

08 SUSTAINABILITY AND CRIME PREVENTION



08 SUSTAINABILITY AND CRIME PREVENTION

08.1 CRIME PREVENTION

Consideration has been given to the site layout to ensure personal safety and align with general 'Secured by Design' principles. This relates to ensuring that the layout for the development does not create an environment conducive to crime. It is envisaged that additional crime prevention advice will be sought, once an occupier has been identified for the unit and how occupiers and visitors to the site can move freely without risk of injury.

08.2 SURVEILLANCE

Natural surveillance will be a key factor in the overall design of the site and the positioning of the offices overlooking proposed car parking will offer a high degree of visual control. The building's design and layout will minimise visual obstacles and eliminate places of concealment and any potential dark areas will be well lit.

Formal Surveillance

At present there is no specific occupier for the building and therefore any formal surveillance solution will need to be agreed at a future time.

However it is acknowledged that presence of staff and CCTV provides reassurance and a deterrent to potential offenders.

Staff need to be located in prominent positions so they can oversee and be seen. The effectiveness of CCTV depends on the number and location of cameras, the quality of the image and the monitoring in place.

Examples of good practice include:

- The use of windows on all habitable spaces within the main offices to all units
- Regular monitoring and patrolling if required by security staff
- The use of high visibility vests
- The placement of CCTV cameras so they cover each other to deter vandalism
- Alarming of the CCTV system
- Placement of the CCTV so that their view is unobstructed and well illuminated.
- Identification and highlighting of CCTV positions.
- Quick and efficient maintenance and repair of CCTV systems.

Informal Surveillance

Through informal surveillance staff can both see and be seen by passers-by, road users, residents and any other local workers.

Examples of good practice include:

- Good illumination throughout the site
- Low level planting to avoid dark or obscured areas
- The use of windows on all habitable spaces within the main and hub offices
- Location of high risk areas such as bicycle and motorcycle parking close to the main entrance to the buildings with the highest pedestrian traffic flows.



Indicative Office Informal Natural Surveillance

08 SUSTAINABILITY AND CRIME PREVENTION

08.3 LIGHTING

Exterior lighting will be designed taking into account the following standards:

BS 5489-1:2013 Code of Practice for the Design of Road Lighting

BS EN 12464-2:2014 Light and Lighting – Lighting of work places

GN01:2011 Institution of Lighting Professionals (ILP) Guidance Note for the Reduction of Obtrusive Light

Lighting and the Environment – A Guide to Good Urban Lighting, Chartered Institution of Building Services Engineers (CIBSE)

Bat Conservation Trust (2014) Artificial Lighting and Wildlife. Interim Guidance: Recommendations to help minimise the impact of artificial lighting. In addition the following criteria will be utilized as a basis for the scheme:

The estate road, car park and service area will be illuminated during the hours of darkness to an appropriate lighting level for both operation and safety.

The lighting lux levels will be kept to a minimum when adjacent any natural habitats, and will avoid direct light spill into sensitive locations.

Lighting will be a combination of building mounted and column mounted lighting units. The lighting design will utilise good quality, attractive 'dark sky' fittings, directed downwards and with no spillage above the horizontal to avoid light pollution.

The mounting height of lighting units should be no greater than 12m.

For the access roads and car parking areas all mounting heights will be 8 to 10m.

Lighting impacts on all receptors will be minimised by careful design. If needed, baffles and shields can be attached to lighting units to further reduce lighting effects.

08.4 PHYSICAL PROTECTION

General

It is important that any development responds to the issues relating to security, such as criminal and anti-social behaviour, by incorporating such physical design features as listed below:

- Barriers to the service area and car park entrances to provide out of hours security.
- Secure parking for cycles located in highly visible and supervisable locations.
- Buildings of robust construction as illustrated within the submitted documents
- All external doors fitted with secure frames and locks.
- 2.4m high security fencing including access gates to the full perimeter of the service area.

08.5 GENERAL MAINTENANCE

General

In the absence of any confirmed occupiers, we can offer examples of the management and maintenance that will be put forward as good practice:

- Regular storage of plant, machinery, materials and supplies should not be permitted outside of the confines of the secured service area.
- The CCTV, lighting and alarm system should be regularly maintained and immediately repaired / replaced if faulty to ensure the safety and security of the development and its users.
- Access controls to the external and internal door sets, gates and barriers are essential to the security of this scheme and it is most important that these systems are regularly maintained.
- Cleaning, litter picking, removal of graffiti and repair of damage arising from vandalism should be carried out promptly to maintain a culture of care and respect. A lack of maintenance often attracts further abuse.



Plot Frontages



Security Fencing

08 WASTE MANAGEMENT

08.6 SUSTAINABILITY

This section sets out the main sustainable features relevant to the application and is restricted principally to the 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 occupier's 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:

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.

08.7 WASTE AND RECYCLING

The waste and recycling capacity has been based on the local authority's Waste and Recycling provisions for commercial developments. Adequate provision for bin storage has been made for each commercial unit speculatively.

Dedicated bin stores provide provision for segregation of waste into refuse and recycling as necessary, away from buildings to minimise potential risk of fire spread.

The general construction design standards to be adopted must exceed the requirements of the current (2013 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.

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 could be provided within the main offices. These amenities could be available for all personnel based at the facility, thus providing for those who choose to cycle to work.

