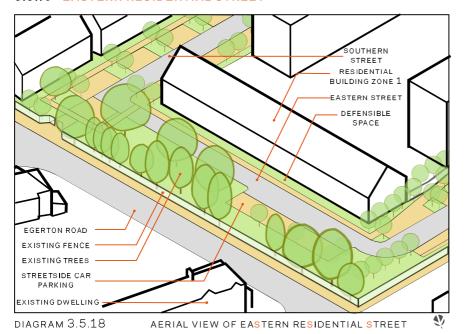
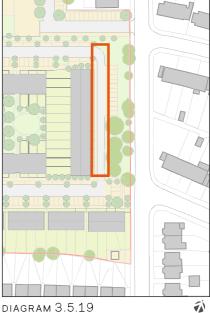
3.5.10 EASTERN RESIDENTIAL STREET



3.5.10.1 **OVERVIEW**

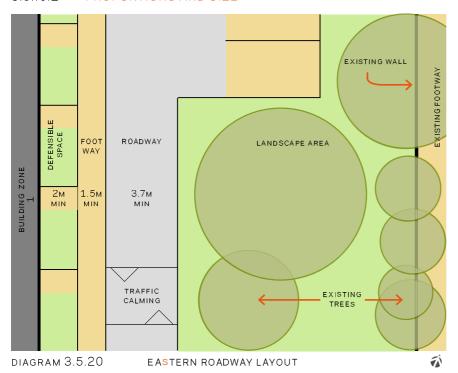
The eastern residential street should connect the southern and northern streets in the residential development zone. To the west it should be bounded by, and should provide access to, residential building zone 1 while to the east it should face onto the retained open space adjoining Egerton Road. The existing boundary wall along Egerton Road should be retained in order to protect the existing habitat and character of the open space and to discourage 'short-cutting' across the open space. Refer to diagrams 3.5.18 and 3.5.19 for illustration.

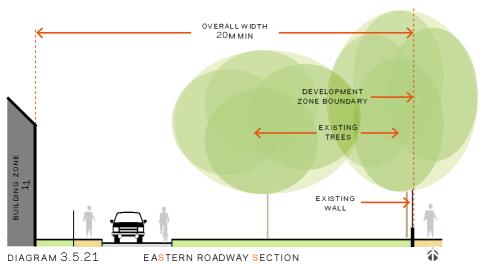
Pedestrian access within the Residential Site should also be possible along this route, and should be accommodated through a dedicated footway running alongside the roadway, as illustrated in diagram 3.5.20, while passing foot traffic should be encouraged to use the broader footway along Egerton Road.



PLAN OF EASTERN RESIDENTIAL STREET

3.5.10.2 PROPORTIONS AND SIZE





The eastern street should be a well-defined street clearly defined and overlooked by the building(s) in Residential Building Zone 1, as described in section 3.2.5. These should be designed to face the street, with defensible spaces between the dwellings and footways, as described in section 5.3. Parking along the street should be minimised in order to maximise the open space and protect the existing trees. Where parking is provided and where space allows, echelon or perpendicular parking should be provided to one side of the street in order to minimise space given over to car parking and improve safety by discouraging high speeds and signifying that the overall space is for 'place' activities and not merely for movement.

Diagrams 3.5.20 and 3.5.21 illustrate the layout of the eastern street, including minimum dimensions.

3.5.10.3 VIEWS

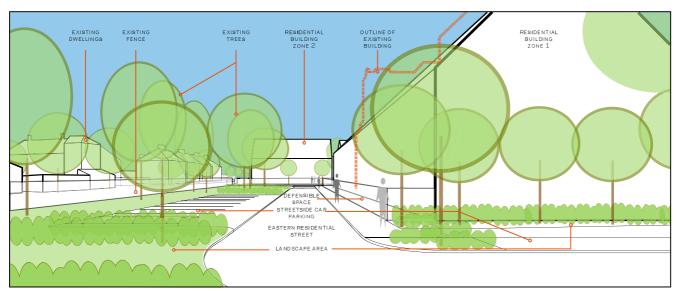


DIAGRAM 3.5.22 ILLUSTRATION OF VIEW SOUTH ALONG EASTERN RESIDENTIAL STREET

The eastern street should support and maintain a condition along Egerton Road that is similar to the existing character in this area, whilst providing access to the residential redevelopment. The open space adjoining the eastern street should provide a sense of openness to this part of the residential site, and should ensure a positive relationship of the site to its context. The design of the building(s) in Residential Building Zone 1 should feature prominently in views along this street, and should be designed accordingly. These buildings should be sized to ensure a transition between the scale of the Heatham Estate and the College & Harlequins Stadium, and should be designed with sympathy to the scale of the existing College buildings in this location.

In order to provide a clear delineation between the street and private amenity spaces within the block, ensure adequate enclosure of the street, maximise active frontages, and retain potential for visual permeability where appropriate, residential building zone 1 should be no less than 3/4 solid where it borders onto the eastern residential street.



3.6 CAR PARKING

Car parking areas will be important parts of the open spaces of the redeveloped site. They should be designed to be safe & attractive, and to avoid the creation of a car dominated Public Realm.

3.6.1 GENERAL GUIDELINES

Car parking areas should be carefully positioned so that they do not dominate the main arrival areas and entrance points around the buildings, while being open and visible, where above ground, from main entrances. Accessible car parking spaces should be provided near to entrances to promote inclusivity and should be designed in accordance with relevant local, regional and national policy and best practice.

Where possible, surface car parking should be broken up with trees or other suitable planting, and should be design/landscaped to avoid the creation of car-dominated spaces. Where the area for car parking may limit tree protection areas, suitable protection and mitigation measures as defined in the arboricultural report should be followed. Surfacing should be chosen to avoid the creation of large areas of tarmac, and permeable materials should be used wherever possible to reduce run-off. Streetside car parking should be materially distinct from the roadway to improve legibility; to reduce the apparent width of the roadway, reduce speeds and improve safety; and to enhance the appearance of the public realm by minimising areas of tarmac.

3.6.2 NUMBER OF CAR PARKING PLACES

Car Parking places should be provided in accordance with the parking addendum to Policy 6.13 of the London Plan and Appendix 4 - Parking Standards of the LBRuT Development Management Plan.

The total number of car parking places applied for in each development zone as part of the application is identified in the Development Specification.

3.6.3 RESIDENTIAL STREET-SIDE PARKING AREAS

In residential areas, street-side car parking with integrated landscaping, traffic calming measures and pedestrian crossings should be encouraged. This should limit the amount of land required for roads & car parking, increase pedestrian safety through reduced traffic speed, and enable development consistent with the surrounding context. Street-side car parking spaces should be integrated into the landscape design and should be compatible with the rhythm of the tree planting.

Where street-side car parking is provided and where space allows, echelon or perpendicular parking should be provided to one side of the street in order to minimise space given over to car parking and to improve safety by discouraging high speeds and signifying that the overall space is for 'place' activities and not merely for movement.

3.6.4 RESIDENTIAL FORECOURT PARKING AREAS

Forecourt or 'front garden' car parking should only be acceptable where other options are not possible. In no case should 'front garden' car parking be permitted where this would result in the loss of an equivalent number of street-side car parking spaces. In the limited cases where 'front garden' car parking would be acceptable in principle, it should be designed to cause minimum intrusion and harm. Any 'front garden' car parking should conform to the standards identified in the LBRuT "Front Garden and Other Off Street Parking Standards" SPG.

3.6.5 OFF-STREET SURFACE PARKING AREAS

In order to prevent the creation of extensive, car-dominated spaces, no more than 10% of the total number of car parking spaces in the Residential Site should be provided as off-street surface parking.

Off-street car parking areas should be located to minimise potential conflicts with pedestrians, to minimise the number of access points required, and to prevent the creation of unsupervised areas - particularly where these would be adjacent to private gardens. Off-street car parking areas should be designed to minimise traffic speed, and should not create opportunities for 'short-cutting' through car parking areas.

3.6.6 PODIUM, BELOW GRADE AND UNDERCROFT PARKING AREAS

Where practical, off-street car parking should be integrated into an enclosed podium, or undercroft area as illustrated in diagrams 3.6.1 and 3.6.2. This should minimise the area of site given over to car parking, whilst ensuring that adequate site area will be available for other uses, including private gardens, communal amenity areas, and other open spaces.

Access to such car parking areas should be should be located to minimise potential conflicts with pedestrians, and to minimise the number of access points required. Where practical, access to different off-street car parking areas should be combined in order to support the same goals. Where podium or undercroft car parking is provided, the identity of different access points and circulation cores should be readily distinguishable to improve wayfinding and safety, as illustrated in diagram 3.6.3. Entrances to enclosed car parking should have controlled access and should be secure.

Where podium car parking is provided, the area on-top of the deck covering the car parking should be used to provide for outdoor spaces, including private gardens and communal amenity areas. Where podium car parking areas abut private gardens, they should be designed to maintain the privacy and security of the private gardens, and where they are adjacent to dwellings with an aspect in the direction of the podium car park, they should be set back from the dwelling in order to provide a private defensible space, as described in section 5.3, and to ensure adequate natural light to the dwelling. Where the adjoining dwelling does not require an aspect in the direction of the podium, the car parking area and podium can abut or extend into the building footprint, as illustrated in diagram 3.6.1.

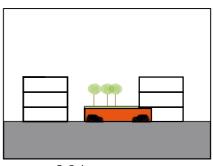


DIAGRAM 3.6.1 PODIUM CAR PARKING

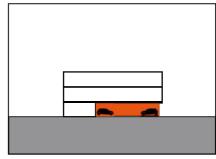


DIAGRAM 3.6.2 UNDERCROFT CAR PARKING



DIAGRAM 3.6.3
CIRCULATION CORES SHOULD BE
DISTINCT AND READILY IDENTIFIABLE

SECTION 4 OPEN SPACES & LANDSCAPING

4.1 OPEN SPACES SITE-WIDE

A series of open spaces should form a clear and organised Public Realm, composed of coherent and distinct places which should offer an important and positive contribution to their context.

4.1.1 INTRODUCTION

These open spaces have been organised into specific areas and different typologies to create appropriate spaces suitable to meet a broad range of needs in a diverse set of conditions.

In order to ensure that the open spaces remain coherent and meaningful places, these may cross the boundaries of different Development Zones. Where open spaces fall within multiple development zones, they will need to be addressed by both Reserved Matters applications. This should ensure that the Public Realm retains its integrity across zone boundaries.

These open spaces of the redevelopment should be the most obvious and important parts of the Public Realm, as well as important private outdoor spaces. Their design is therefore just as critical as the design of the buildings themselves when creating a sense of place. Design Guidelines for each of these areas is found in sections 4.3-4.8.

4.1.2 OPEN SPACES AND LANDSCAPES



DIAGRAM 4.1.1 OPEN SPACES AND LANDSCAPES

1) REEC ENTRANCE AREAS

4) SHARED AMENITY AREAS

5) PRIVATE AMENITY AREAS

2) REEC GARDEN AREAS

3) REEC PLAY AREAS

6) LANDSCAPE AREAS

4.2 OPEN-SPACE & LANDSCAPE

GUIDELINES

The open spaces and landscapes should be important parts of the redevelopment, and should make an important contribution of the redevelopment to its environment. In order to secure high quality spaces they should conform to the following design guidelines.

4.2.1 INTRODUCTION

All open spaces and landscapes should be attractive, designed appropriately for their intended for use, be well lit at a level appropriate to their context and use, and have appropriate furniture and signage integrated into their design.

4.2.2 FRONTAGES AND ENCLOSURE

Building frontages should be of sufficient height to offer a strong definition to open spaces, and the relationship between the frontage and the open space should be considered.

Landscape features such as walls, trees and planting, street furniture, lighting, covered walkways, cycle parking, postal boxes, utility infrastructure, signage, etc may protrude beyond the Building Zone extents as indicated in the Parameter Plans. Where such features are provided, they should reinforce the overall design and use of the space within which they are located, and should not create unsafe or difficult to supervise locations.

4.2.3 DAYLIGHT & SUNLIGHT

The design of each open space should be cognisant of its microclimate and take measures to ensure a pleasant environment is created for people to enjoy. Built frontages should be designed to ensure open spaces achieve adequate levels of daylight & sunlight over the course of the day and year.

4.2.4 VARIETY

The grounds of the College and Schools should offer a variety of different settings for sports, outdoor teaching, social and recreational activities. Shared residential amenity areas should offer a variety of different settings for social and recreational activities for different age groups. Links between indoor and outdoor spaces should be optimised.

