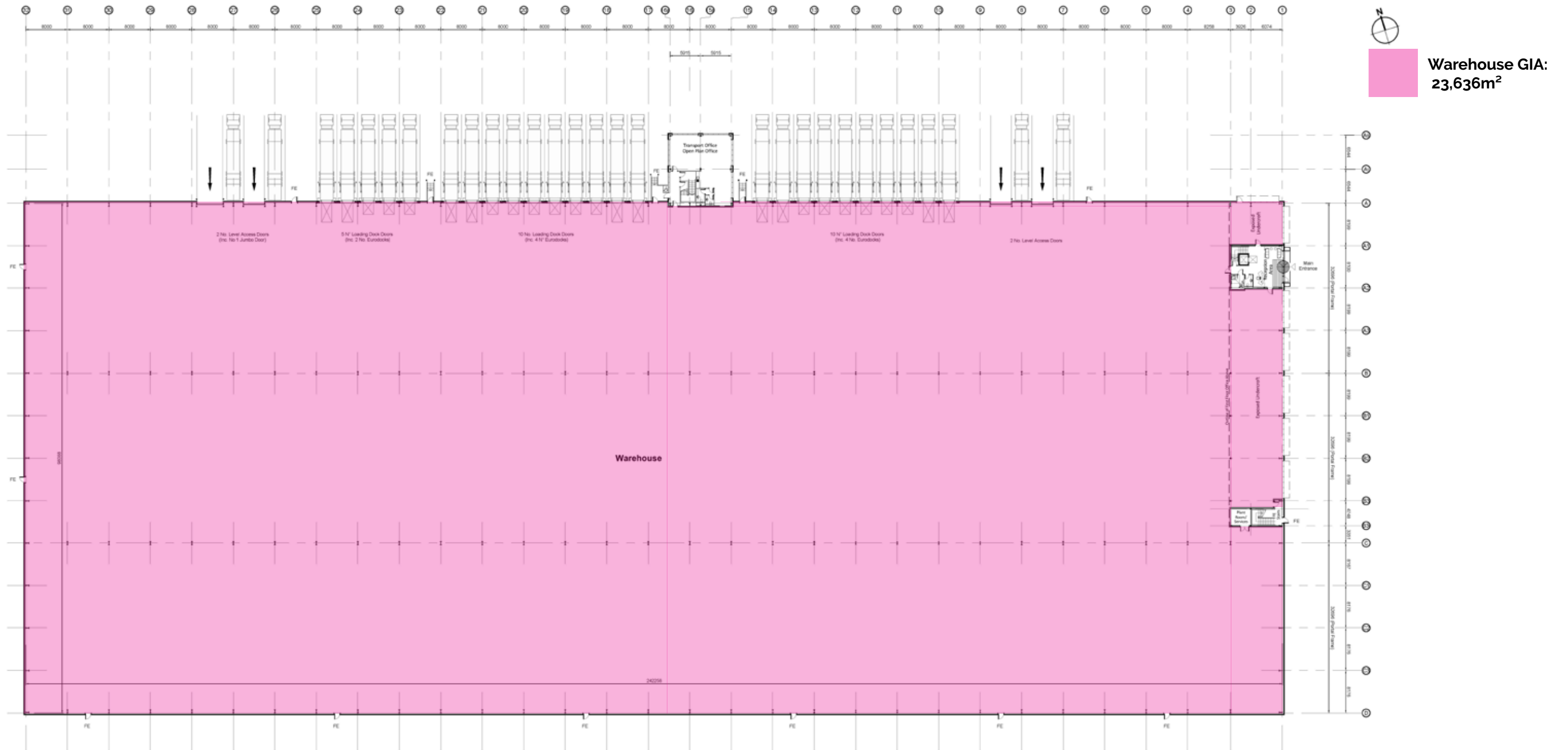


South East Elevation 11.214

B		D		F		H		L	
ANTHRACITE (RAL 7016)		ALASKA GREY (RAL 7000)		ANTHRACITE (RAL 7016)		GREY WHITE (RAL 9002)		ANTHRACITE (RAL 7016)	
C		E		G		J		N	
ALBATROSS (RAL 240 80 05)		HAMLET (RAL 9002) OYSTER (RAL 7035) ALASKA GREY (RAL 7000) SLATE GREY (RAL 7012)		SLATE GREY (RAL 7012)		ANTHRACITE (RAL 7016)		ANTHRACITE (RAL 7016)	