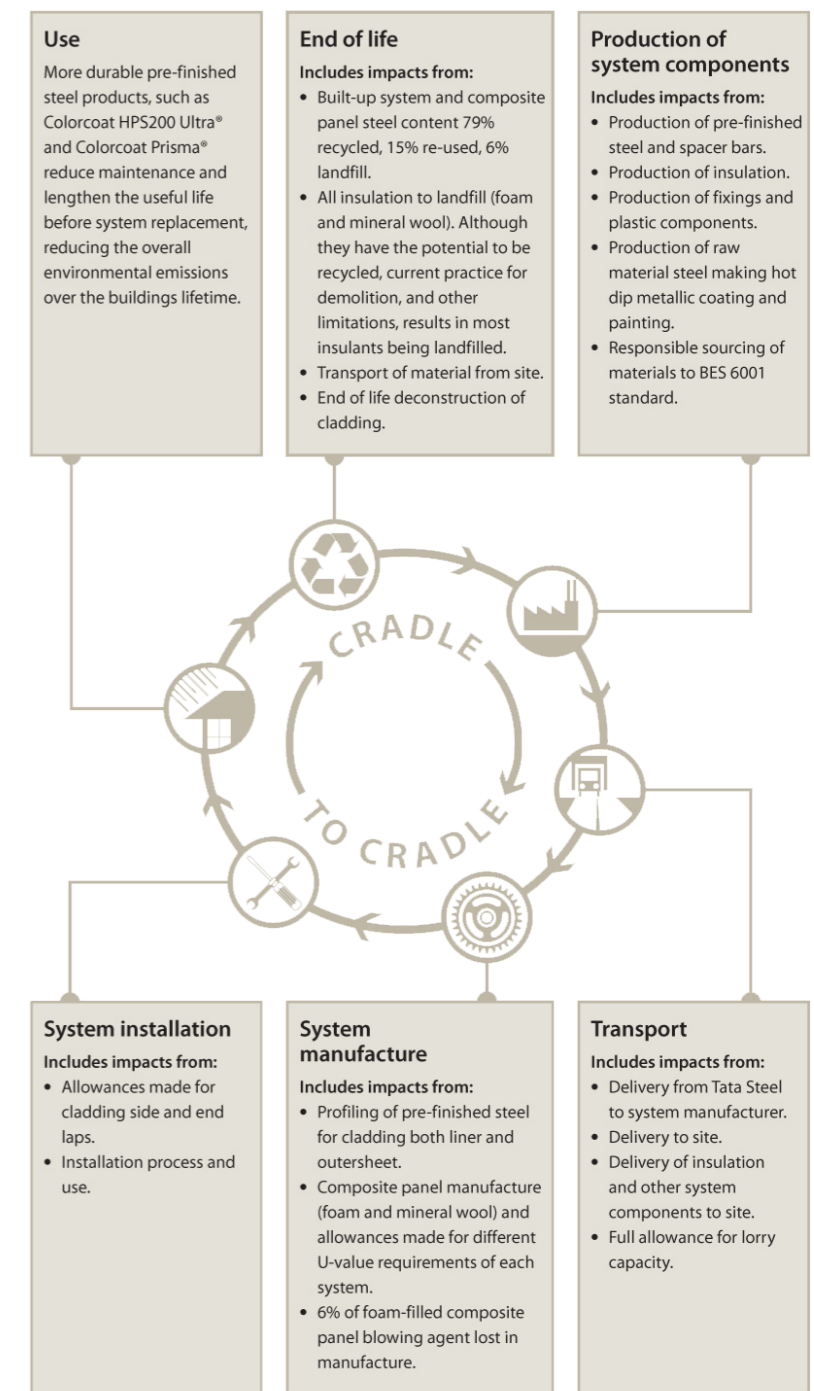
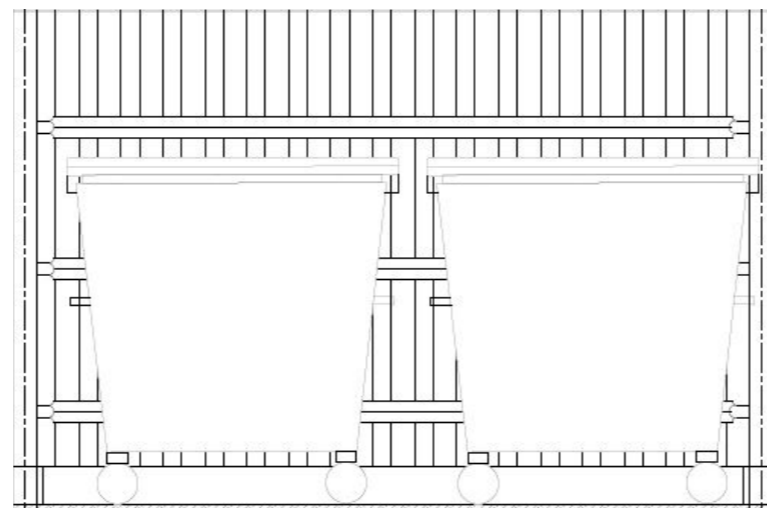
Further considerations would include:

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.



09 SUMMARY



09 SUMMARY



09.1 SUMMARY

The design proposals have been developed with due regard to the existing site, its context and surroundings, to create a carefully sited, appropriately sized building which meets the client's brief. The design seeks to minimise the impact on its surroundings; providing an attractive, contemporary and cohesive design that is 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 the Runnymede Borough Council.

The proposals represent a high quality development and a substantial investment, which will help to promote and support employment growth and stimulate continued economic investment to the area, cohesive with regional and local aspirations. It is anticipated that the development will act as a catalyst for further development to create additional new jobs and investment for the local community.

UMC Architects, Newark Beacon Innovation Centre,
Cafferata Way, Newark, Nottinghamshire NG24 2TN

o. +44 (0)1636 653027
f. +44 (0)1636 653010
e. info@umcarchitects.com

www.umcarchitects.com