4.2.5 DRAINAGE

There should be a good balance between hard and soft landscaping. The redevelopment should include a sustainable drainage strategy, prioritising drainage according to the hierarchy in the Borough's Policy DM SD 7, and where practical should incorporate SUDS.

4.2.6 PLANTING

Landscaping should be designed to use a wide range of plants and tree species, encouraging biodiversity and using local or indigenous species where possible.

4.2.7 LIGHTING

External amenity and sports areas may require specialised lighting, enabling activities to continue during hours of darkness, as appropriate. Flood lighting should not be provided to the Sports Pitches on the Playing Field Site.

Consideration will need to be given to ensure that adjacent buildings and spaces (eg residential buildings, public highway, wildlife habitat areas, etc) are not adversely affected by glare or lighting spill.

4.2.8 SECURITY

Open spaces and landscapes should be should be safe and attractive environments that are designed to be easily supervised, and where possible designed to encourage passive surveillance. They should be appropriately lit, with clear lines of site, and where possible, be provided with clear boundaries that do not create areas that are concealed. Open Spaces should be designed in accordance with Secure by Design principles.

4.2.9 ACCESSIBILITY

External spaces should be designed for inclusion and accessibility.

School, College and residential play spaces should provide facilities for physical and non-physical activities to meet young people's varying needs. Attention must be given to disabled access, including provision of *Level Access*.

There must be adequate shelter from the sun and from prevailing winds, in particular where there are Pupils with complex health needs. Shelter for outdoor space can be provided by planting as well as structures such as canopies.

Access to and through soft landscape areas along defined pathways should not require special footwear and should be easily maintained, with any all-weather surfaces provided being located so that users do not have to cross grass to reach them.

4.2.10 EMERGENCY ACCESS

Landscaping should be designed to allow access for emergency and servicing vehicles where necessary. These routes should be fully integrated with the landscape design and be allowed for by the careful placement of trees and street furniture, they should not compromise the integrity of the Public Realm.

4.2.11 CLIMATE CHANGE

The redevelopment should take account of climate change adaptation measures in planning transitional and external spaces, to reduce internal temperatures and provide outdoor shelter. (Transitional spaces range from unheated atria and covered walkways to more minor spaces, such as covered verandas and porches. This is to reduce energy use and extend usable space in a changing climate.)

4.2.12 MATERIALITY

Open spaces should have appropriate materials assigned to different places depending on their character and use. All paving materials should be high quality, durable and resilient, and where possible they should be natural. The palette of materials should be chosen to complement each other and their use should

provide continuity between different places within the redevelopment, and with the existing context.

4.2.13 STREET FURNITURE

Street Furniture should be designed and sited to avoid clutter, visual intrusion and should not create risks to safety or have adverse implications for disabled people. 'Defensive' street furniture such as bollards and railings should be kept to a minimum.

All street furniture should be high quality, durable and resilient, and where possible they should be natural and local. Where intended for seating, street furniture should be comfortable and designed for inclusivity.

Street furniture should be strategically sited to encourage natural surveillance, lingering & meeting and a vibrant Public Realm.

Street furniture can be provided both inside and outside of building zones.

4.2.14 MINOR STRUCTURES

Where identified as appropriate in sections 4.3-4.6, minor structures should be provided for a variety of functional reasons. These should be designed as a part of a coherent design language and should be used strategically to provide unity and coherence to the overall Richmond Education and Enterprise Campus. Wherever possible, these minor structures should be sited and designed to enclose open spaces and provide appropriately-designed secure boundaries in order to minimise the need for defensive elements, such as walls and fences.

4.3 REEC ENTRANCE AREAS

Each of the College and Schools should have an entrance area situated as part of their development zone. These spaces should signify the arrival onto the REEC campus from the Public Realm and should play a major role in expressing the identity of each of these institutions within their context.

4.3.1 OVERVIEW

At the arrival point onto the College's and the Schools' sites there should be open areas appropriately sized to accommodate the numbers of pupils and visitors who will arrive on the site in short periods of time.

4.3.2 PURPOSE

Each entrance area should provide a place marking arrival at the institutions' site. These places should serve important social roles particularly at the beginning and end of each day as well as during special events.

These areas should contain or should be adjacent to any landscape spaces intended to accommodate any activities that have an interface with the public such as display areas or cycle workshops - as well as social areas, outdoor dining spaces and other activities which would benefit their context, provide visual interest and enable engagement and passive supervision of the surroundings. In all cases appropriate levels of safeguarding must be ensured.

Where possible these spaces should accommodate temporary installations and displays, such as art installations, related to the College and School's activities. As befits their civic nature, the entrance areas would be the preferred locations for the siting of any public artworks that may be part of the redevelopment.

4.3.3 CHARACTER

The entrance areas should become a important places in the local landscape, and their design should be reflective of this civic importance, as well as that of the institutions to which they provide a 'front-door'. This should be reflected in the scale and nature of the entrance spaces, the quality and character of the materials of surfaces and boundary treatments, and in the type, quality and quantity of street furniture provided.

The entrance spaces should be pedestrian-only spaces, to ensure safety and security, particularly of pupils and young people. Landscaping should ensure that any adjoining vehicular access and car parking does not dominate the Public Realm. An exception to this rule should be made for a multi-functional entrance area for the SEN School, where secure pick-up and drop-off of pupils is required due to the nature of their specific needs. All vehicular parts this area should be designed in accordance with the guidance in section 3.

Entrance areas should be predominantly hard landscaped spaces and their design should encourage lingering-in and extend the use of the space to emphasise their

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DIAGRAM 4.3.1 ENTRANCE AREAS

active and civic nature. Their design should ensure that they have a pleasant microclimate that can be enjoyed while standing still or seated, and should be able to accommodate various activities appropriate to their context.

4.3.4 PROPORTIONS AND SIZE

Each entrance area should be adequately sized to handle the number of expected pupils, staff and visitors, and should be provided with a generosity of scale that reflects the importance of each institution within its context. Their proportions should be suitable to accommodate the relevant social functions of the space.

Facades adjoining entrance areas should be sized to provide definition and enclosure of the entrance areas, and the design and massing of the enclosing facades should provide legibility by emphasising the entrances to the adjoining buildings. Facades adjoining the entrance spaces should be particularly prominent aspects of each School and College, and this should be reflected in their design.

4.3.5 LANDSCAPING

Landscaping should not screen the entrance areas from buildings and open spaces around them, in order to promote passive supervision and to ensure visibility of entrances across the space. Landscaping should be used to soften the impact where these spaces border onto private residential areas. Existing trees should be retained where they do not interfere with the function and security of entrance areas.

4.3.6 **VIEWS**

In order to support wayfinding, views across each entrance area to the building entrances should be prioritised and should be unobstructed wherever possible. Outside of this natural desire line the view should be designed to ensure an attractive composition from the Public Realm. Where direct views to and from the entrances cannot be provided, alternative wayfinding, supervision and access control measures should be provided.

Where overlooked, the entrance spaces should be designed with attention given to their view from above. Where visible from the Public Realm, design and finishes should have a quality and character that contribute to a positive portrayal of the overall redevelopment.

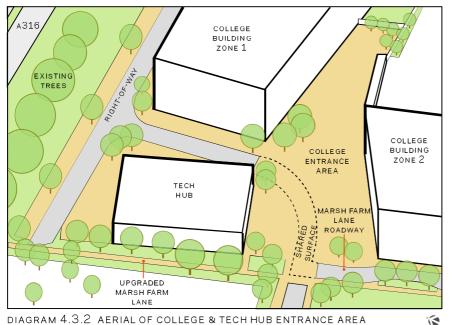
4.3.7 LIGHTING

The entrance areas should be well-lit to ensure safety and security, and to mark out the spaces importance in the Public Realm. The lighting strategy for each entrance space should emphasise entrances, as well as any Active Frontages adjoining entrances spaces, and should minimise glare and lighting spill onto adjoining spaces, and in particular any neighbouring residential properties.

4.3.8 SCHOOLS ENTRANCE AREAS

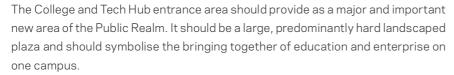
The Schools' entrance areas should be semi-private spaces, within the secure boundary of their site for security and safeguarding reasons. Their design should comply with the guidance above, should ensure an appropriate boundary treatment to the adjoining residential properties, and should demonstrate measures to minimise and mitigate any potential nuisance effects (eg noise and lighting spill) on the adjoining residences and their private gardens.

4.3.9 COLLEGE & TECH HUB ENTRANCE AREA









The entrance area should be a pedestrian-priority across the entirety of its area, and the materiality of the surfaces should reinforce the unity of the space. The part of the entrance that provides for vehicle arrivals should be subservient to this primary purpose, as described in section 3.4.8. Markings and defensive furniture, such as bollards, should be minimised and designed to promote the greater goal of unity across the space. Insofar as is practical, ground floor spaces overlooking this area should have active facades, in order to enliven the entrance area and promote passive security and supervision.

4.3.8.2 PROPORTIONS & SCALE

The College and Tech Hub entrance space should be of a scale befitting the proportions of the buildings that surround it and reflective of the space and the overall Richmond Education and Enterprise Campus's importance in its context. It should be civic in character, and this should be reinforced in the design of the space, its street furnishing and landscaping, and of the buildings that overlook it. Where the entrance space abuts against private play areas of the REEC campus, minor structures, such as covered seating and cycle shelters, should be provided to enclose the space and provide privacy, security and safeguarding whilst minimising defensive elements such as walls and fences.

4.3.8.3 **VIEWS**

As described in section 2, the key views upon arriving at the entrance area should be to the entrances of the buildings overlooking the space. Clear views across the space should be promoted in order to promote passive supervision and security of the space.

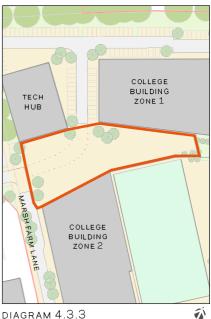


diagram 4.3.3 COLLEGE/TECH HUB ENTRANCE AREA

4.4 REEC GARDEN AREAS

Each of the College and Schools should be provided with soft landscape areas providing intimate green spaces suitable for appropriate activities and providing soft boundaries to the different parts of the Richmond Education and Enterprise Campus.

4.4.1 OVERVIEW

The educational parts of the REEC Site should be provided with areas of a landscape garden character, where quiet activities can be accommodated and planned for. These spaces should be used to provide soft boundaries between the different parts of the REEC Site. Where the site is directly in contact with private residential areas, Garden Areas should be used to provide buffer spaces to the Private Gardens to protect the amenity the gardens provide.

4.4.2 PURPOSE

These quieter areas should be designed to accommodate a range of diverse activities including outdoor learning spaces, allotment gardens, sensory and experience gardens, natural and habitat areas, time-out spaces, quiet play and supervised activity areas. Additionally, these spaces should fulfil an important role in separating spaces and limiting the overflow of potential disbenefits on neighbouring spaces and properties.

Parts of Garden Areas intended for more active uses should be designed according to their function, which may vary considerably. These activities should be situated so as to avoid creating nuisance to adjoining properties, particularly existing dwellings.

4.4.3 CHARACTER

Garden Areas should have a more natural character, providing the campus with an attractive setting & de-emphasising any required secure property boundaries. Landscaping in these areas should be designed to promote security and reflect a neighbourly considerateness. Where practical, the provision of supervised buffer spaces should be encouraged where garden areas form boundaries.

4.4.4 PROPORTIONS AND SIZE

Garden Areas should be adequately sized to provide meaningful outdoor spaces, adequately sized to accommodate their functions, and deep enough to provide the separation between spaces when used as buffer spaces.

4.4.5 LANDSCAPING

In order to secure their intended purpose, garden areas should provide a mix of hard and soft landscaping, and should be provided with a range of planting, with a preference for areas of native hedgerows and wildflowers where these would be practical and would have a suitable microclimate needed to thrive. In order to maximise the benefit of these spaces hard landscape elements, street furniture



DIAGRAM 4.4.1
REEC GARDEN AREAS

and non-native planting may be provided where these would support the overall purpose and predominant character of the space.

Landscaping should not screen Garden Areas from internal spaces in order to ensure these spaces can be passively supervised, except where these spaces have controlled access and will only be used when supervised.

Existing trees should be retained where they do not interfere with the function and security of Garden Areas. Trees should not compromise the security of the College, Schools or adjoining properties, for example by being climbable.