05 DEVELOPMENT PROPOSAL

05.6 UNIT 2 WAREHOUSE FLOOR PLAN



Unit 2 Floor Plan

05 DEVELOPMENT PROPOSAL

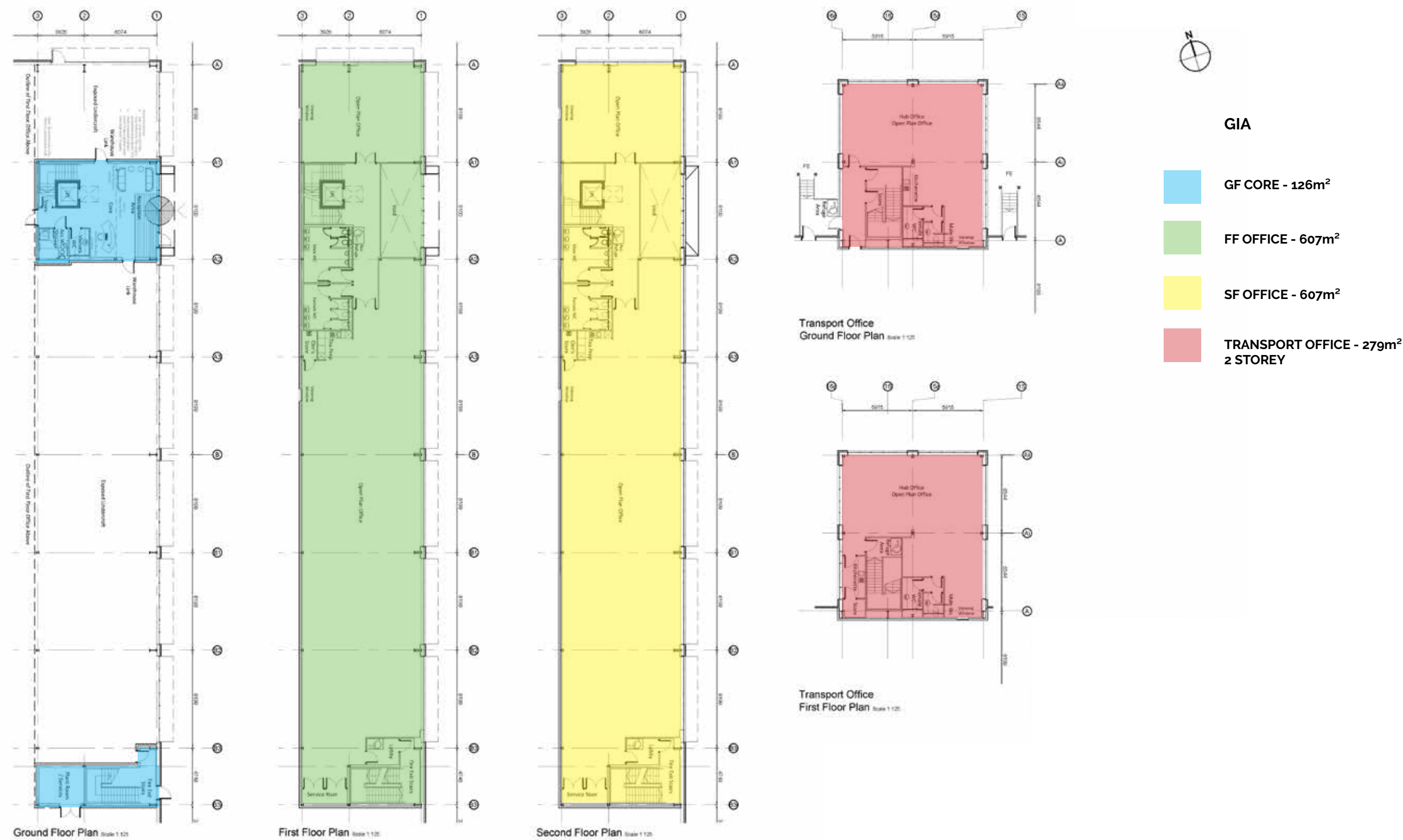
05.7 UNIT 2 ROOF PLAN



SCHEDULE OF ACCOMMODATION		
Unit 02		
Open Warehouse Area	-	23,128m ²
10% Roof light coverage	-	2,313m ²
104no Roof lights @ 22.24m ²	-	2,313m ²
PV layout coverage(1No Panel 1.6m ²)	-	6,527 no.
	-	10,443m ²

