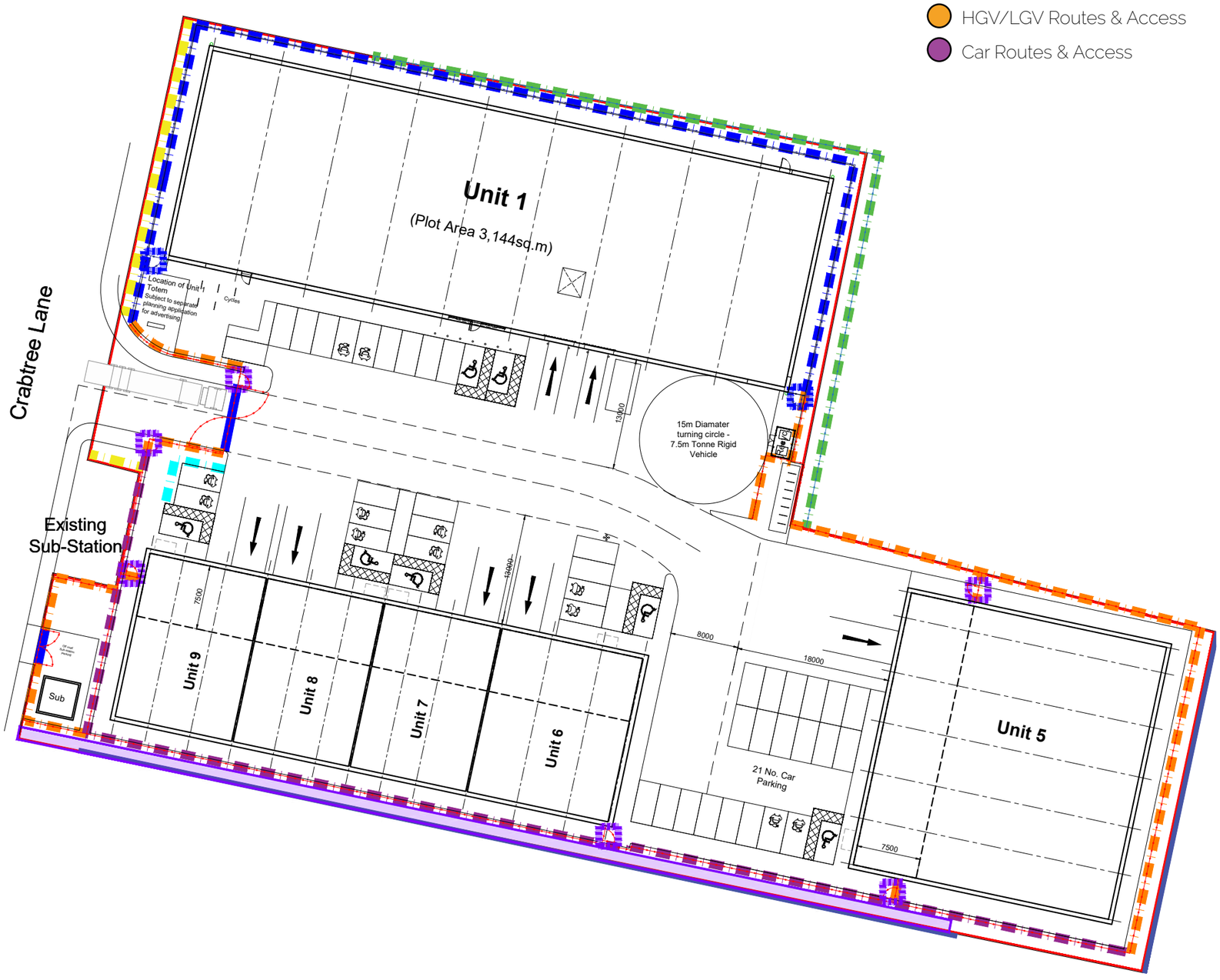
06 ACCESS



06 ACCESS



Proposed Vehicular Access Plan

HGV/LGV Routes & Access

Car Routes & Access

06.1 PROPOSED VEHICULAR ACCESS

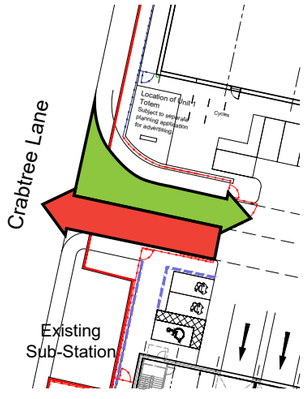
Access into the site is by Crabtree Lane. The existing access to the site is being re-developed to ensure safe, secure and efficient passage to and from the site.

Service yards have been created to the front elevations of units 1 , 5, 6&7, and 8&9. The service yards have depths that allow for sufficient circulation of HGVs for loading and unloading and vehicle manoeuvrability. Refer to UMC Architects drawing 23168-UMC-XXXX-SI-DR-A-0601_Proposed Site Plan for tracking. Service yard areas will be formed in concrete surfacing, to provide a robust base for vehicle manoeuvering.

Car parks are designed to be in open areas but include sensitive landscaping strategies to create a clear ownership demarcation. All the units will have a dedicated car park entrance and a dedicated LGV/HGV access off the central access road. The car park areas will be constructed in dense bitumen tarmacadam, which will form part of a coordinated hard landscaping strategy. The car park has been positioned adjacent to the ancillary offices to enhance natural surveillance and discourage potential criminals.

Car & HGV movement

Provide a clear and legible vehicular movement network through the site, incorporating all roads, loading areas, and vehicular parking areas. This provides efficient movement patterns for HGV/LGV/car vehicles, which will improve efficiency for potential tenants.



Site Entrance **HGV & Car In**

Site Exit **HGV & Car Out**

Access

Car and HGV/LGV traffic can access the site from Crabtree Lane, off of the adjoining A662, which connects to the M60.

06 ACCESS

06.2 PROPOSED PEDESTRIAN AND CYCLE ACCESS

Designated 2 metre wide paths have been provided as a minimum. Tactile paving and dropped kerbs will be provided on this route at all road junctions, with further paving extended around the offices and building ends.

Footpaths will be kept to a minimum and be direct to encourage heavier usage and reduce any footpaths that are rarely used. Pedestrian routes will be at the same level as vehicular traffic, with no pinch points or hidden areas created.