4.4.6 **VIEWS**

Where overlooked, Garden Areas should be designed with attention given to their view from above. Where required for safeguarding screening of Garden Areas should be provided in a manner that does not compromise the views of the redevelopment.

4.4.7 LIGHTING

The garden areas may be lit to extend the hours that they can be used and to ensure safety and security. Where these areas are lit, particular attention should be given to ensuring that adjacent buildings and spaces - in particular residential buildings - are not adversely affected by glare or lighting spill.

4.4.8 GARDEN AREA ALONG EASTERN BOUNDARY

The Garden Area along the eastern boundary of the Schools Development Zone adjoins the rear of existing residential properties fronting onto Egerton Road. This area should therefore be designed as quieter spaces in order to protect the amenity these gardens provide.

4.5 REEC PLAY AREAS

The College and the Schools should be organised around central and secure areas bounded by the REEC Buildings. These areas should provide the principle educational, recreational and social spaces of the REEC Campus.

4.5.1 OVERVIEW

The REEC Play Areas should form the heart of the educational redevelopment. These play areas should create safe and comfortable environments for a wide range of activities for different groups with differing needs, and should be designed as a series of vibrant and characterful parts. Refer to diagram 4.5.1.

4.5.2 PURPOSE

The REEC Play Areas should accommodate the majority of the outdoor areas and activities of the proposed Secondary and SEN schools. These activities should include:

- Spill-out activities related to internal functions
- Outdoor dining
- Social areas
- Hard and soft play areas
- Formal sports areas / Multi-Use Games Area (MUGA)
- Outdoor learning spaces
- Landscape and natural areas

Separate play areas should be provided to accommodate the differing activities in a way that provides adequate area and meets the differing needs for each of the Schools, in a manner that provides security and safeguarding whilst maximising the potential for shared benefits.

Provision should be made to enable managed community use of any formal sports areas in the REEC play areas, where this would not impinge on use for sports academies and formal competition, or result in undue nuisance for neighbouring dwellings.

4.5.3 CHARACTER

Different parts of the play areas should have differing character resulting from being designed appropriately to their function. Nevertheless, the design of each area should be coherent and coordinated, should promote continuity between the different parts of the space, and should manifest a sense of being part of a common educational campus.

Boundaries within each area will be required for practical and safeguarding reasons. Where physical boundaries are required for functional reasons, these should be exploited to provide necessary safeguarding in order to avoid the creation of a sense of division between the Colleges and Schools. Minor structures, such as covered walkways and seating, should be provided to enclose the

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DIAGRAM 4.5.1 REEC PLAY AREAS

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space and provide privacy, security and safeguarding whilst minimising defensive elements such as walls and fences. Where further divisions between the Colleges and Schools are required, these should be designed to be attractive and discreet.

Areas reserved for formal sports should reflect their use. They should be secure, fit-for-purpose and well-maintained. They should be provided with high quality pitches with runoffs, good sight-lines, and appropriate support infrastructure designed to be compatible with MOL designations where this designation applies.

4.5.4 PROPORTIONS AND SIZE

The overall proportions of the play areas and the facades that enclose it and should contribute to a sense of generosity to the scale of the overall space, whilst ensuring that it feels secure and enclosed.

The proportions of formal playing fields should be driven by the standards of the sports they are intended to accommodate, as well as the context of the area available to them. By virtue of their size they should occupy the central areas of the College Playing Field Site. Multi-Use Games Areas (MUGAs) on the REEC Site should be located near the sports facilities.

4.5.5 LANDSCAPING

Landscaping should not screen play areas from internal spaces in order to ensure these spaces can be passively supervised, except where these spaces have controlled access and will only be used when supervised.

Landscaping should be used to create distinct spaces within the central open space, and to provide the separation of the College's and the Schools' Zones.

Existing trees should be retained where they do not interfere with the function and security of the overall space and its constituent parts. Trees should not compromise the separation of the College's and the Schools' Zones, for example by being climbable.

4.5.6 **VIEWS**

As they are surrounded by the College and School's buildings, the play areas should be designed with attention given to views on it from above. These views should promote a sense of campus and enjoyment of the overall outdoor space, whilst limiting views between sites as a means of ensuring safeguarding.

Where required for safeguarding screening of the central space should be provided in a manner that does not compromise the views of the redevelopment.

The design of the sports pitches on the Playing Fields Site should promote a sense of openness and long views as described in section 4.8.

4.5.7 LIGHTING

The central space should be lit to ensure safety and security. The MUGA in particular should be well lit to extend the range of hours it can be used. Floodlighting to the sports pitches on the Playing Field Site should not be provided.

Particular attention should be given to ensuring that adjacent buildings and spaces - in particular residential buildings - are not adversely affected by glare or lighting spill.

4.6 SHARED AMENITY AREAS

The residential redevelopment should include shared amenity areas that will form an important contribution to the Public Realm, in accordance with the Borough's and the GLA's open space strategies.

4.6.1 **OVERVIEW**

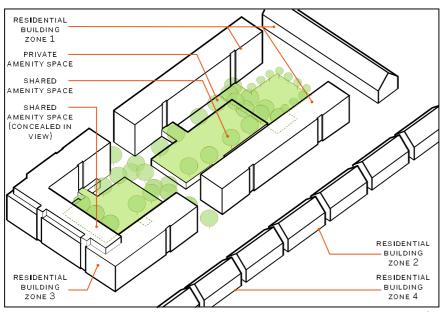




DIAGRAM 4.6.2 SHARED AMENITY AREAS

DIAGRAM 4.6.1 AERIAL VIEW OF SHARED AMENITY SPACES

The residential redevelopment should include shared open spaces that respond to and reflect the scale of the development and that complement the local network of open spaces. These should include communal areas for the residents and where appropriate may include publicly accessible open space. Given the scale of the residential redevelopment it should include spaces for children and young people's play and informal recreation. Refer to diagrams 4.6.1 and 4.6.2 for illustrating.

4.6.2 PURPOSE

Good quality shared outdoor spaces are an integral part of lifetime neighbourhoods, which are a central goal of the London Plan and of the residential redevelopment.

The shared amenity areas should provide residents with access to places to meet and relax, green and open spaces within easy reach of their homes and should be consciously planned into the proposal at the outset help to build a cohesive, successful and sustainable community.

The shared amenity areas should cater to the needs of residents at all stages of their lives, and should take into account other open spaces already provided in the vicinity (including the series of natural areas and park spaces along the River

Crane), those approved to be delivered nearby (such as at Twickenham Rough), and the extensive open spaces proposed elsewhere in the redevelopment (such as the formal sports pitches on the School and College Playing Field Sites).

Priority should be given to spaces designed for activities not provided for elsewhere in the vicinity, and in particular for spaces that should meet the needs of the residents who will be less mobile - in particular young children, those with limited mobility and the elderly.

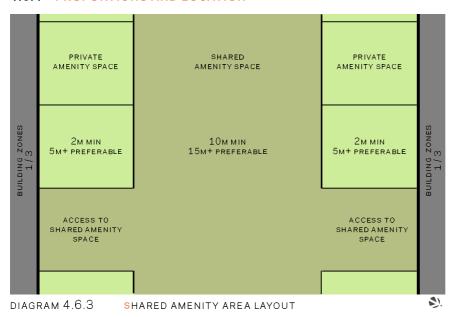
4.6.3 CHARACTER

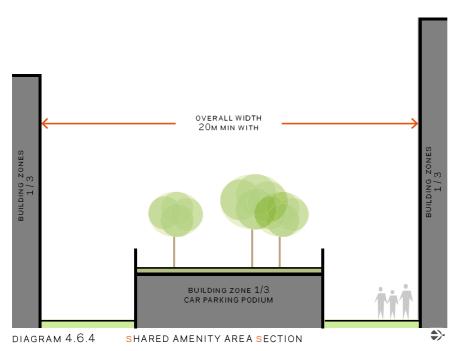
As the shared amenity areas should include areas catering for different age groups and activities, these areas should have differing character resulting from being designed appropriately to their functions. Nevertheless, the design of the areas should be coherent and coordinated, should promote continuity between the different parts of the space, and should manifest a sense of being part of a community.

Boundaries within the shared amenity areas may be required for practical and safeguarding reasons. Where barriers are required, these should be creatively considered and could also act as seating or climbing walls, or could be created using landscaping features and informal planting. Where boundaries are required, these should be designed to prevent the creation of unsafe places that cannot be passively supervised. Where the boundaries are to private spaces, these should be secure. Hedge planting to the boundary between private spaces and shared amenity spaces should be encouraged and should be on the shared or Public Realm side and maintained by the management company.

Communal spaces designed to be shared by a smaller group of residents should be considered, particularly where these are overlooked by the households that share the space and should engender a sense of ownership among residents.

4.6.4 PROPORTIONS AND LOCATION





Given the scale of the development, the shared amenity area(s) should be of a meaningful size. The overall proportions of the shared amenity area(s) should ensure that the space is provided with direct sunlight, particularly at the times of the day when it is most likely to be used.

The shared amenity area(s) can be joined to create a more generosity overall space. Priority should be given to locating the amenity area(s) near any larger residential buildings to providing direct access to outdoor spaces to upper floor dwellings and minimise the need to cross any streets to access the space.

The minimum dimension of any shared amenity areas should be no less than 10m, and where possible should be 15m or more. Refer to diagrams 4.6.3 and 4.6.4.

4.6.5 LANDSCAPING

Landscaping should not screen the shared outdoor areas from passive supervision, except where these spaces have controlled access. Landscaping should be used to create distinct spaces within the shared open spaces, and to provide for different functions including as habitat and for sustainable urban drainage.

Existing trees should be retained and new trees provided where they do not interfere with the function and security of the space. Landscaping should enhance the security of the shared space and adjoining spaces.

4.6.6 **VIEWS**

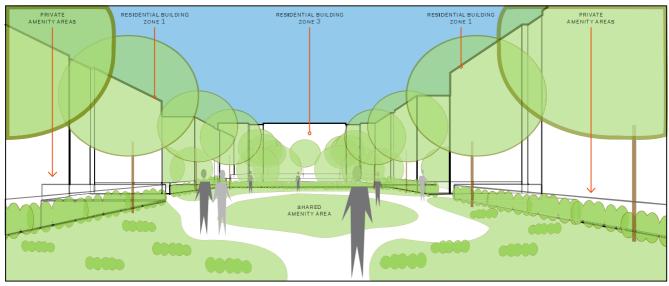
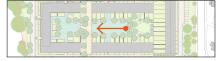


DIAGRAM 4.6.5 ILLUSTRATION OF VIEW WEST IN SHARED AMENITY AREA

In order to provide security and maximise visual amenity, the shared amenity space should be designed with attention given to views on it from above. These views should promote a sense of community and enjoyment of the overall outdoor space, whilst limiting views into private spaces and in particular bedrooms. Where the shared amenity areas are overlooked by private amenity spaces, these should be designed to encourage passive supervision of the shared space.



KEYPLAN

4.6.7 LIGHTING

The shared residential areas should be sensitively lit to ensure safety and security, whilst creating an attractive atmosphere encouraging use and lingering. Particular attention should be given to ensuring that adjacent buildings and spaces - in particular bedrooms - are not adversely affected by glare or lighting spill.

4.7 PRIVATE AMENITY AREAS

All dwellings should be provided with adequate private open space in the form of a garden, terrace, balcony or glazed winter-garden.

4.7.1 AREA STANDARDS

Individual dwellings should be provided with their own outdoor space, in addition to any shared outdoor space that may be provided. Private outdoor amenity space may be provided at the front and/or rear of the building for lower level dwellings and by balconies or terraces for dwellings above this. Where two or more dwellings are adjacent, there should be a separation between their private amenity spaces. There should be level access to private amenity areas.

Dwellings should be provided with private external amenity space with a minimum area of 5m^2 for 2 people and an extra 1m^2 for each additional occupant. Ground level family dwellings (of 3 or more bedrooms) within a block of flats should have larger private amenity spaces, in accordance with borough standards (DM HO 4), whilst houses should be provided with a minimum total private amenity space of 70m^2 for 3+ bedrooms and 40m^2 for 2 bedrooms.

In exceptional circumstances where it is not possible to provide dwellings with private external amenity space, it should be demonstrated that the dwelling sufficiently exceeds the relevant standards in space and quality to outweigh this.