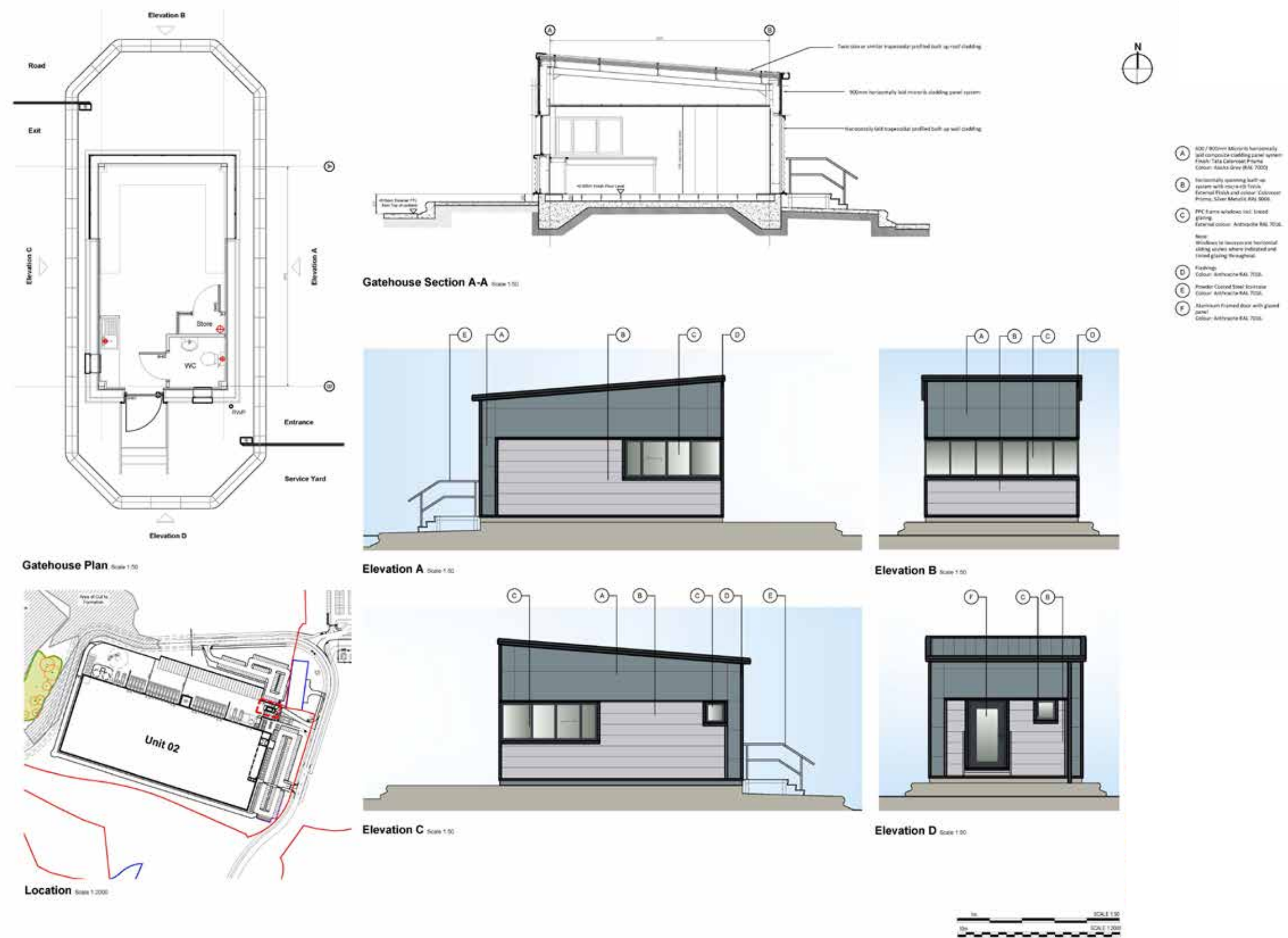
05 DEVELOPMENT PROPOSAL

05.8 OFFICE PLANS



05 DEVELOPMENT PROPOSAL

05.9 GATEHOUSE DESIGN



05 DEVELOPMENT PROPOSAL

05.10 PROPOSED USE

This section describes the process of design and how it has been informed by Section 3, in order to define the constraints that restrict the site's redevelopment and identify the opportunities and options for development.

The uses applied for within the application is Use Class E(g).

In proposing this, the occupier may require a 24-hour operation, to provide flexibility and efficiency, while also giving the opportunity for traffic associated with the development to be spread out of peak hours.

The following ancillary functions will be provided:

- Administration offices supporting distribution and management elements.
- Service yards that allow sufficient circulation (45-50m)
- Cycle storage for 100 cycles. (10 shelters)
- Car parking for 244N° spaces - inc. 15 accessible spaces and 50 EVC ports

05.11 PROPOSED AMOUNT

The 13.25 acre (5.36 hectare) plot plans to deliver a single unit consisting of:

Unit 2		
Warehouse Area	-	254,420 sq ft (23,636m²)
Office GF Core (Inc. FE Core)	-	1,357 sq ft (126m²)
Office FF & SF	-	13,014 sq ft (1,209m²)
Transport Office (2 St.)	-	3,000 sq ft (279m²)
Gatehouse	-	300 sq ft (28m²)
Total Area	-	272,091 sq ft (25,278m²)

The design is to meet normal Institutional Standards with a service yard provided to the northern side of the unit. These feature level entry doors are operationally required by most distribution occupiers. In addition to the 38 N° goods vehicle parking spaces, there is provision for 244N° customer and staff car parking spaces.

The proposed site layout submitted as part of this application (drawing reference 22604-UMC-XXXX-SI-DR-A-0602-Illustrative Masterplan) comprises of a singular steel-framed, two-storey warehouse, with a mixture of adjoining ancillary offices and operational areas.

Loading Docks	-	25 (Inc No.10 Euro Docks)
Level Access	-	4 (Inc No.1 Jumbo Door)
HGV Parking	-	38
Car Parking	-	244 (Inc. 15 Acc.+ 50 EV)
Cycle Parking	-	100 (10 Shelters)
Motorcycle Parking	-	13

The development has a gross internal area of **272,091ft²**. The size of these areas reflect the dimensions of modern articulated vehicles and their turning circles. External space has also been required to allow for a significant soft landscaping scheme to be implemented throughout the site. This enhances the general neighbourhood whilst also softening external views of the building facade.

Modern design solutions suitable for commercial development use generally centre around the standard size of a pallet used in the UK. The pallets are stored in racking and the building shape is built up around the pallet module to ensure that an efficient racking layout is used that requires the fewest number of racking spaces to be lost to internal columns. Steel portal frames are generally adopted as the structural system for buildings of this type in the UK. The maximum efficient span for a steel portal frame is around 35m. Beyond these spans, more commercially prohibitive solutions are required. It is important that structural efficiency is maximised in these buildings, especially when dealing with large areas and therefore large quantities of construction materials.