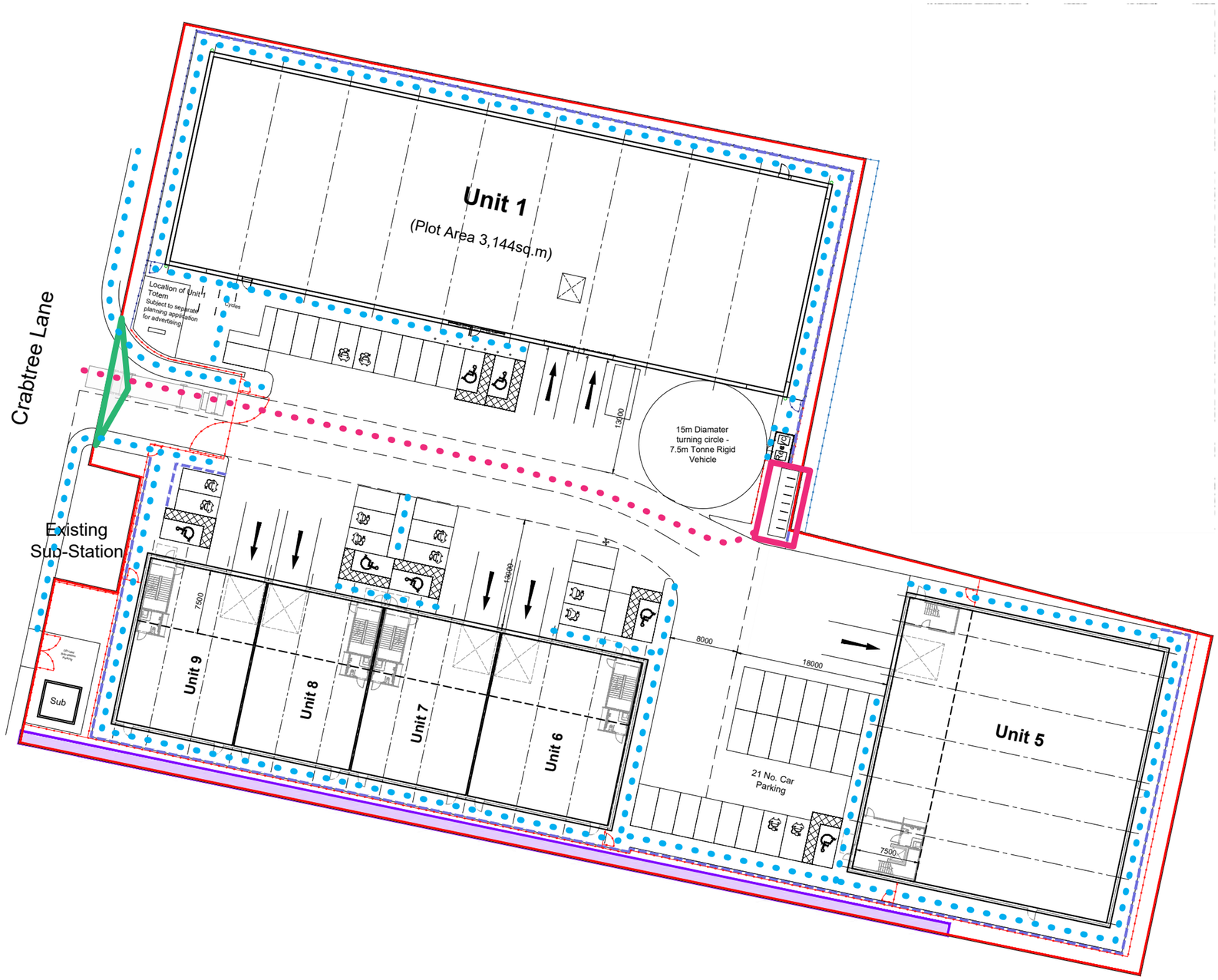
All accessible car-parking bays will be located as close to the main entrance as possible, with a cycle shelter providing security and protection for bicycles. Safe pedestrian routes from these shelters will meet up with the route between the car park and building. All levels within the car park will have a gradient of less than 1:25, enabling wheelchair access and the ambulant disabled to access the site without difficulty.

All main entrances into the building 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 (manual only) 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.

Cycle shelters will provide security and protection for bicycles. Safe pedestrian routes from these shelters will meet up with the route between the car park and buildings. Lighting by street lamps during hours of darkness will help to provide a safe and secure environment for the pedestrian / cyclist.

Pedestrian & Cycle Routes

- Proposed pedestrian routes
- Proposed cycle routes
- Cycle storage
- Entrance to the site



Proposed Pedestrian and Cycle Access Plan

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06 ACCESS

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 in accordance with Part-M Building Regulations.

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 only in Unit 5. A future lift position has been located on plans in Unit 1, and 6-9 if occupants wish to install. 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 disability 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

A Crime Impact Statement has been produced to understand and assess the level of crime in the area, in efforts to accommodate thoughful design with the ambition to combat the crime analysed within this specific area. 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.

Most aspects of the crime impact statement will be captured during detailed design. However, following vast experience the client has in owning many industrial parks of this nature, the request for 2m high blockwork wall or mesh to the inside of each building will not be implemented. This impacts on rentable and useable area. Furthermore the site is secure and end users will install CCTV and as such this requirement in this context is over designed and not cost effective to the overall scheme.

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 and BS EN-12464-1:2021.