4.7.2 DEFENSIBLE SPACE

Ground floor dwellings should be provided with private defensible external spaces where they adjoin public or shared spaces. These areas should provide valuable amenity and privacy, and enhance security of both the public and private realms. Detailed Guidance on Defensible Spaces is provided in section 5.3. Defensible space should be an important part of the total of private amenity space.

4.7.3 PRIVATE GARDENS

Ground floor dwellings should be provided with Private Gardens. These gardens should be directly connected to and overlooked by the dwelling that they serve.

Wherever possible, Private Gardens should be provided to the more private side of the dwelling, and where gardens are provided to multiple sides, preference should be given to making the private side of the garden larger. Whilst gardens of a wide range of sizes and shapes should be acceptable, all gardens should seek to provide the majority of their area with a depth no less than 2m.

Private gardens should be provided with clear boundaries that provides privacy and security without being overly defensive. Wherever possible Private Gardens should adjoin other private or secure spaces.



DIAGRAM 4.7.1
PRIVATE AMENITY AREAS

4.7.4 BALCONIES, ROOF TERRACES & WINTER-GARDENS

Upper level dwellings should be provided with balconies or roof terraces; or, where these would not be suitable due to extreme wind or noise, winter-gardens. Detailed Guidance on Balconies is provided in section 5.7.

4.7.5 LANDSCAPING

Individualised landscaping of private amenity areas should be encouraged to reflect the desires and needs of the residents. Nevertheless, these private spaces should respect and reflect their existing context, and should maintain existing habitat wherever possible. Where this is not possible, replacement for lost habitat may be provided elsewhere if this would provide an overall improvement.

Private gardens should play an important role in controlling run-off and should be designed in accordance with sustainable urban drainage strategies.

Consideration should be given to landscaping on large balcony spaces provided on rooftops or setbacks, including the provision of Living Roofs. Where practical, consideration should be given to vertical planting where space is limited.

Existing trees should be retained and new trees provided where they do not interfere with the function and security of the space. Landscaping should enhance the security of the shared space and adjoining spaces.

4.7.6 **VIEWS**

Whilst views are valuable and desirable, the benefits of views should be considered in light of privacy of private amenity spaces. Wherever possible a balance that can provide both views and privacy should be sought, though it is acknowledged that this may be difficult in some circumstances. Views from smaller balconies should be prioritised to ensure that the benefits of these amenity spaces are maximised, whilst Private Gardens should prioritise privacy over views. Where Private Gardens overlook shared amenity spaces, these should be designed to encourage passive supervision of the shared space.

Where views are provided, these should not unduly compromise the privacy of other private spaces, in particular those of existing residential properties.

4.7.7 LIGHTING

The private residential should be sensitively lit to ensure useability and security. Particular attention will need to be given to ensure that adjacent buildings and spaces - in particular bedrooms - are not adversely affected by glare or lighting spill, particularly from upper level balconies.

4.8 LANDSCAPE AREAS

High quality landscape areas should be provided as part of the redevelopment, and in particular on the Playing Field Site.

4.8.1 PURPOSE

The redevelopment should include open landscape areas that provide visual amenity and habitat, and - where practical - access to the general public. Landscape areas should also be important areas for the provision of formal and informal sports facilities.

As a reflection of the existing character and use of the site such areas will be predominantly on the Playing Fields Site, though there may be opportunities for open landscape areas elsewhere.

Access to the public to open landscape areas should be made available where this is compatible with the sites continuing use to meet the curricular needs of students, where this does not create a safeguarding issue, where this would be safe, and where habitat will not be adversely affected.

4.8.2 CHARACTER

The redevelopment is likely to include different kinds of landscape areas including large areas to which there is likely to be public access, and smaller ancillary landscape areas. Each of these areas should have a distinct character.

Larger landscape areas should provide a significant amenity for residents where access can be provided, and should retain a sense of openness. These areas should broadly retain the existing character of the areas that they occupy, though where appropriate they may benefit from suitable planting and landscaping that retains and enhances their existing character.

Smaller ancillary landscape areas may also be provided as part of the redevelopment, particularly where there are left-over or difficult to use parcels of land. These should be designed on a case-by-case basis to reflect their context and micro-climate. Where possible these should be linked to form a series or chain of natural spaces, in particular to form a habitat corridor.

4.8.3 PROPORTIONS AND LOCATION

Large open landscape areas should surround the playing fields. Insofar as is practical, the scale of these spaces should remain generous and in general should only be less than 10m in depth at unavoidable pinch-points. Refer to section 2.6.

Important existing landscape areas with prominent existing trees along the A316 and Egerton Road should be retained. These should provide open space sized to



DIAGRAM 4.8.1

OPEN LANDSCAPE AREAS

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protect the root areas of the trees, and with buildings setback to ensure a suitable setting is maintained.

Smaller landscape areas should be distributed around the site, in particular along Marsh Farm Lane. Efforts should be made to ensure that these spaces are joined up wherever possible, in order to reinforce their potential to form a habitat corridor. Where intended to be usable these areas should be sized to reflect their proposed use, and where they are not intended for other use should be used for habitat unless this would be unsafe or unviable.

4.8.4 LANDSCAPING

Landscaping should not screen landscape areas from passive supervision, except where these spaces have controlled access. Landscaping should emphasise the continuity of larger open spaces, and should be used to create distinct spaces where appropriate. Landscaping should accommodate different functions including as habitat and for sustainable urban drainage where these would be most valuable.

Existing trees should be retained and new trees provided where they do not interfere with the function and security of the space. Landscaping should enhance the security of the shared space and adjoining spaces.

4.8.5 **VIEWS**

Wherever possible, landscape areas should be overlooked to provide passive supervision and visual amenity. In order to provide security and maximise visual amenity, the open spaces should remain visually open and where boundaries are required attention should be given to maintaining and enhancing the visual amenity the open spaces provide. Boundary treatments should enhance the image of the open landscape, whilst enhancing the security and privacy of Private Gardens that border onto the Playing Field Site.

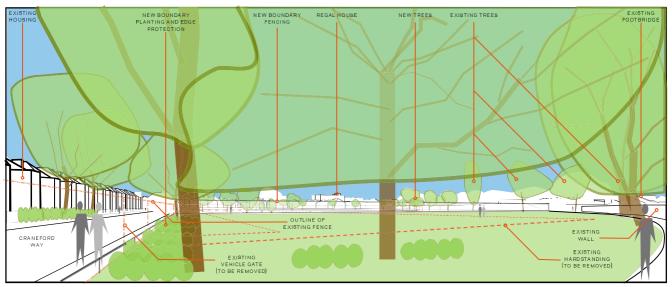


DIAGRAM 4.8.2 ILLUSTRATION OF VIEW EAST ACROSS OPEN SPACES ON COLLEGE PLAYING FIELDS SITE



KEYPLAN

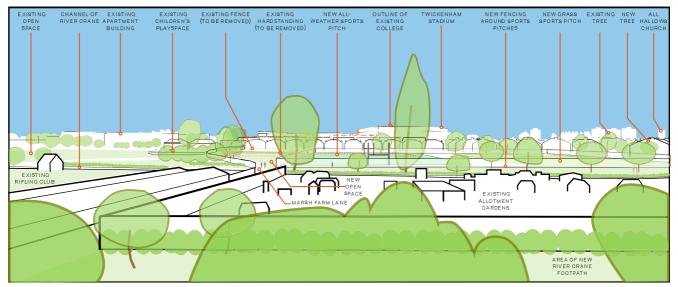


DIAGRAM 4.8.3 ILLUSTRATION OF VIEW NORTH ACROSS OPEN SPACES ON COLLEGE PLAYING FIELDS SITE



KEYPLAN

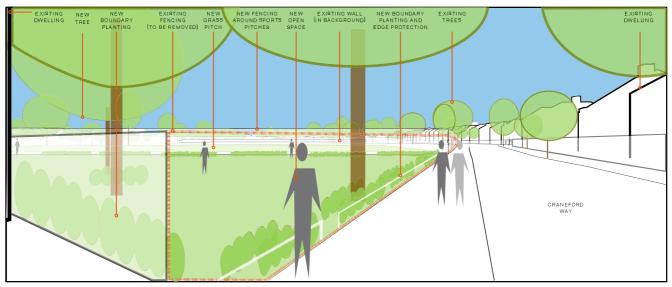


DIAGRAM 4.8.4 ILLUSTRATION OF VIEW WEST ACROSS OPEN SPACES ON COLLEGE PLAYING FIELDS SITE

4.8.6 LIGHTING

Landscape areas should only be lit by exception. Any lighting should be sensitively designed to ensure that there is no lighting spill or adverse impact on adjoining dwellings, amenity areas, or habitat areas. Floodlighting to the sports pitches on the Playing Field Site should not be provided.



KEYPLAN

4.9 TREES & HABITAT AREAS

Existing trees and habitat areas should be retained and protected particularly where these are healthy and form an important and valuable part of the existing environment.

4.9.1 HABITAT AREAS

Areas of existing habitat should be protected and retained in the redevelopment, particularly where these are in good condition. Any habitat utilised for the construction period that is not permanently lost to the Proposed Redevelopment should be reinstated to its former habitat.

New or extended habitat areas should be provided as part of the redevelopment where these are identified as appropriate in sections 2 and 3. These should include the following measures identified in the Environmental Statement:

- provision of additional scrub habitats and native species-rich hedgerows around the periphery of the College Playing Fields Site for breeding birds and hedgehogs;
- provision of unmanaged grassland areas in unlit parts of the College Playing Fields
 Site to enhance the invertebrate population on site and improve the existing foraging resource for bats;
- provision of bird nesting opportunities in suitable locations through the installation of 15 bird boxes;
- provision of bat roosting opportunities in suitable locations through the installation of 6 bat boxes in unlit areas close to linear habitat; and
- provision of additional deadwood habitat or a stag beetle loggery along the southern boundary of the College Playing Fields Site for stag beetle, contributing to the objectives of the London and LBRuT Species Action Plans.

Consideration should be given to removing habitat areas that are in poor condition, that pose a safety risk, or that would be more beneficially provided elsewhere. Wherever required, replacement for lost habitat should provide an overall improvement.

Where practical and viable, and where this would not create a safety risks or nuisance, living roofs and vertical surfaces should be considered as locations for new habitat areas. Where habitat is incorporated into/onto buildings, its design should be integrated within the architectural form, language and appearance of the buildings.

4.9.2 EXISTING TREES

The landscape strategy should take into account the presence of mature trees worth retaining towards the edges of the site, in particular the row of mature Sycamore and Horse Chestnut trees along the A316, which form a prominent landmark, and should be protected as part of the redevelopment. Additionally, the mature trees adjoining Egerton Road should be retained and protected, as should the trees to the perimeter of the College Playing Field Site.

Other prominent trees and groups of trees should be protected and retained in the redevelopment, particularly where these are in good condition. Where the area for protection may be limited or where proposed uses intrude on the protection areas, suitable protection and mitigation measures as defined in the *arboricultural report* should be followed. Where the retention of existing trees is not possible, alternatives to felling should be considered where practical.

Existing trees that are dead, dying or dangerous should be removed as part of the redevelopment.

Consideration should be given to the reuse within the redevelopment of any felled trees, for example as deadwood piles or for a stag beetle loggery along the eastern or southern boundary of the Playing Fields Site. Where any trees are felled within a row of trees, suitable replacements should be planted wherever possible.

4.9.3 NEW TREES

The redevelopment should include new trees. Where possible, these trees should be native, and their selection and siting should consider the character of the area and the existing trees near to where they are planted.

New trees should be chosen with consideration of their size when planted and as they age, as well as of their suitability for their location. The use of a single tree species should be considered where trees form an avenue or where this would help reinforce the identity of a space.

All new trees should be sufficiently mature to thrive when planted, and should be provided with additional protection where required.

SECTION 5 BUILDING DESIGN GUIDELINES

5.1 GENERAL GUIDELINES

Where relevant any building in the redevelopment will be expected to comply with the following guidelines in order to ensure the built fabric of the redevelopment is of the highest standard and that building design ensures a safe, attractive and successful Public Realm.

5.1.1 INTRODUCTION

The building layout should take account of the character of the area & topography of the site, including its shape, contours & subsoil; and the local ecology & micro-climate.

5.1.2 PASSIVE DESIGN

Buildings should be designed to optimise passive design principles and mitigate the effects of adverse environmental conditions.

5.1.3 NOISE

The needs of neighbours in close proximity should be reflected in the siting and layout of buildings within the Building Zones. Quieter activities should be located away from noisier activities and neighbourhood noise, wherever possible. Noisy activities should be located away from sensitive receptors including neighbouring properties.