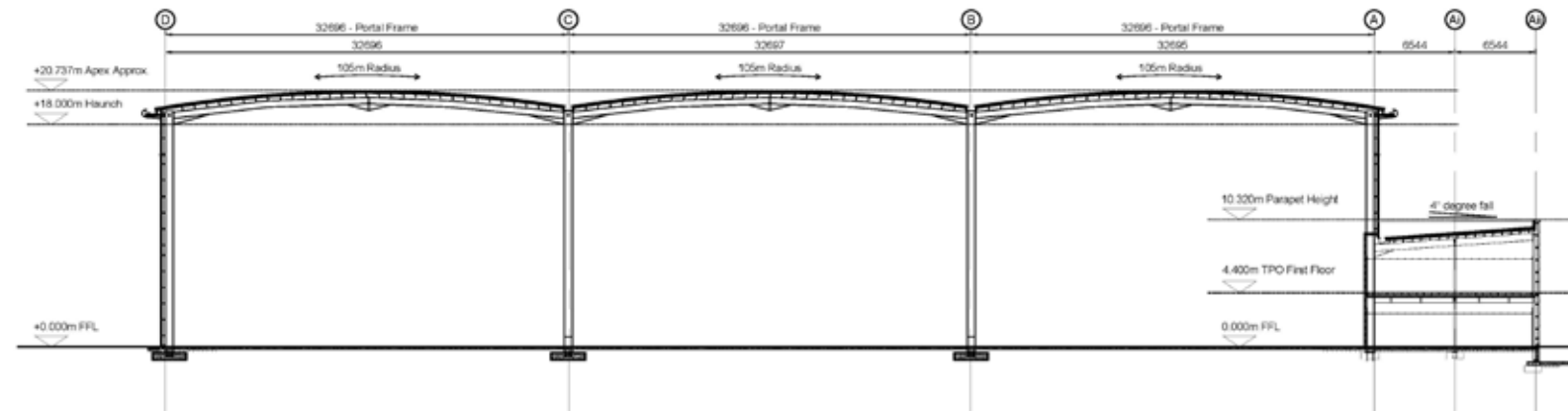
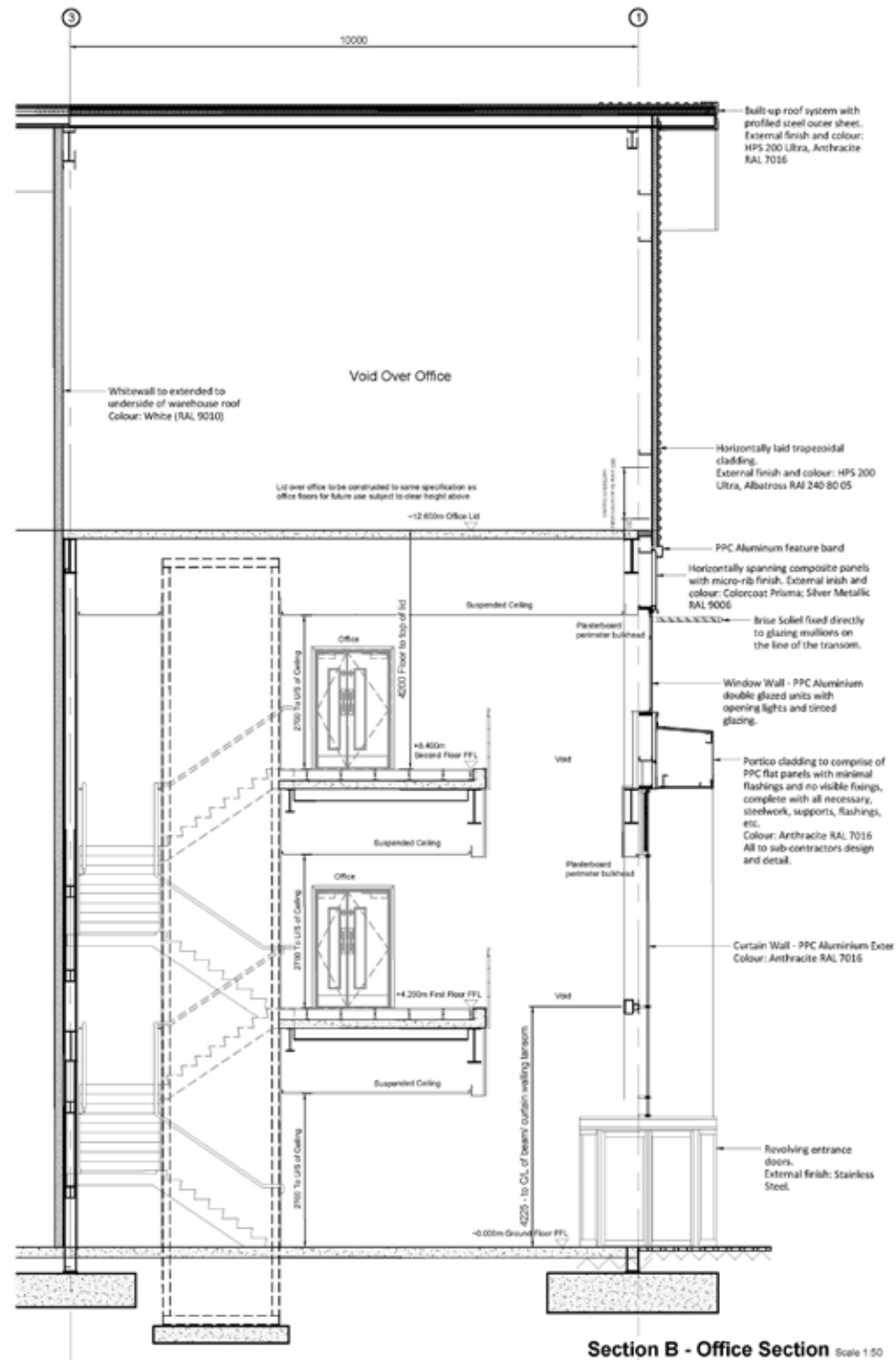
The result is the need for buildings with large volumes. Market and institutional requirements dictate that the larger the building, the higher it needs to be, allowing a greater height of racking within. The effective height of buildings such as this is usually defined as the 'clear height to the underside of the haunch'. This is the height to steel haunch that is used between the column and rafter of the portal frame. The zone above this height cannot effectively be used for racking and is usually reserved for services.

Other than pallets, the other deciding factor in the design of distribution solutions is the way in which goods are brought in and out of the building. Each loading position is 4m wide by 16.5m deep. The turning circle of the lorry has to be considered and is always examined under the scenario that every parking and dock position is occupied.

It is therefore a question of careful attention to detail as to how to deal with these types of buildings. The treatment of rooflines and the use of colour have become of paramount importance, together with the careful articulation of any ancillary office elements and the quality of the structural landscaping.

05 DEVELOPMENT PROPOSAL

05.12 SCALE, HEIGHT AND MASSING



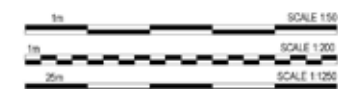
The proposal represents a positive use of the site on a scale that is comparable with other developments within the local vicinity.

The proposal creates large facades, so the design of the elevation treatment must incorporate features to reduce the perceived scale.

Buildings in this sector often have large critical internal heights to suit operational requirements, based on specific capacity / volumetric requirements and industry standard equipment and storage modules.

The heights of industrial / distribution buildings are generally dictated by the pallet racking heights within the building, which in turn are usually maximised to enable efficient storage volumetrics within a footprint. The footprint is usually determined by optimising portal frames.

Unit 2 proposes to have a clear internal height of **18.0m**, enabling the warehouse space requirements. This is in addition to 2 floors of office space and a two storey transport office. The building will have a built up barrel roof giving a maximum apex height of **20.737m**. This height is comparable to some of the buildings that sit in the immediate context.