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.

Internal lighting will coincide with BS EN-12464-1:2021 to ensure sufficient, appropriate and energy efficient lighting solutions are provided. These solutions will be procured by a competent consultant. The internal lighting solutions will ensure that an adjustable system is integrated that:

- benefits available daylighting.
- accounting for occupancy of the space.
- changes in visual tasks can be catered for.
- changes of occupants preferences or needs can be catered for.

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07 SUSTAINABILITY AND CRIME PREVENTION

07.5 OWNERSHIP

It is important to design and create a space that feels safe, is enjoyable,and is pleasant to use. This will promote the appropriate kind of use and generally discourage potential criminals. A site that is well used will benefit from increased natural surveillance and the reporting of inappropriate behaviour.

The design will encapsulate this sense of space by creating an open, light space that has very clear defined routes for vehicles and pedestrians. Use of imposing fencing or inappropriate security enforcement will be kept minimal, while the use of natural barriers and psychological deterrents will be promoted.

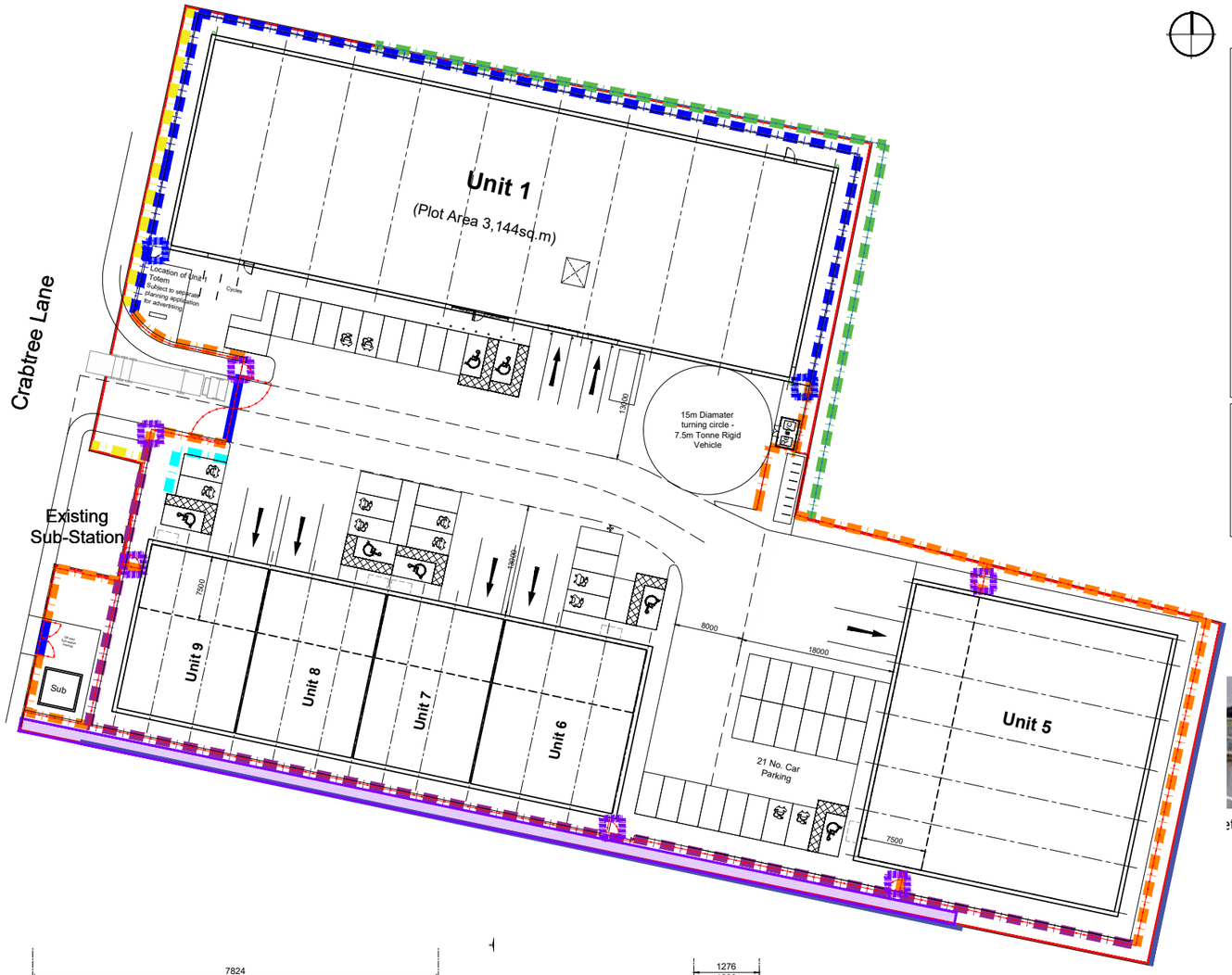
Landscape design and appropriate planting will be used to create a pleasant environment, along with good lighting and pleasant outdoor furniture. The selection of materials for the road and pathway is important to be used as way-finding and to slow down vehicular traffic.