5.1.4 SECURITY

Boundaries to the public realm should be clearly defined, should discourage trespass & vandalism and buildings should be designed to ensure good visibility to facilitate surveillance across the site. Buildings should be designed in accordance with Secure by Design principles.

5.1.5 SETBACKS

In areas where the building line is held back from the Building Zone boundary, the residual space should be designed to complement the adjacent open space.

5.1.6 SIGNAGE

Signage should be integral to the buildings and Public Realm of the redeveloped site. The use and scale of signage should be sympathetic to the building on which it relates as well as the whole character of the Public Realm. Signage can be used on any building typology and should be clear and legible.

The application of signage for may vary, for example it may be set behind or in front of glass frontages, be applied to awnings, or can be fixed to or integrated into the building facade. Any integrated or fixed signage should be sympathetic with the architecture of the building on which it is located, and any projecting signs should not obstruct the width of the roadway or footpath, nor compromise the integrity of the Public Realm.

Signage for residential buildings should be sympathetic with but distinct from any signage for the REEC campus to improve wayfinding and avoid confusion.

5.1.7 LIGHTING

Lighting design for buildings should balance a number of criteria such as character & ambience with legibility & wayfinding and safety & security, as well as sustainability & light pollution. Glare & light pollution should be controlled to minimise stray light and in particular its impact on residential amenity and on habitat.

Residential buildings may be gently illuminated via concealed light sources. Educational and commercial buildings may be illuminated to enhance key architectural features. Landmark parts of the College buildings in particular should be illuminated to reflect their prominence and importance in the urban context.

Lighting may be used to express buildings at ground level, particularly at entrances and to enhance Active Frontages (including any commercial or community-use parts of residential buildings eg Ground floor retail or leisure). Illuminated signage should be carefully designed to integrate with the design approach and architecture of the building. At entrances, increased ambient lighting levels should be incorporated to aid the transition from exterior to interior.

Light fittings should be concealed where possible, or otherwise designed and positioned to reflect the architecture and character of the building. External cabling/conduits should be avoided where possible.

5.1.8 RAINWATER & SANITARY PIPES

Rainwater & sanitary waste pipes should not be visible on the facades, but where unavoidable should be fully integrated into the architecture of the building & facade composition.

5.1.9 MATERIALITY

Buildings should be built using materials that are high quality, durable and resilient, and where possible they should be natural. The palette of materials should be chosen to complement each other and their use should provide continuity between different places within the redevelopment, and with the existing context.

Where specific buildings and features should stand out from the general redevelopment, for example to serve as landmarks, contrasting materials and/or colours should be permissible. Conversely, where buildings are not intended to stand out this should be reflected in the choice of colour and material.

Facades should be designed to avoid vandalism, damage, water staining, uneven weathering and decay.

5.1.10 APPEARANCE

Facades should be design with consideration of appearance from their surroundings and with consideration to potential implications of overlooking private residential spaces.

5.2 ACTIVE FRONTAGES

Street level frontages should activate the adjoining Public Realm to ensure the redevelopment engages with its context and to promote security.

5.2.1 ACTIVE FRONTAGES

Making frontages 'active' adds interest, life and vitality to the public realm. Active frontage should consist of the following:

- Frequent doors and windows, with few blank walls
- Articulated facades with bays and porches
- Lively internal uses visible from the outside, or spilling onto the street
- Activity node concentration of activity at a particular point.

Buildings should be designed with predominantly Active Frontages along ground floors where they interface with the Public Realm. Appropriate materials should be used to maximise transparency and create vibrant frontages. This in-turn promotes passive surveillance and increased security of both public and private realms. Refer to diagram 5.2.1. Where appropriate, activities should spill out into adjoining external spaces.

Parts of the College, Tech Hub and Residential Building Zones that should have Active Frontages are identified in sections 2.2, 2.3 and 2.4 respectively.

Active Frontages should be understood to include appropriately-designed frontages of dwellings that are accessed from and that overlook the Public Realm. In such instances the design of the facade should ensure opportunities to look out over the Public Realm, whilst maintaining appropriate levels of privacy to the dwelling. Such dwellings should be provided with defensible spaces as described in section 5.3. Active frontages to the College, Tech Hub and School buildings should be understood to include façades that are visually permeable between inside and outside which relate to spaces that are likely to be occupied during most of the College/School/work day.

In the design of buildings it may be appropriate and necessary to include areas of facade where the frontages are not active. In facades that have been designated in section 2 as requiring active facades, *inactive frontages* should not exceed 15m in length, should be limited in number and frequency, and the sum of inactive frontages should not constitute more than 1/3 of any one facade. Where Active Frontages cannot be provided, landscaping should be used to provide an attractive and secure boundary wherever possible. Refer to diagram 5.2.2.

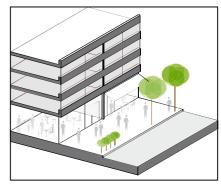


DIAGRAM 5.2.1

ACTIVE FRONTAGES ENLIVEN THE

PUBLIC REALM AND PROVIDE PASSIVE

SURVEILLANCE AND INCREASED

SECURITY.

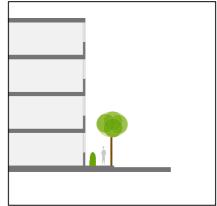


DIAGRAM 5.2.2 WHERE ACTIVE
FRONTAGES CANNOT BE PROVIDED
LANDSCAPING SHOULD BE USED TO
PROVIDE AN ATTRACTIVE AND SECURE
BOUNDARY WHEREVER POSSIBLE.

5.3 DEFENSIBLE SPACE

Ground floor dwellings should be provided with private defensible external spaces where they adjoin public or shared spaces. These areas should provide valuable amenity and privacy, and enhance security of both the public and private realms.

5.3.1 DEFENSIBLE SPACE

Ground floor dwellings should be provided with defensible/privacy areas of a minimum depth of 2m along their length where they have doors or windows at ground floor level. These should provide adequate separation between the private home and the Public Realm and enhance the living quality of ground floor dwellings. This space may be outside the building line, or it may be partially or fully recessed into the building as illustrated in diagrams 5.3.1. The defensible space should not be recessed more than 2m to ensure good lighting. Defensible spaces should not be deeper than 5m to ensure that frontages remain active and related to the Public Realm. The measured dimension of a defensible space should include its enclosure and any boundary planting to avoid reducing the Public Realm.

The boundaries of a defensible space should offer security and visual privacy, whilst allowing passive surveillance of the Public Realm. The height of this boundary must be a maximum height of 1m. The boundary between the defensible space and the Public Realm should be constructed from a combination of a wall or railing with planting to add a greener appearance to the Public Realm. Where a building has multiple tenants, boundary planting should be maintained by the management company.

For residential properties, all internal ground floor levels should correspond to external levels with a vertical tolerance of up to 1m as illustrated in diagram 5.3.2. This should ensure that frontages remain related to the Public Realm, whilst allowing for additional privacy and security. Level access should be provide between the interior and the defensible space. Where the defensible space is raised, there should not be any access from the Public Realm to the space beneath it.

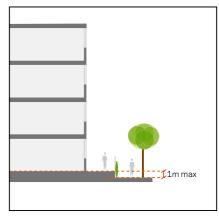


DIAGRAM 5.3.2

DEFENSIBLE SPACE SHOULD RETAIN
A RELATIONSHIP WITH THE PUBLIC
REALM

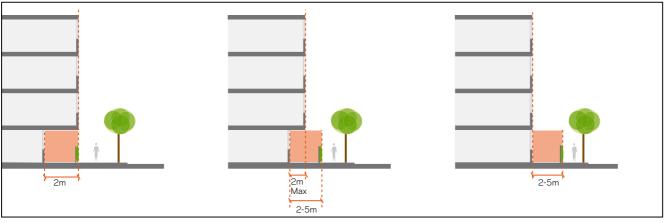


DIAGRAM 5.3.1

THE POSITION OF GROUND FLOOR DEFENSIBLE SPACE CAN BE RECESSED OR PARTIALLY RECESSED INTO THE BUILDING

5.4 ENTRANCES & ACCESS

Entrances to buildings should be clearly identifiable, safely designed and accessible.

5.4.1 ENTRANCES

Entrances should be fully integrated with the architecture of the building and have a clear hierarchy. They should have an appropriate level of prominence and be well marked. This is to maximise access and provide visitors with a legible understanding of buildings. Refer to diagram 5.4.1.

Entrances should be expressive of the individual character of the unit to which they offer access, while retaining the continuity of the street frontage. This allows the individuality of unit to become a positive feature of the street, while still delivering a coherent frontage to the Public Realm.

Buildings should meet the ground with a level transition from outside to inside. Ground junctions should be carefully designed to mitigate detrimental effects of steps and slopes at threshold locations. Level access should be provided to all entrances of buildings. Refer to diagram 5.4.2. For non-residential properties, all internal ground floor levels should correspond to external levels with a vertical tolerance of up to 0.3m. This would minimise the effect of the slopes on accessibility and ensure connectivity of interiors with the Public Realm. Refer to diagram 5.4.3. For residential properties also refer to section 5.3.

The space immediately outside the entrance should be adequately sized and sheltered from the elements, for example with a canopy, to provide a transition between the interior and exterior. Refer to diagram 5.4.2.

At entrances, increased ambient lighting levels should be incorporated to aid the transition from exterior to interior.

5.4.2 LOBBIES

Lobbies should be designed as Active Frontages with a direct relationship to the adjacent Public Realm or shared amenity spaces. They should be predominantly glazed to offer views into entrance space, whilst providing security as necessary. This is to encourage passive surveillance and provide unobstructed views from the Public Realm into the adjoining active spaces. This should create vibrant frontages to lobbies, which should help animate the Public Realm and enhance natural surveillance.

The design of the Lobby should encourage use of the principal access stairs in shared circulation cores. Lifts, stairs and dwellings should be easy to find and navigate by all users - including visitors, disabled and older people.

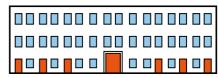


DIAGRAM 5.4.1
ENTRANCES SHOULD HAVE A CLEAR
HIERARCHY, WITH COMMUNAL AND
MAIN ENTRANCES GIVEN GREATER
PROMINENCE.

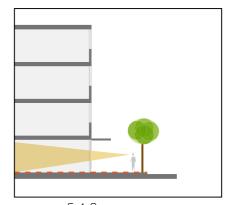


DIAGRAM 5.4.2
SHARED ENTRANCES SHOULD HAVE
LEVEL THRESHOLDS, AND OFFER
VIEWS TO THE INTERIOR

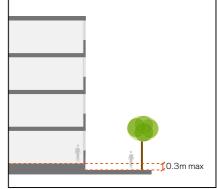


DIAGRAM 5.4.3
GROUND FLOOR LEVELS SHOULD
CORRESPOND WITH EXTERNAL LEVELS

Shared residential entrance lobbies should be large enough for people to manoeuvre with shopping and baby buggies, and for wheelchair users to move with ease. Shared circulation cores should provide intercom control in every dwelling linked to the main front door for electronic lock release.

5.4.3 RESIDENTIAL ACCESS

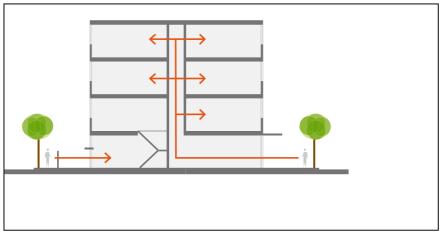


DIAGRAM 5.4.4

GROUND FLOOR RESIDENTIAL UNITS SHOULD HAVE DIRECT EXTERNAL ACCESS,
AND ENTRANCES SHOULD BE SHELTERED

Access to maisonette or lower level dwellings should be from a private front door externally from the street. 'Defensible spaces' should be provided to these dwellings as described in section 5.3. Access to upper level dwellings should be from a shared lobby entrance at street level. Where upper level dwellings share an entrance, any given vertical access core should only by exception provide access to more than 8 dwellings at any level, in order to maintain a sense of ownership and security. Refer to diagram 5.4.4.

5.4.4 CAR PARKS

Access from any shared undercroft or podium car park should be via a circulation core which should be easily accessible and secure. Tenants and visitors should easily be able to identify which core they are entering from the shared car park when multiple circulation cores are provided. Refer to diagram 5.4.5.