06 ACCESS



06 ACCESS

06.1 PROPOSED VEHICULAR ACCESS

- Masterplan Boundary
- Application Boundary
- HGV Access
- Car Access / Cycle Access
- Emergency Vehicle Access
- Green Cycle/ Bridleway



VEHICULAR ACCESS

Vehicular access to the units will be via proposed new central service road which connects to Cronton Road.

There will be two separate car parks to the north and east of the unit. The entrances to these can be accessed from the proposed road connecting to Cronton Road. HGV access to the north of the unit can be accessed from the same road.

Car parking standards are appropriate for the use class in question. Provision has been made for covered secure cycle shelters stands to be located adjacent to the main office block.

Service yard areas will be formed in concrete surfacing, to provide a robust base for vehicle manoeuvring.

06 ACCESS

06.2 PROPOSED PEDESTRIAN AND CYCLE ACCESS

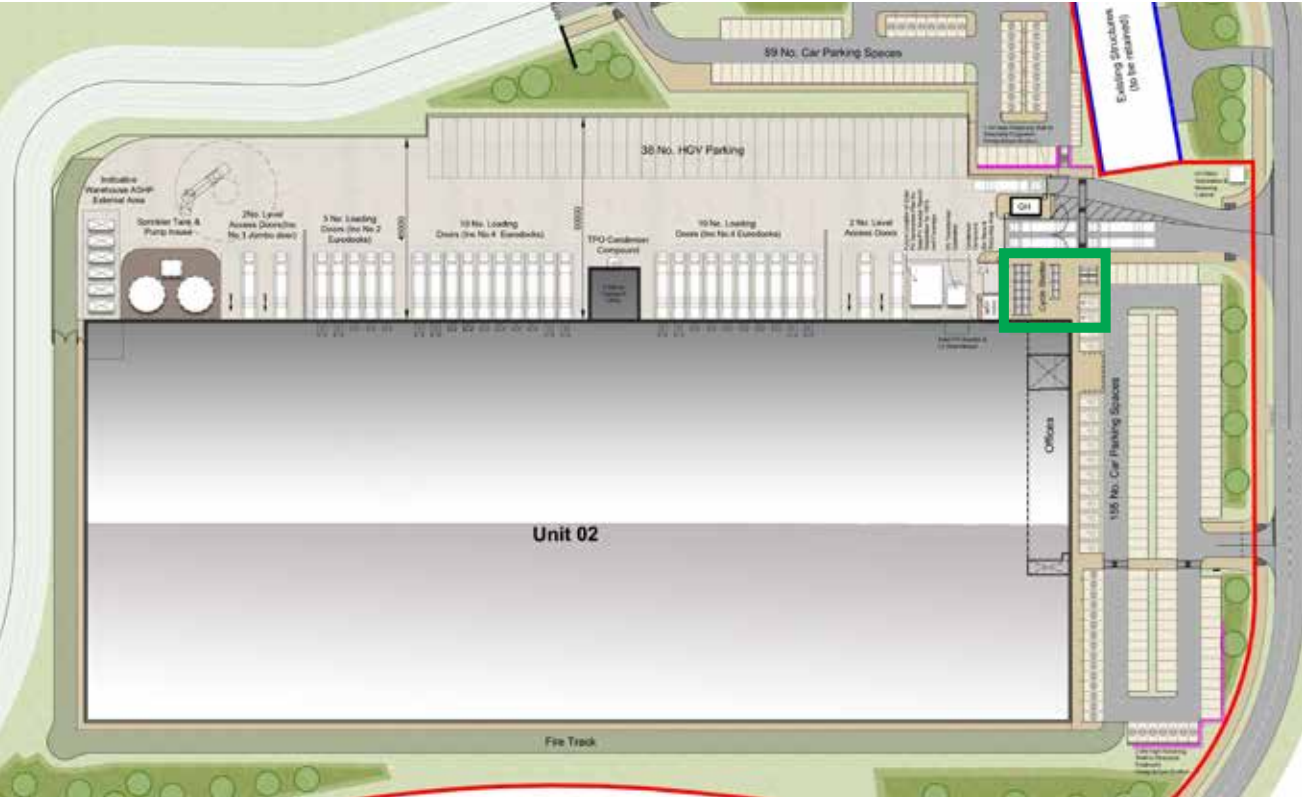
PEDESTRIAN AND CYCLE ACCESS

Footpaths will lead from the access road, via the car park, up to the office main entrances. Tactile paving and dropped kerbs will be provided at all road junctions, with further paving extended around offices and to the building perimeter.

Lighting by street lamps during hours of darkness will help to provide a safe and secure environment for the pedestrian / cyclist.

The development will be laid out to achieve accessibility for disabled occupants. All disabled car-parking bays are located as close to the main entrance as possible, with 10 cycle shelters (for 100 cycles) providing security and protection for bicycles. Safe pedestrian routes from these shelters will meet up with the route between car park and the building. All levels within the car park will have a gradient of less than 1:25, enabling wheelchair access and ambulant disabled to access the site without difficulty.

All main entrances into the unit will be 'wheelchair friendly' level entry, with automatic or manual opening doors. The doors will meet all current Building Regulations Part M requirements, with full height tubular steel handles for ease of opening. The force required to operate the doors will be below the maximum force recommended in the Building Regulations, and the effective opening width of each leaf will be designed to be more than 800mm.



06.3 PEDESTRIAN ACCESS - INTERNAL

Reception

The reception area of the main offices will be suitably sized to accommodate wheelchair users. They will include appropriate space and waiting zones. All floor finishes will be suitable for wheelchair access.

Horizontal circulation

Internal corridors will be a minimum of 1800mm wide at the pinch point. All doors will have a minimum clear opening of 800mm and an opening force below the recommended maximum.

Door furniture will contrast with the background colour of the door leaf, and be of either lever type, at 1000mm above floor level, or pull handles, commencing at 1000mm above floor level. Doors in corridors will be fitted with vision panels, commencing at 500mm above floor level.