07.6 PHYSICAL PROTECTION

Perimeter boundaries to service yard areas will require a higher level of security and will typically be secured by utilising 2.4m high security fencing, which will be a secured paladin panel fence system. The black paladin fence positioned around the site can be seen on UMC Architects drawing 23168-UMC-XXXX-SI-DR-A-0701_Proposed Boundary Treatments. The design of which will incorporate a non-broken metal mesh that will inhibit climbing and stop wind blown littering from occuring. This fencing has been consistently used by the client/applicant through a vast majority of similar scaled schemes. The fencing will be of robust design and resistant to attack, with robust galvanised steel fixings to BS EN ISO 1461:2009. Posts will be of coated steel construction with a wall thickness of at least 1.5mm and be securely fixed to the ground into concrete pads, and resist upheaval. Drawing 23168-UMC-XXXX-SI-DR-A-0701_Proposed Boundary Treatments also shows 1 x 2.4m high sliding vehicle gates and 3 x 2.4m high personnel gates.

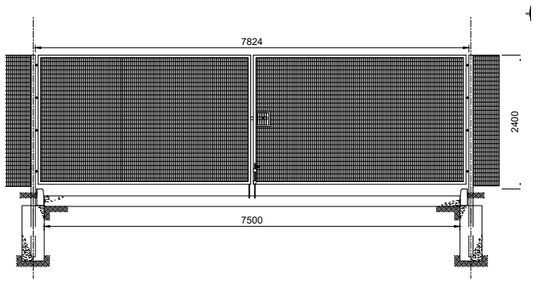
No structures or planting will reside in proximity to the security fencing in order to avoid potential climbing. During the design process and once the end users are involved with the development consultation with the CPDA will outline the fencing strategy and design.

All fencing will be erected on site by an approved installer.

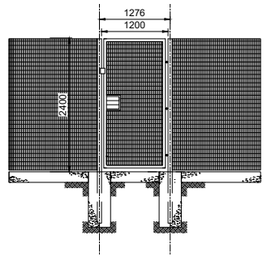




Site Boundary Treatments Plan



Main Entrance: Vehicle Gates Elevation



Typical Personel Gate Elevation

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07 SUSTAINABILITY AND CRIME PREVENTION

07.7 SUSTAINABILITY

With the current emphasis placed on energy conservation and the use of LZC technologies outlined below, the applicant is keen to enhance the development's sustainable credentials both from an estate and public perspective.

In order to deliver an environmentally responsible building, an approach based on low energy design principles is proposed. This approach involves energy demand minimisation through effective building form and orientation, good envelope design, and proficient use of services.

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.