5.4.5 ESCAPE ROUTES

Escape routes should be obvious from all areas of shared circulation and from every dwelling entrance.

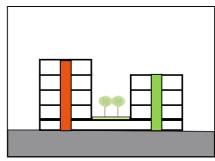


DIAGRAM 5.4.5
CIRCULATION CORES SHOULD BE
DISTINCT AND READILY IDENTIFIABLE

5.5 BUILDING HEIGHT

The height of buildings should be controlled to ensure that the development is of an appropriate scale without overconstraining the potential design of the buildings.

5.5.1 MEASUREMENT OF BUILDING HEIGHT



DIAGRAM 5.5.1

MEASUREMENT OF BUILDING HEIGHT

Building Zones are provided with a parameter identifying the maximum height of buildings in that zone. Buildings that extend beyond the relevant parameter should not be permissible. Site-wide building height parameters are identified in Parameter Plan (PL-05). Specific height parameters for each Building Zone are identified in their respective Parameter Plans.

Building Height should be measured to the top of the parapet or top of the eaves, as illustrated in diagram 5.5.1; in the diagram, all of the buildings are the same height. Where a building is designed such that there are multiple eaves or parapet levels, all must be within the Building Zone's height parameter.

Building heights on the Parameter Plans are all expressed in metres Above Ordinance Datum (AOD), as well as in terms of relative level based on a typical ground level of 9.20m AOD which is common across much of the site and its boundaries. In the event of a discrepancy between the quoted values, the absolute maximum expressed in metres AOD should take precedence, and any changes to the proposed future ground level should not increase or decrease the proposed maximum height of the Building Zone.

A restrictive set of projections associated with the building, such as rooftop plant and exhaust flues, should be permitted to extend beyond the building height parameter - these elements are identified in sections 5.9 and 5.10 of this Design Code. This is to ensure that the overall mass of the buildings can be controlled, without requiring overly large building zones to be provided in order to accommodate minor, unavoidable, or beneficial projections.

5.6 BUILDING MASSING

Buildings should be designed so that their general shape and size is clear, legible and supports the creation of clear, legible and high quality places. The design of building's facades should support their overall massing.

5.6.1 BUILDING MASSING

Buildings massing should be articulated to create visual interest and prevent contextually overly-large and inappropriately uniform buildings, whilst being cognisant of the design of other buildings in the redevelopment to ensure a sense of being part of a campus. Differentiation should be provided by employing one or more of the following strategies: setbacks, geometry, detailing of building materials, different cladding material, different facade system, different window proportion, increased percentage of glazing, etc. Refer to diagram 5.6.1.

Where practical opportunity should be taken to provide shared/private amenity space at roof level in the form of roof terraces. Roof terraces on upper or top floors in particular should provide generous shared amenity space for residents or for larger family apartments. Refer to diagram 5.6.2 and section 5.7.

Building massing should generally be consistent and continuous to define the urban block and street layout. Continuous building lines are preferred as they provide definition to, and enclosure of, the Public Realm; they also make navigation by blind and partially-sighted people easier. Wherever practical, recesses and projections to overall building form facing the street should only be used to denote entrances in order to assist wayfinding. Refer to diagram 5.6.3.

Building massing should be informed by the effects of overshadowing private and shared amenity spaces, whilst considering the needs of solar-shading and the comfort of internal spaces.

Facade composition should emphasise and complement the overall building form and support the creation of a high quality environment.

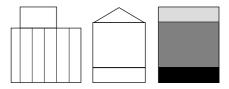


DIAGRAM 5.6.1
BUILDING MASSING SHOULD BE
DIFFERENTIATED

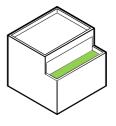


DIAGRAM 5.6.2
BUILDING SETBACKS SHOULD BE USED
TO PROVIDE AMENITY SPACES

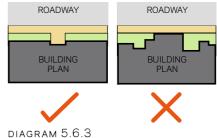


DIAGRAM 5.6.3
CONTINUOUS BUILDING LINE (PLAN VIEW)

5.7 BALCONIES

Balconies should be used to provide private outdoor amenity space to upper level spaces, and will be required for flats without a ground floor external space.

5.7.1 BALCONIES

Balconies may be incorporated into the design of the buildings. Balconies may provide private amenity space to upper floor spaces. Balconies with level access are required for dwellings without private gardens at ground floor or podium level, in accordance with policy DM DC 6. Where dwellings are provided with a single balcony, this should be accessible off of the main living space. Where dwellings are provided with multiple balconies, the largest balcony should be accessible from the main living space(s).

Balconies should have a positive impact on the architecture of building and provide useful, pleasant, private outdoor space for residents, students and staff. Balconies may be designed as projecting, semi-recessed or fully-recessed, but should be fully integrated within the formal composition of the building and the architectural detail and language of the facades. Wherever practical, steps in the building form should be taken advantage of to provide external amenity space. Refer to diagrams 5.7.1-5.7.4. Balconies should not appear to be 'bolted-on'.

Balconies should have solid floors draining to a downpipe integrated into the building's architecture. Soffits to balconies, or to the recesses of balconies, should be provided with high quality solid soffits that are consistent with the architectural language of the building. Balustrades should be designed to allow privacy when viewed from below, whilst allowing views out from a seated position.

Where balconies are provided, these should be designed to limit the overlooking of private spaces, in particular existing Private Gardens and bedrooms. Screens should be provided to allow for privacy from neighbouring properties. Balconies should be designed in accordance with Secure by Design principles.

Individual projecting balconies are allowed to project up to 4m beyond the Development Zone boundary as defined in the Parameter Plans. To ensure that balconies are usable, the main balcony to a dwelling should not be less than 2m in either length or depth and balconies should have a clear height of at least 2.5m. Where dwellings have multiple balconies, additional balconies may be reduced in size. The minimum dimension of the balcony should not be reduced by the enclosure (eg balustrade).

Where balconies may be subject to high levels of noise (NEC noise category C or D) or very strong winds, glazed and ventilated winter gardens can be provided as a replacement. Where winter gardens are provided, these should be thermally separated from the interior, they should be drained, and should be designed to avoid overheating in summer.

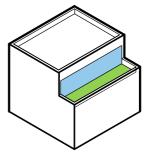


DIAGRAM 5.7.1
BALCONY AS PART OF BUILDING FORM

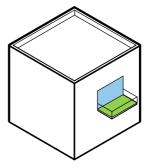


DIAGRAM 5.7.2
PROJECTING BALCONY

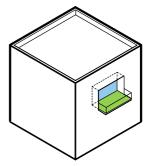


DIAGRAM 5.7.3
PARTIALLY PROJECTING BALCONY

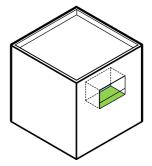


DIAGRAM 5.7.4

RECESSED BALCONY (OR LOGGIA)

5.8 LIVING ROOFS

The redevelopment should encourage the use of Living Roofs, particularly where roofs are overlooked. Buildings with a flat roof footprint larger than 100m² should be provided with a living roof, in accordance with local regulations.

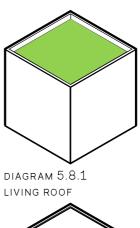
5.8.1 LIVING ROOFS

The use of Living Roofs, including green and brown roofs, on lower buildings should be encouraged. This should provide a visual amenity for buildings overlooking them, as well as an ecological benefit to all buildings. Where practical, rooftops should be designed to encourage stormwater recycling and assist in managing rainwater.

All buildings with a flat roof footprint larger than 100m² should incorporate Living Roofs where practical, in accordance with local regulation. On such roofs, the Living Roof should occupy 70% or more of the flat roof area, unless a reasonable justification is provided.

Environmental sustainability and biodiversity should be encouraged. Where practical and viable, and where this would not create a safety risks or nuisance, living roofs should be considered as locations for new habitat areas.

Where practical and viable, green walls and other building-integrated landscaping should be encouraged. Such alternatives should be accepted in lieu of Living Roofs, especially where these would provide equivalent or greater benefits.



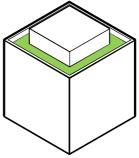


DIAGRAM 5.8.2
LIVING ROOF AROUND PROJECTIONS

5.9 ROOFTOP PLANT

The redevelopment shall have a clean and tidy appearance, uncluttered by rooftop plant. Where rooftop plant is required, it shall be concealed from view.

5.9.1 ROOFTOP PLANT

In buildings where the rooftop is not overlooked (by existing, consented or pipeline works), *rooftop plant* may be concealed behind a raised parapet, provided the plant is not higher than the top of the parapet. Refer to diagram 5.9.1

In buildings where the rooftop is not overlooked, any rooftop plant that is higher than the parapet shall be located in solid or perforated enclosures that are designed as an integral part of the building form and appearance. Such enclosures may be open-topped. Refer to diagram 5.6.2.

In buildings where the rooftop is overlooked, the plant shall be located in solid or perforated enclosures that are designed as an integral part of the building form and appearance. Where the functioning of the plant allows, such enclosure should be enclosed from above to provide visual concealment of the rooftop plant. Refer to diagram 5.6.3

Where enclosed, insofar as is practical, rooftop plant should be clearly organised to avoid the proliferation of rooftop enclosures and to retain space for amenity spaces, renewable energy sources and living roofs where these would be appropriate.

The height of rooftop plant and enclosures for rooftop plant may project above the limit of the building zone they are located in, provided that this projection is no more than 2.5m from the building zone or the top of the building (whichever is lower). This allowance is to ensure that the overall mass of the buildings can be controlled without requiring overly large building zones to be provided in order to accommodate minor, unavoidable, or beneficial projections, including rooftop plant.

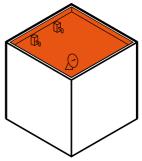


DIAGRAM 5.9.1
PLANT AREA CONCEALED BY PARAPET

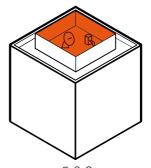


DIAGRAM 5.9.2
PLANT AREA SCREENED

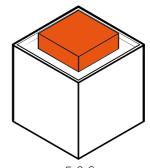


DIAGRAM 5.9.3
PLANT AREA ENCLOSED

5.10 PROJECTIONS

Projections beyond the overall envelop of buildings should be permitted where these are integrated within the architectural form, language and appearance of the buildings. Ad-hoc or uncoordinated protrusions should be discouraged.

5.10.1 GENERAL GUIDELINES

The dimension of projections should be measured from the relevant face of the building, and can project beyond the edge of the building development zone to the distances identified below, except as otherwise specified. This allowance is to ensure that the overall mass of the buildings can be controlled without requiring overly large building zones to be provided in order to accommodate minor, unavoidable, or beneficial projections.

5.10.2 CANOPIES

The provision of projecting canopies on buildings are permissible up to a distance of 2.5m beyond the edge of the relevant building zone. Canopies must be integrated into the architecture of the building and should not obstruct the width of the roadway or footpath, nor compromise the integrity of the Public Realm. Where canopies are provided these should provide useful shade and shelter, in particular to entrances of buildings. Note that shelter, for example from a canopy, is required at entrances: refer to section 5.3 for additional guidance for canopies provided at entrances.

Where fire appliances may need to pass through an area covered by a canopy, the canopy should be positioned with minimum 3.7m headroom.

5.10.3 FLUES, CHIMNEYS AND WIND CATCHERS

The provision of projecting flues, chimneys, windcatchers and the-like on buildings are permissible up to a height of 3m, except where health & safety requirements would require a higher flue height (for example from a science lab).

Flues and chimneys should not be visible on the facade, and projections above roof level should be fully integrated into the architecture of the building and facade composition.

Where flues project above the height of the parapet or roof pitch by more than 1m or are positioned within 1m of the edge of the roof they should be grouped together, insofar as is practical, and should be located in solid or perforated enclosures that are designed as an integral part of the building form and appearance.

5.10.4 LIFT OVERRUNS AND ROOFTOP ACCESS STAIRS

The provision of projecting lift overruns and access stairs to the rooftop are permissible up to a height of 3.5m.

5.10.5 LIFE SAFETY EQUIPMENT

Equipment required for the safe use and maintenance of the buildings and their associated amenity spaces are permissible up to a height of 2.5m.

5.10.6 EXTERNAL SHADING

The provision of projecting shading devices, such as louvres, blinds screens and awnings, on buildings are permissible up to a distance of 1m beyond the edge of the relevant Building Zone. Where shading devices form a continuous facade, this should not project beyond the overall Building Zone envelope.