Warehouse area

The warehouse area will be level throughout, with clearly defined pedestrian routes. There will be fire exits within the warehouse area that are to have a level threshold between the building and pathway.

Vertical circulation

Stairs will provide vertical access around the offices, and a passenger lift will provide access to all floor levels. All staircases and lifts will be designed in accordance with Approved Document M, with recommendations including contrasting nosings, and treads/risers suitable for ambulant disabled members of staff or visitors. Any member of staff, or visitor, with a visual handicap would be actively managed within the building.

Toilets

On each floor of the office, toilets will be provided for both male and female users, with separate unisex disabled toilets provided for disabled users. In addition, at least one cubicle in each male and female WC will be provided for ambulant disabled users.

Finishes

All floor finishes are to be of a non-slip type, with carpets being of a shallow dense pile, allowing easy passage for wheelchair users. The walls, wall coverings, and paint finishes are to be suitably contrasting with the joinery of the doors and low surrounds. Where wall tiles are to be used, they are to have a satin finish to reduce glare.

Means of escape

The needs of individual members of staff will be assessed using Personal Emergency Egress Plans and management arrangements introduced as necessary following appropriate risk assessments. Means of escape will be designed in accordance with Approved Document B.

07 SUSTAINABILITY AND CRIME PREVENTION



07 SUSTAINABILITY AND CRIME PREVENTION

07.1 CRIME PREVENTION

The building design and layout have been considered to minimise visual obstacles and eliminate places of concealment, and any potential dark areas will be well lit. Consideration has been given to the layout of the development to ensure personal safety. This relates not only to ensuring that the illustrative layout of the development does not create an environment conducive to crime, but also to how occupiers and visitors to the site can move freely without risk of injury.

The site boundary is to be secured with perimeter fencing, both proposed and retained, with entrance gates for vehicles and pedestrians allowing movement in and out of the site.

07.2 ACCESS AND MOVEMENT

Spaces and pedestrian routes are currently well defined with easy to recognise entrances; this provides convenient movement without compromising security. Proposed car parking is provided in the most prominent locations possible.

07.3 CAMERAS & CCTV

The design will principally focus on enhancing natural surveillance and not rely on cameras more than necessary; however, a CCTV system may be installed by the end user and could be used to enhance security on the site and aid the identification of criminals afterwards.

If a CCTV system is implemented, it is important that the system is designed by a specialist and encapsulates the main high risk areas and site pinch points of high traffic. The monitoring of the car park area may be assisted by a CCTV system as this is a larger area that is generally more difficult to observe.

The CCTV system will need to be designed in conjunction with the lighting design to avoid any unlit areas and any glare from the lighting source to the cameras. The system will need to incorporate robust anti-vandal fittings that can withstand attack, such as enclosures around the camera units, and secure fixings into the building structure or onto secure columns.

The image quality is important, with the ability to recall details of people's faces and vehicle number plates may be required therefore, careful consideration into the type of system installed will be needed. Attention into how the system will potentially be managed and monitored will also be required, whether a digital video recording system is needed, and to the timings of recording, quality, and format of the recordings will all be carefully considered.

07.4 LIGHTING

The design of the lighting system will be undertaken during the design process; the system will be designed by an appropriate electrical engineer and will be in accordance with BS 5489.

The position of lighting will be carefully considered, areas of natural surveillance will be lit evenly, creating a uniform light with minimal shadows over areas that are appropriate, such as walkways, access roads, and car parking area. The principle entrance of the plots and the building will be well illuminated to aid in way-finding and with natural surveillance.

The lux levels will be calculated by an engineer, and a lux plan will be developed that will indicate lux levels across the site with contour lines highlighting drop off. The Overall Uniformity of light will aim to achieve a rating of 0.4Uo and will not fall below 0.25Uo. This plan will be developed in conjunction with consultation with the CPDA.

Also taken into account will be colour rendering of the lighting fixtures, it is important to achieve a reasonable colour rendering in order to aid in identifying people or vehicles and create a safer feel to the site which benefits from good surveillance. There will be an aim to achieve a colour index rating of 60RA or above. All street lighting for both adopted highways and footpaths, private estate roads and footpaths and car parks will comply with BS 5489-1:2013.

Lighting will not be utilised in areas that are not appropriate, such as landscape areas or areas that are not intended for public use. This will help keep the impact the development will have on the environment to a minimum, also deter anyone from straying away from the designed traffic routes.

All lighting fixtures and fittings will be of a robust design and securely fixed to the building or stanchion posts, which in turn are securely fixed to a secure concrete base. The use of LED fittings within the lighting units will be promoted in order to reduce unnecessary light pollution and promote environmental sustainability.

07 SUSTAINABILITY AND CRIME PREVENTION

07.5 PHYSICAL PROTECTION

Relevant Key Design Principle

KDP3: Providing safe and convenient access for all users of the site including employees, suppliers or distributors, visitors and the local community, ensuring good connections beyond the site

Design Objectives

Consideration should be given to the layout of the development to ensure personal safety. This relates not only to ensuring that the layout of the development does not create an environment conducive to crime, but also to how occupiers and visitors to the site can move freely without risk of injury.

Detailed Guidance

Security Fencing

Boundary protection around service yards will be 2.4m high paladin fencing, powder coated in green as specified on Page 11 of DALDG.

Acoustic Fencing

Timber acoustic fencing could be specified and positioned in accordance with Acoustic Engineer's recommendations, based on the final layout, size and orientation of units within the development area.

These could be located close to the source of noise and may create boundaries for service yards.

The fencing should be constructed of a suitable timber or equivalent material and should be imperforate, sealed at the base, and have a superficial mass of at least 18kg/sq.m. Fencing should be tested and compliant to BS EN 1794-1 and BS EN 1794-2.

Access and Movement

Spaces and pedestrian routes are to be well defined with easy to recognise entrances; this provides convenient movement without compromising security. Proposed car parking should be provided in the most prominent locations possible.