Long-term energy benefits are best realised by reducing the inherent energy demand of the building in the first instance. Therefore, the building envelope will be designed to ensure that the fabric and form of the office and warehouse spaces encompass low energy sustainability principles as follows:

Air Tightness
In accordance with the requirements of a low energy building, the air tightness characteristics will be addressed. Through robust design and detailing, the building will achieve high air tight standards to mitigate air leakage, far in excess of current Building Regulation minimum requirements.

Natural Daylight/Rooflights
High levels of natural daylight will be provided, wherever possible, through effective window design and 15% roof lights to the warehouse space to reduce the need for artificial lighting.

Lighting Strategy
It is imperative that the lighting design philosophy provides the correct quality of lighting with minimum energy input and hence reduce internal heat gains. Throughout the office, lighting will be appropriately zoned to allow control of luminaries via switches/ absence detection and daylight sensors.

BREEAM
In order to benchmark the environmental performance of the building, the applicant will carry out an assessment against the Building Research Establishment (BRE) Environmental Assessment Method (BREEAM). This is a voluntary scheme that aims to quantify and reduce the environmental burdens of buildings by rewarding those designs that take positive steps to minimise their environmental impacts. Projects are assessed using a system of credits which results in a formal certification giving a rating on a sliding scale. The proposed building will aim to achieve a BREEAM rating of Very Good for unit 1, and Excelent for units 5 & 6-9.

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 incorporating 2023 amendments Part L Building Regulations which require an improvement on the CO2 emission figures and a need to meet a Target Primary Energy Rate against 2013 standards. The building envelopes will be designed to ensure that the fabric and form of the spaces encompasses low energy sustainability principles.

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.

Waste Strategy
The location of areas for refuse will be internal and managed by the incoming tenants.

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.

Electric Car Charging Point
18 N° external car charging spaces are to be provided, thereby allowing staff or visitors to recharge their electric cars when at the premises. All spaces will be ducted for additional chargers to be added in the future.

Cycle Store and Showers
To encourage staff to cycle to work, cycle stores and provision for showers to be installed once end user occupiers are known.

PV Solar Panels
The scheme proposes future provisions for photovoltaic panels to be installed, located on roofs of units 5 & 6-9 only. This renewable energy source absorbs sunlight and generates direct current electricity reducing fossil fossil fuel dependency.

Use

More durable pre-finished steel products, such as Colorcoat HPS200 Ultra® and Colorcoat Prisma® reduce maintenance and lengthen the useful life before system replacement, reducing the overall environmental emissions over the buildings lifetime.

End of life

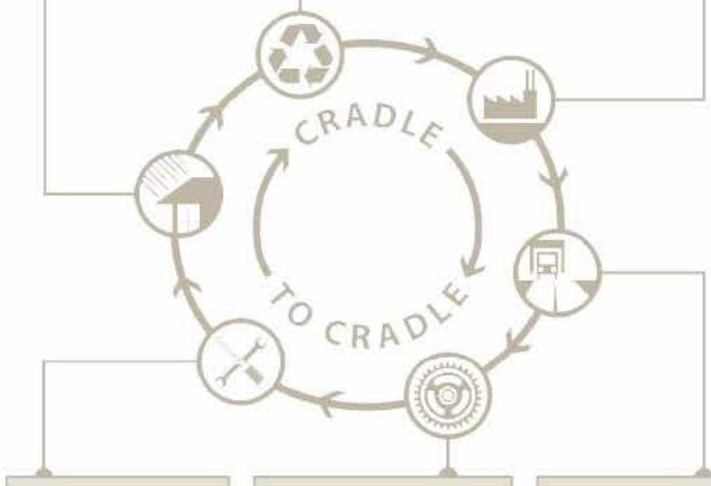
Includes impacts from:

- Built-up system and composite panel steel content 79% recycled, 15% re-used, 6% landfill.
- All insulation to landfill (foam and mineral wool). Although they have the potential to be recycled, current practice for demolition, and other limitations, results in most insulants being landfilled.
- Transport of material from site.
- End of life deconstruction of cladding.