Shading devices should not obstruct the width of roads or footpath, nor compromise the integrity of the Public Realm. Additionally, these must not create a health & safety risk. Where shading devices might be climbable, they should be designed and positioned to prevent their misuse.

5.10.7 SIGNAGE

Signage at ground level should not obstruct the width of roads or footpath, nor compromise the integrity of the Public Realm. Additionally, these must not create a health & safety risk. Where signage might be climbable, they should be designed and positioned to prevent their misuse.

5.11 LANDMARK BUILDINGS

The importance of those parts of the redevelopment that will be landmarks in their context should be reflected in their design.

5.11.1 LANDMARK BUILDINGS

By virtue of their importance as distinct markers within the Public Realm, landmark buildings and features should be distinct in their context and should be attractive to look at and inspire, excite and delight. Such deviations from the general context should be proportionate to the importance of the landmark feature and its significance within its context.

Where possible, the landmark nature of a building should be expressed with distinct building massing, and reinforced through the design of the facades, quality of materials used and signage. Where buildings should be landmark buildings or should feature landmark elements, it would be appropriate for these features to project beyond or step back from the general building line and profile to create a landmark feature.

Consideration should be given to the lighting of landmark buildings and features to reflect and ensure their prominence and importance in the urban context.

5.12 RESIDENTIAL STANDARDS

The redevelopment should provide residential units that comply with the Borough's and the GLA's housing standards, in particular the requirements of the London Housing Design Guide.

5.12.1 RELEVANT GUIDANCE

The layout and buildings of the residential redevelopment should be designed and built in accordance with the standards and best practice design principles set out in the following documents:

- The London Plan (including minor amendments)
- Mayor of London's Housing SPG
- Mayor of London's Housing Design Guide
- LBRuT Core Strategy
- LBRuT Development Management Plan
- LBRuT Residential Development Standards SPG
- LBRuT Small & Medium Housing Developments SPG
- LBRuT Affordable Housing SPG
- LBRuT Design Quality SPG
- LBRuT Housing Optional Technical Standards Update
- DCLG Technical Housing Standards Nationally Described Space Standard

5.12.2 ACCESSIBLE AND ADAPTABLE & WHEELCHAIR USER DWELLINGS

The residential redevelopment should be designed and built to provide 90% of dwellings as accessible and adaptable in accordance with requirement M4(2) of the Building Regulations (2015). The remaining 10% of dwellings should be provided as wheelchair accessible or should be easily adaptable for residents who are wheelchair users, in accordance with requirement M4(3) of the Building Regulations (2015).

Blue badge parking should be provided on a 1:1 basis for wheelchair accessible dwellings. Refer also to blue badge parking requirements in section 3.2.3.

5.12.3 MINIMUM UNIT SIZES

The residential development should meet the minimum area standards prescribed in the nationally described space standards as adopted in the London Plan, the London Housing SPG and LBRuT Housing Optional Technical Standards Update.

5.12.4 CYCLE PARKING

The residential development should meet the standards prescribed for cycle parking as adopted in the London Plan.

5.12.5 AIR CIRCULATION, DAYLIGHT & SUNLIGHT

The design of residential buildings should ensure good air circulation and light penetration to all dwellings. All dwellings should benefit from direct sunlight and daylight. At least one living space should receive direct sunlight during a portion of the day.

All 2+bedrooms dwellings should be provided with two or more aspects. Single aspect north facing units in particular should only be acceptable where other aspects of the dwelling can be demonstrated to outweigh this limitation.

All habitable rooms should have windows no smaller than 20% of their floor area.

Dwellings should have ceiling heights of 2.5m or more across 75% or more of their area. In habitable rooms and particularly on the ground floor, higher ceiling heights should be encouraged. Habitable rooms should have a minimum ceiling height of 2.3m or more. Habitable rooms with sloping ceilings beneath pitched roofs should achieve the minimum ceiling height in at least 60% of the area of the room.

Any area with less than 1.5m of headroom should not be counted as usable area except as storage, in accordance with the nationally described space standard.

5.12.6 LONDON HOUSING DESIGN GUIDE

The residential development should be designed and built in accordance with the London Housing Design Guide, which illustrates the policies of the London Plan and the London Housing SPG, including internal and external space standards, qualitative requirements, and sustainability requirements including *climate change mitigation* and *climate change adaptation* requirements.

In the event of conflicts between the London Housing Design Guide and the revised London Plan and revised London Housing SPG, the newer document should be understood to take precedence.

5.12.7 TENURE MIX

The design of buildings and spaces should be tenure blind and indistinguishable from one another in terms of design quality, and external appearance. Different tenures should be integrated across the site as far as practical and large groups of any single tenure avoided in order to make places where everyone can feel a sense of belonging. Notwithstanding this goal, mixed-tenure cores often raise management issues and should be avoided where changes in tenure over the life of a dwelling are unlikely.

Assuming consent for the outline proposals is granted, Reserved Matters Application(s) will be required to evidence how discussions with a registered affordable housing provider have influenced the scheme being proposed.

SECTION 6 TOWNSCAPE

6.1 TOWNSCAPE CONSIDERATIONS

The redevelopment should provide design mitigation measures to address the townscape impacts identified as part of the Environmental Statement.

6.1.1 PREDICTED TOWNSCAPE & VISUAL EFFECTS

No significant adverse residual townscape or visual effects have been identified in the Townscape and Visual Impact Assessment carried out as part of the Environmental Impact Assessment.

A number of moderate adverse effects have been identified for which appropriate *secondary mitigation measures* should be identified as part of the reserved matters proposals. In addition, secondary mitigation has been also been assumed as part of the detailed design that should result in residual enhancement to the townscape and views and provide significant benefits.

6.1.2 STRATEGIES TO BE ADOPTED TO MITIGATE TOWNSCAPE & VISUAL EFFECTS

To maximise townscape and visual benefits, and mitigate impacts, the secondary mitigation measures that should form of reserved matters applications should include:

- 1 Replacement planting to mitigate the loss of trees along Marsh Farm Lane, guidance on which is provided in sections 3.3 and 4.9 of this Design Code.
- 2 Building elements in appropriate locations should be articulated to create a visual interest and local landmark elements. Refer to section 5.11 for detailed guidance on landmark elements.
 - (i) In particular, the building(s) in College Building Zone 1 along the A316 should create a local landmark when viewed from the A316, as described in section 2.2.
 - (ii) Similarly, the building(s) in College Building Zone 3 should act as a local landmark when viewed along the upgraded Marsh Farm Lane, as described in sections 2.2 and 3.3.
- 3 Appropriately designed areas of public realm including soft landscaping should be incorporated into the design of Marsh Farm Lane. Refer to section 3.3.
- 4 Buildings should be well designed and detailed. In particular, the apparent scale and mass of large blocks should be reduced though the detailed design of the elevations and roofscape including through the use of set backs and projections, fenestration, entrances and materials. Roof level plant should be contained and sensitively concealed. Particular consideration should be given to
 - (i) The roofscape and built form seen from Rosecroft Gardens;
 - (ii) The roofscape and elevations seen from the public open space on the Harlequins Site;
 - (iii) The articulation of frontages seen from Egerton Road and the roofscape seen from adjoining residential areas;
 - (iv) The roofscape seen across Craneford Way Playing Fields;
 - (v) The roofscape and articulation of built form seen in views from Richmond Hill; and

- (vi) The articulation of the frontages seen in views from Chertsey Road.
- Refer to section 5 for detailed guidance on elements of building design, section 5.6 for detailed guidance on building massing, and section 5.9 for detailed guidance on rooftop plant.
- 5 Buildings should be designed with good quality elevation and roofing materials with attention given to the variety of materials, their colour and prominence within the townscape and views (particular attention should be paid to the view from Richmond Hill and from Rosecroft Gardens). Refer to section 5.1 for detailed guidance on building materiality.
- 6 Appropriate design, scale and materials of boundary treatments.

For additional detail, refer to the Townscape and Visual Impact Assessment Chapter of the Environmental Impact Assessment.

SECTION 7 GLOSSARY

7.1 GLOSSARY

Specialist terminology and defined terms are used throughout the design code and are highlighted in *red italics* when they first appear in this document. Definitions of these terms are provided below.

7.1.1 INTRODUCTION

Accessible and Adaptable Dwelling(s)

Housing that is meets or is easily adaptable over time to meet differing needs in accordance with Building Regulations (2015) Requirement M4(2).

Active Frontage

Street level frontages that engage with the Public Realm to promote activity and security. Making frontages 'active' adds interest, life and vitality to the public realm. Active frontage should consist of the following:

- Frequent doors and windows, with few blank walls
- Articulated facades with bays and porches
- Lively internal uses visible from the outside, or spilling onto the street
- Activity node concentration of activity at a particular point.

Active frontages do not include frontages that fit the above descriptions but do not face the Public Realm (or areas that sometimes act as practical extensions of the public realm). Refer also to the definition for Inactive Frontages.

Affordable Housing

Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market.

Amenity

A positive element or elements that contribute to the overall character or enjoyment of an area. For example, open land, trees, historic buildings and the inter-relationship between them, or less tangible factors such as tranquillity.

Amenity Space

Outdoor spaces provided for the amenity and benefit of residents of dwellings in the redevelopment, regardless of whether private, communal or public.

(The) Applicant

Richmond-upon-Thames College

Arboricultural Report

A report prepared to demonstrate how the tree constraints have been considered in the design and layout of the site, to provide guidance on tree protection measures, and to assess impacts relating to trees of the development proposals. It also provides the local authority with the necessary information to assess the tree issues associated with the planning application.

Boundary

A line which defines the limits of an area. When referring to the boundary of open spaces or the Public Realm this term refers to the functional edge of the space, for example as provided by the building line or fence-line, not the legal property boundary.

BREEAM

"Building Research Establishment Environmental Assessment Methodology" is a method of assessing, rating, and certifying the sustainability of buildings, similar to but distinct from LEED.

Building Line

A line defined by the frontage of a building or a series of aligned buildings.

Building Zone

The area within a Development Zone within which buildings can be built.

Character

A term relating to the appearance of any rural or urban location in terms of its landscape or the layout of streets and open spaces, often giving places their own distinct identity.

Climate Change Adaptation

Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate Change Mitigation

Action to reduce the impact of human activity on the climate system.

Code for Sustainable Homes

The national standard for the sustainable design and construction of new homes. The government has withdrawn the Code for Sustainable Homes, aside from the management of legacy cases.

Communal Open Space

Open space that is usually privately owned and is usually only accessible by groups of residents.

Control Documents

The Control Documents set out the Development Parameters and include: the Parameter Plans, the Development Specification and the Design Guidelines.

Defensible Space

Private Open Space between a ground floor dwelling and the Public Realm that is designed to establish a safe area adjoining the dwelling and encourage passive surveillance of the Public Realm.

Design and Access Statement

A short report accompanying and supporting a planning application. Provides a framework for applicants to explain how a proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users.

Design Code

A set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area.

Design Compliance Statement

A short report accompanying Reserved Matters applications identifying how they comply with the requirements of the outline planning application as approved, and in particular to any design guidelines contained in the design code and the reasoned justifications for any departures.

Design Guidelines

The specific design rules and requirements contained in the design code.

Detailed Access Plans

The Primary Control Documents that identify the items pertaining to access for which detailed approvals are beings ought as part of this planning application.

Development Parameters

Specific parameters included within the Outline Planning Application to which the Reserved Matters applications will be required to comply, in particular access, and building height, width, length, area and location.

Development Specification

Describes and defines the principle components of the proposed development. It also explains the form of the outline planning application and the parameters that the applicant will employ, if planning consent is granted, for applications for the approval of Reserved Matters for each element of the scheme.

Development Zone

Areas within the outline application to which specific planning conditions and obligations are sought to be assigned to be discharged in Reserved Matters applications.

Dwelling

A self-contained building or part of a building used as a residential accommodation, and usually housing a single household. A dwelling may be a house, flat, or maisonette.

Energy Statement

An assessment of the effects of different strategies and technologies to meet energy requirements as a result of a development, to address the objectives set out in the local, regional and the national planning policies.

Environmental Impact Assessment (EIA)

A procedure to be followed for certain types of project to ensure that decisions are made in full knowledge of any likely significant effects on the environment.

Environmental Statement (ES)

A Secondary Control Document which presents the findings of the technical environmental assessments that have been undertaken to understand the likely significant environmental effects of the Proposed Development.

Fabric First

The principle that it is preferable to prioritise reductions in energy requirements through building design, specification and construction in preference to replacing energy demands through renewable energy devices, such as solar panels.