Natural Surveillance and Lighting

Natural surveillance should be a key factor in the overall design of the site. Offices should overlook car parking and public realm, allowing a high degree of visual control. The building designs and layouts aim to minimise visual obstacles and eliminate places of concealment and any potential dark areas must be well lit.

Cycle Store

To encourage staff to cycle to work, cycle store will be provided as a purpose built structure in metal work to be finished in Black as specified on Page 11 of DALDG.

Gate House/ Security Lodges

Designed as an integral part of the development to adhere to DALDG.



Paladin Fencing



Acoustic fence on a perimeter mound



Typical Acoustic Fence



'Living' Acoustic Willow Fence

07 SUSTAINABILITY AND CRIME PREVENTION

07.6 SUSTAINABILITY

This section sets out the main sustainable features relevant to the application and is restricted principally to the future buildings and the physical features of the site, rather than encompassing the wider sustainable development issues of the site location and its surrounding infrastructure.

The issues in relation to sustainable design can be complex and drawing the right balance between all considerations is often difficult. This type of development requires an understanding of the occupiers operational requirements as the demands placed upon such buildings are not necessarily the same as for other types of development, such as domestic properties. However, the fundamental principles still apply, particularly in reducing the impact on the environment and the use of finite resources.

For a development such as this, the most significant impacts relate to material usage (principally for aggregates, concrete and steel) and the power consumed during its operation.

Elsewhere the scheme will focus on various aspects of sustainable design, potentially including all or some of the following:

BREEAM Certification

Unit 02 will be targeting BREEAM Very Good Certification (2018) with an aim to achieve excellent. At outline planning application stage, a strategy has been developed to target Very Good certification with a preliminary score in excess of the 55% required. The exact BREEAM strategy and route to Excellent certification will be progressed further during detailed design.

Energy Efficiency:

In order to deliver environmentally responsible building stock, an exemplar approach is being proposed based on low energy design principles. In summary, this approach involves energy demand minimisation through effective building form and orientation, good envelope design and proficient use of services; such that the buildings themselves are being used as the primary environmental modifier.

The general construction design standards to be adopted must exceed the requirements of the current (2021 Edition) Part L Building Regulations which stipulate an improvement on the CO₂ emissions of an aggregated 9% against 2010 standards. The building envelopes will be designed to ensure that the fabric and form of the spaces encompasses low energy sustainability principles.

Facilitating electric vehicles

Active and passive electric charging points will be provided within the car parks of each building to provide employees with the infrastructure to charge their EV's. The use of EVs (both cars and cycles) will also be encouraged via the sustainable travel plan to be developed as part of future reserved matters applications.

Water Efficiency

There are various measures that will be incorporated to reduce water consumption and demand. The specification of water efficient appliances such as spray taps and low volume W/C's will assist. In addition to toilets, shower rooms with changing and locker areas will be provided within the main offices. These amenities will be available for all personnel based at the facility, thus providing for those who choose to cycle to work. Further considerations would include:

Waste Strategy

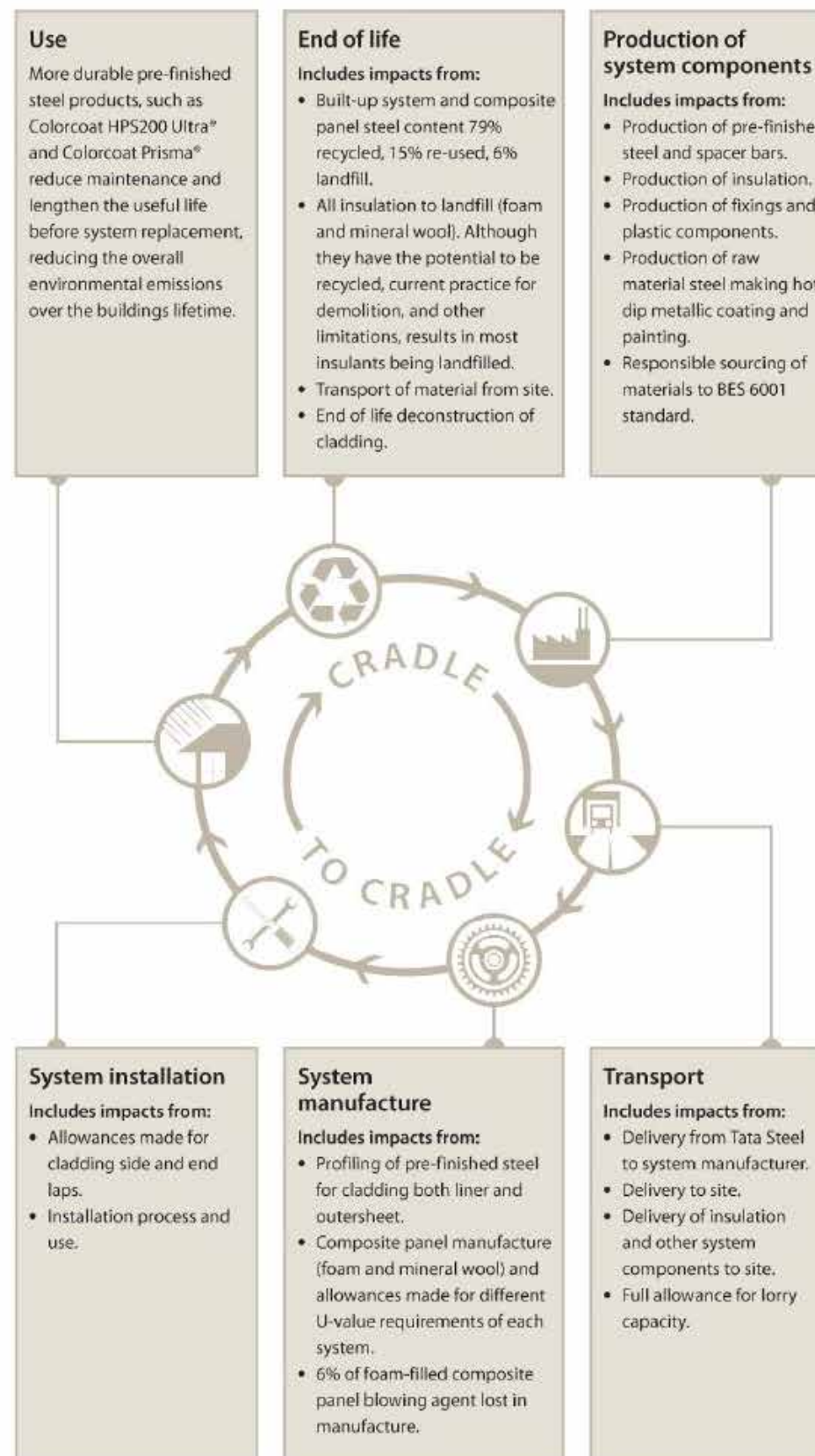
Dedicated areas for refuse will be provided to allow for adequate bin storage / compactors to suit the occupiers operations. The refuse area will not exceed 10m from the main footpath and sufficient turning areas will be provided for refuse vehicles.