Production of system components

Includes impacts from:

- Production of pre-finished steel and spacer bars.
- Production of insulation.
- Production of fixings and plastic components.
- Production of raw material steel making hot dip metallic coating and painting.
- Responsible sourcing of materials to BES 6001 standard.



System installation

Includes impacts from:

- Allowances made for cladding side and end laps.
- Installation process and use.

System manufacture

Includes impacts from:

- Profiling of pre-finished steel for cladding both liner and outersheet.
- Composite panel manufacture (foam and mineral wool) and allowances made for different U-value requirements of each system.
- 6% of foam-filled composite panel blowing agent lost in manufacture.

Transport

Includes impacts from:

- Delivery from Tata Steel to system manufacturer.
- Delivery to site.
- Delivery of insulation and other system components to site.
- Full allowance for lorry capacity.

Confidex SUSTAIN

Born and bred in the UK for a lower carbon footprint

SYSTEM CERTIFICATION ISO 14001 SGS

UKAS ENVIRONMENTAL MANAGEMENT 005

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08 LANDSCAPING

08 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.

Refer to drawings by Urban Green for further detailed information.



Proposed Landscaping Plan

Key

Hard Works

Vehicular Asphalt Surface
Black colour. To engineer specification & recommendation

Pedestrian Asphalt Surface
Black colour. To engineer specification & recommendation

Proposed 2.4m Paladin Fence
Including matching gates as required
Colour: Black

Proposed 2.4m Paladin Fence
Including matching gates as required
Colour: RAL 5002

Retaining Wall
To engineer specification & recommendation

Soft Works

Proposed Tree
Refer to planting schedule.

Existing Native Shrub Mix
To be retained and improve.

Proposed Native Shrub Planting

Plant Schedule

QTY	UNIT	CODE	PLANT NAME	STOCK	FORM	GIRTH/ HEIGHT
Trees						
2	No.	ALN GLU hs	Alnus glutinosa	RB	STD	12-14cm
3	No.	BET PEN hs12	Betula pendula	RB	STD	12-14cm
2	No.	Pop Tre hs	Populus tremula	B	STD	12-14cm
2	No.	SOR AUC hs	Sorbus aucuparia	RB	STD	12-14cm

PERCENT	QTY	UNIT	PLANT NAME	STOCK	SIZE
Plant Mixes					
582m2 NATIVE SCRUB MIX 2 planted @2/m2					
15%	175	No.	Corylus avellana	B Trans	60-80cm
15%	175	No.	Crataegus monogyna	B Trans	60-80cm
15%	175	No.	Prunus spinosa	B Trans	60-80cm
15%	175	No.	Sambucus nigra	B Trans	60-80cm
10%	116	No.	Rhamnus cathartica	B Trans	60-80cm
10%	116	No.	Rosa canina	B Trans	60-80cm
10%	116	No.	Salix lantana	C2L	20-30cm
5%	58	No.	Lonicera periclymenum	C2L	20-30cm
5%	58	No.	Rubus fruticosus	C2L	20-30cm
Individual varieties to be planted in groups of approximately 3-5.					

Notes and Abbreviations		
B	=	Bare root (bagged).
C	=	Container (or pot) grown, followed by size of the container (or pot).
FORM	=	Shape of tree as supplied by the nursery.
QTY	=	Quantity
RB	=	Rootballed (balled and wrapped).
Std	=	(clear stem) Standard.
STOCK	=	Root condition/protection method eg Bare root.
Trans	=	Transplant (or undercut seedling).
- Refer to specification for further information.		
- All plants to be completely hardened off		
- Substitutions to be agreed with Landscape Architect.		

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09 SUMMARY

09 SUMMARY

09.1 SUMMARY



Indicative CGI

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 polices of Manchester City Council.

umc architects

UMC Architects, Third Floor, Manchester Club,
81 King Street, Manchester, M2 4AH

o. +44 (0)161 413 0590
e. info@umcarchitects.com

www.umcarchitects.com