Flood Risk Assessment

A flood risk assessment is an assessment of the risk of flooding, particularly in relation to residential, commercial and industrial land use.

Frontage

The portion of a building or piece of land facing an area, usually a street or open space.

Gross External Area (GEA)

The total floor area of a building including the thickness of the external walls, measured in accordance with the RICS Code of Measuring Practice.

Gross Internal Area (GIA)

The total floor area of a building measured to the internal face of the perimeter walls at each floor level, excluding the thickness of the external walls, balconies and voids, measured in accordance with the RICS Code of Measuring Practice.

Habitable Room

Any room used or intended to be used for sleeping, cooking, living or eating purposes. Enclosed spaces such as bath or toilet facilities, service rooms, corridors, laundries, hallways, utility rooms or similar spaces are excluded from this definition.

Hard Landscape

An open space that is predominantly paved, with porous materials or otherwise.

Harlequins Site

The property to the east of Marsh Farm Lane, south of the A316, west of the Duke of Northumberland's River and north of the Council Depot and Craneford Way, excluding the 4 dwellings on Craneford Way west of Marsh Farm Lane.

Housing Design Guide

The London Housing Design Guide which sets a benchmark for housing design in London, as published by the Mayor of London, available for download on london.gov.uk.

Illustrative Scheme

A design included within the outline planning application that demonstrates one interpretation of the Development Parameters.

Inactive Frontage

The parts of a frontage facing the Public Realm, where identified that it should be an Active Frontage, but which is not provided with features that would 'activate' the frontage. Areas of inactive frontage are commonly required for practical reasons, but should be limited in order to ensure active frontages are successful. Inactive frontages include the following:

- Blank walls without windows or regularly-used doors windows (such as emergency exits and service accesses)
- Facades without articulation such as bays and porches.
- Access to car parking garages and other infrequently accessed areas (eg. bin stores).
- Frontages without an activity node in front of them (such as a porch, dining area or gathering space).

Inactive frontages do not include frontages that fit the above descriptions but do not face the Public Realm. Refer also to the definition of Active Frontage.

Inclusive Design

Designing the built environment, including buildings and their surrounding spaces, to ensure that they can be accessed and used by everyone.

Landmark Building (or Element)

An important building (or part of a building) that serves as a prominent role as a distinguishing feature, as a marker of a site or location, or in enclosing the Public Realm and making memorable spaces.

Landscaping

Measures undertaken to improve the appearance of open spaces, such as by planting trees, shrubs, or grass, paving, installation of landscape features such as planters and retaining walls, or altering the contours of the ground.

LBRuT

Abbreviation of the London Borough of Richmond-upon-Thames.

LEED

"Leadership in Energy & Environmental Design", is a green building assessment, rating and certification program, similar to but distinct from BREEAM.

Level Access

Access between interior and exterior spaces where the level of the interior is flush with the level of the exterior without lips, upstands, or other thresholds. Between private spaces, such as a private dwelling and its private amenity space, thresholds of less than 15mm should be considered level.

Living Roof

Living Roof are partially or completely covered with vegetation and a growing medium is and encompass both Green and Brown Roofs.

Local Planning Authority

The local government body responsible for formulating planning policies (in a Local Plan), controlling development through determining planning applications and taking enforcement action when necessary.

London Plan

The name given to the Mayor of London's spatial development strategy for London.

Main Site

The portion of the redevelopment site that is north of Craneford Way.

Maisonette

A dwelling on two or more storeys within a larger building, and provided with its own ground floor and private garden as if it was a house.

Marsh Farm Lane

The name of the publicly accessible pedestrian and cycle route that run approximately north-south from the A316 along the western edge of the redevelopment site, across the River Crane and connecting over the railway to Marsh Farm Road.

Masterplan

The 'Proposed Development' takes the form of a 'Masterplan' and as such, these terms can be used interchangeably.

Metropolitan Open Land (MOL)

Land defined and protected in the London Plan and which can only be developed in accordance with the criteria set-out therein.

Mitigation

Measures that are designed to address any adverse effects. Primary mitigation comprises measures that have developed through an iterative design process and have become embedded in the proposed development. Secondary mitigation addresses impacts remaining after primary mitigation and standard construction practice have been incorporated into the scheme.

Moderate Effects

Effects considered to have moderate importance to the immediate locality, as assessed in the Townscape and Visual Assessment. Can be adverse or beneficial.

Net Internal Area (NIA)

Net Internal Area is the usable area within a building measured to the internal face of the perimeter walls at each floor level, excluding common parts (circulation, toilets, plant, etc), car parking, and unusable areas, measured in accordance with the RICS Code of Measuring Practice.

Non-Technical Summary

A document prepared to summarise the environmental statement without technical jargon, in order to assist in understanding by a non-expert.

Northings & Eastings

A term used to refer to geographic Cartesian coordinates for a point, with reference to the Ordinance Survey National Grid. Easting refers to the eastward-measured distance (or the x-coordinate), while northing refers to the northward-measured distance (or the y-coordinate).

Open Space

All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Outline Planning Application (OPA)

A general application for planning permission to establish that a development is acceptable in principle, subject to subsequent approval of detailed Reserved Matters.

Overlooking

A term used to describe the effect when a development or building affords an outlook over adjoining land or property, often causing loss of privacy.

Overshadowing

The effect of a development or building on the amount of natural light presently enjoyed by a neighbouring property, resulting in a shadow being cast over that neighbouring property.

Parameter Plans

The Primary Control Documents that define the extent of the proposed access routes, Development Zones, Building Zones and open spaces across the Redevelopment Site against a series of minimum or maximum dimensions.

Each of the Development Zones and Building Zones is identified by a name reflecting its intended use (e.g. College Building Zone 1).

Passivhaus / Passive House

Passivhaus or Passive House is an energy performance standard focussed on achieving excellent comfort, thermal performance and energy efficiency through fabric first principles. It is distinct from both BREEAM and LEED.

Phased Development

The phasing of development into manageable parts.

Place

A clearly defined area or space with an identifiable purpose, character or identity.

Planning Condition

A condition imposed on a grant of planning permission (in accordance with the Town and Country Planning Act 1990) or a condition included in a Local Development Order or Neighbourhood Development Order.

Planning Obligations

A legally enforceable obligation entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal. Sometimes called "Section 106" agreements.

Planning Statement

A planning application document that sets out how the scheme responds to the relevant planning policies, as well as why the proposals are being promoted and what benefits are expected from them.

Playing Field Site

The portion of the redevelopment site that is south of Craneford Way.

Podium Parking

A car parking structure where the car parking is provided beneath a solid deck that provides shared or private residential amenity spaces above.

Predominant

The main portion, generally constituting more than half, of the specified use, length, area, frontage, etc.

Primary Control Documents

The documents submitted for approval as part of the Outline Planning Application.

Private Gardens

Ground level private outdoor amenity areas connected to and intended for the use of a specific dwelling.

Private Open Space

Open space that is usually privately owned and is not usually accessible by members of the public.

Proposed Development

The 'Proposed Development' takes the form of a 'Masterplan' and as such, these terms can be used interchangeably.

Public Art

Permanent or temporary physical works of art visible to the general public, whether part of a building or free-standing. For example, sculpture, lighting effects, street furniture, paving, railings and signs.

Public Open Space

Urban space, designated by a council, where public access may or may not be formally established, but which fulfils or can fulfil a recreational or non-recreational role (for example, amenity, ecological, educational, social or cultural usages).

Public Realm

Those parts of a village, town or city (whether publicly or privately owned) available, for everyone to use. This includes streets, squares and parks.

Redevelopment Site

The Site covered by the Application and defined within the Site Location Plan (PL-01).

REEC Site

The portion of the Main Site incorporating the College, Tech Hub, Secondary School and SEN School Development Zones.

Reserved Matters

Those planning matters for which approval is not being sought as part of the Outline Planning Application, and for which approval will be sought as part of one or more Reserved Matters Applications.

Reserved Matters Application

A 'Reserved Matters Application' seeks the approval of one or more Reserved Matters.

Residential Site

The portion of the Main Site corresponding to the Residential Development Zone.

Revision

The Outline Planning Application documents may be updated as part of the planning application. When referencing them, please refer to the document by referencing its name and its revision letter, eg. "Design Code Rev A"

Richmond-upon-Thames College Planning Brief SPG

The name of a Supplementary Planning Guideline that has been specifically adopted for the College Site.

Right-of-Way

A right of way is a highway over which there is a right of access along the route.

River Crane Footpath

The name adopted in the report to refer to the approved new footpath through Twickenham Rough connecting between Twickenham Rail Station and Marsh Farm Lane

Rooftop Plant

Any and all equipment, services and fittings installed on a roof pertaining to the functioning and maintenance of the building; such as air conditioners, aerials, maintenance gantries, mechanical smoke reservoirs, satellite dishes, and solar panels but excluding flues, chimneys, vents, lift overruns and signage.

RuTC

Abbreviation of Richmond-upon-Thames College.

School Grounds

The open spaces of an site used for educational purposes.

Secondary Control Documents

Documents submitted to support the Primary Control Documents and provide additional information required by the Local Authority to determine the outline planning application.

Secure by Design

A UK Police flagship initiative that advocates designing out crime to promote safer neighbourhoods.

Self-Shading

The characteristic of a building designed to shade itself to prevent unwanted solar gain.

SEN School

Abbreviation for Special Educational Needs School.

Service &/or Delivery Area

An area used for the temporary storage, delivery and removal of goods & waste to and from site, including associated car parking, working, and storage areas.

Sethack

A dimension (or a minimum or maximum dimension) from a given point, line or feature used to define an area into which a building will not encroach.

Significant Effects

Effects considered to have significant importance to the immediate locality, as assessed in the Townscape and Visual Assessment. Can be adverse or beneficial.

Soft Landscape

An open space that is predominantly grass or other natural surfaces.

Sports Pitch Zone

The area within the College Playing Field Development Zone within which sports pitches and associated minor structures can be built.

Stag Beetle Loggery

A stag beetle loggery is a group of large logs (more than 30 cm in diameter), sunk vertically 30 to 50 cm into the ground, placed in a partially shaded area and protected against predators.

Statement of Community Involvement

The Statement of Community Involvement sets out the processes to be used by the local authority in involving the community in the preparation, alteration and continuing review of all local development documents and development control decisions. The Statement of Community Involvement is an essential part of the new-look Local Development Frameworks.

Street Furniture

Street Furniture is understood to include public art, benches, signs, bins, bollards, bus stops, utilities boxes, post boxes, lighting, cycle stands and other similar items.

Supplementary Planning Guidance

'Supplementary Planning Guidance' or 'SPG' may cover a range of issues, both thematic and site specific and provide further detail of policies and proposals in a development plan.

Sustainability Statement

An appraisal of the economic, environmental and social effects of a plan from the outset of the preparation process to allow decisions to be made that accord with sustainable development.

Tenure Blind

The principle that dwellings of different tenures should be designed to be indistinguishable when viewed from the public realm.

Townscape

Areas such as villages, towns and cities where the built environment is dominant.

Townscape and Visual Impact Assessment

A tool to identify and assess the significance of and the effects of change resulting from development on both the urban landscape (or townscape) as an environmental resource in its own right and on people's views and visual amenity.

Townscape Effects

Effects on the urban landscape (townscape) as a resource in its own right.

Transport Assessment

An assessment of the effects upon the surrounding area by traffic as a result of a development, such as increased traffic flows that may require highway improvements.

Twickenham Rough

The name for the piece of land bounded by the River Crane, Brewery Wharf (former Post Sorting Office site), the Railway Tracks and the allotment gardens on Marsh Farm Lane. The approved River Crane Footpath runs through Twickenham Rough.

Twickenham Stoop

The name for the Rugby Stadium on the Harlequins Site.

Unadopted Road

A highway not maintainable at public expense.

Upper Floor

Any floor located above ground floor, including any ground floor mezzanine level.

Visual Effects

Effects of development on specific views and the visual amenity experienced by people.

Wheelchair User Dwelling(s)

Housing that is wheelchair accessible or easily adaptable for residents who are wheelchair users in accordance with Building Regulations (2015) Requirement M4(3).

Works Period

The period of time during which construction and demolition relating to the proposed redevelopment will take place.



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Qube, 90 Whitfield Street London W1T 4EZ +44 (0)20 7636 2006 +44 (0)20 7636 1987 alan.addison@hok.com

www.hok.com