Waste Management

The proposed development can provide for the careful and sustainable disposal of waste during and post construction. Modern methods of design and construction using pre-fabricated units will help to keep waste arising to a minimum. Post construction, the buildings will be provided with a dedicated area within the building for the provision of refuse and re-cycling facilities, tailored to operational requirements.

Net Carbon Zero

Tritax Symmetry Merseyside 1 Ltd. have announced that all their new developments within their portfolio will be constructed to net zero carbon in construction in line with the UK Green Building Council's (UKGBC) Net Zero Carbon Buildings Framework. By mitigating the embodied carbon generated from the development programme by funding high-quality, accredited and verified offset schemes. The Offset scheme selected is in line with the current principles set out in UKGBC's net zero framework. This is to enhance nature and wellbeing, as well as create a positive socio-economic impact in all the local communities in which the group assets are located.



08 LANDSCAPING



LANDSCAPING

08.1 PROPOSED LANDSCAPING

Planting will be utilised in the design to promote psychological barriers. The use of low level planting and shrubbery can also aid in way-finding to enhance pathways and traffic routes. Low level planting will also be utilised around the car park in order to deter criminal activity adjacent to vehicles.

No planting will be designed to impede the visible range between above 1m and below 2m, and the planting scheme will be designed in conjunction with the lighting system and potential CCTV system in order not to interfere with surveillance.

Introducing a good landscape design to the proposal incorporating an attractive and practical planting scheme will help to enhance the environment and create a better quality space.

Relevant Key Design Principle

KDP4: Maintaining a strong landscape setting which creates views and legible routes to and from buildings, connects with the surrounding landscape, and further enhances biodiversity

Design Objective

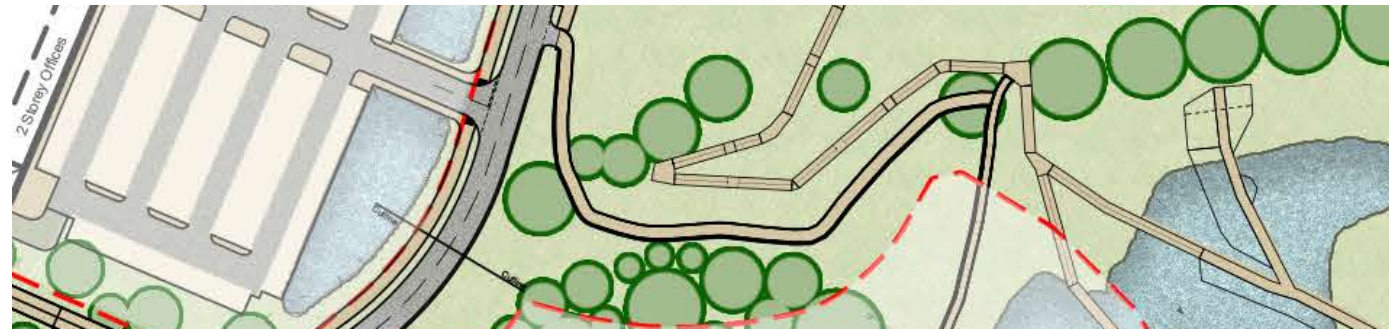
Each plot should ensure it includes adequate soft landscaping within its demise to enhance the appearance of the buildings and soften the built form. It should also provide a soft buffer between plots and complement the adjacent infrastructure landscaping.

Landscaping will be focused around car parking areas and may include trees, hedgerows, shrub beds and grassed areas. Tree and hedge planting forms a significant structural element within the plot landscape strategy helping to subtly enclose and divide areas, soften the built form and bring a human scale to large dominant structures.

Tree planting (Commercial Street)

(Medium to large: 10-20m)

The commercial area is anticipated to be primarily used for large format logistics and distribution centres. The space as outlined in the HSPD shall include wildlife corridors. To strengthen the corridors native hedgerows will be provided along boundaries in grass verges and trees will be used to enhance the green infrastructure along main corridors and at key focal points with an emphasis on softening or framing commercial buildings. Trees in this area to be planted at a large size for impact.



Internal Plot Landscaping Key Plan



1. Norway Maple



2. Birch Spp.



3. Rowan/ Mountain Ash



4. Little-leaved Linden

09 SUMMARY



09 SUMMARY

09.1 SUMMARY

This document seeks to demonstrate that the development of this site will result in a well designed, high quality scheme that is an asset to the area, and will provide a desirable development. It is anticipated that the scheme will act as a catalyst for new jobs and bring welcome investment to the local community.

The development represents an investment to the area and will help to promote and support employment growth and stimulate economic regeneration to the area, cohesive with regional and local aspirations.

The design seeks to minimise the impact on its surroundings; providing an opportunity for the development of attractive, contemporary and cohesive buildings that are fit for purpose and safe for all to use.

All design proposals contained within this report have been designed to meet the required design and sustainability policies of Knowsley Metropolitan Borough Council.

