

6.4 Indicative Planting Palette

Trees planted in the ground

- Carpinus betulus 'Frans Fontaine'
- Prunus 'Umineko'
- Tilia cordata 'Green Spire'

Trees planted in moveable raised planters

- Amelanchier arborea 'Robin Hill' (MS)

Shrubs and Perennials

- Ajuga reptans 'Atropurpurea'
- Anemanthele lessoniana
- Bergenia 'Ballawley'
- Bergenia 'Bressingham White'
- Brachyglottis 'Sunshine'
- Ceanothus thrysiflorus 'Repens'
- Choisia 'Aztec Pearl'
- Cotinus coggygria 'Royal Purple'
- Escallonia 'Apple Blossom'
- Geranium macrorrhizum 'Ingwersens Variety'
- Hebe 'Red Edge'
- Hebe 'Blue Gem'
- Hebe rakaiensis
- Hypericum moserianum
- Lavandula angustifolia 'Hidcote'
- Philadelphus 'Belle Etoile'
- Potentilla fruticosa 'Abbotswood'
- Pyracantha 'Red Carpet'
- Sarcococca hookeriana var. humilis
- Sedum spectabile
- Skimmia japonica
- Spiraea japonica 'Little Princess'
- Stachys byzantina 'Silver Carpet'
- Viburnum davidii
- Viburnum 'Eve Price'

Ornamental grasses & ferns

- Deschampsia cespitosa 'Goldtau'
- Miscanthus 'Yakushima Dwarf'

Indicative planting species



Deschampsia
caespitosa 'Goldtau'



Ajuga reptans 'Atropurpurea'



Miscanthus 'Yakushima
Dwarf'



Escallonia 'Apple
Blossom'



Geranium 'Ingwersens
Variety'



Hebe 'Blue Gem'



Ceanothus 'Repens'



Brachyglottis 'Sunshine'



Prunus 'Umineko'



Amelanchier arborea 'Robin Hill' (MS)



Green wall trellis system

6.4 SuDS Indicative Planting Palette

The following planting palette is compiled with the rain garden planting beds being located in sunny areas or partial to full shade. Suitable mixes have been prepared based on the sun exposure location.

The species can comfortably handle moisture, are fairly low-maintenance and can offer ecological benefits.

Trees planted in the ground

Acer campestre 'Elsrijk'

Shrubs & perennials

Alchemilla mollis

Anemone x hybrida 'Horine Jobert'

Aster x frikartii 'Monch'

Bergenia 'Ballawley'

Cornus sanguineum 'Midwinter Fire'

Geranium 'Rozanne'

Oenothera lindheimeri 'Whirling Butterflies'

Phlox russeliana

Rudbeckia 'Goldsturm'

Tiarella cordifolia

Viburnum davidii

Viburnum opulus 'Compactum'

Ornamental grasses & ferns

Calamagrostis x acutifolia 'Karl Foester'

Carex morrowii 'Ice Dance'

Osmunda regalis



6.5 External Furniture & Fencing

- Products Palette

01/ EXF-01 HVM Linear Seating unit at north entrance with planting
Height Above Ground: 500mm
Material: White Stone

02/ EXF-02 Bench and Seats with backrest in Public Realm
Dimensions: 2400 (l) x 410 (d) x 470(h) mm
Material: Galvanised and Powder coated metal
Slats material: FSC Hardwood
Method of fixing: Root fixed

03/ 04 EXF-03 Moveable Raised tree Planters with integrated
Public Realm
Tree planter in combination with wall benches of Solid slats with a
Rough&Ready end beam.
Seating Dimensions: 2300 (l) x 540 (d) x 900 (h) mm
Seat Height Above Ground: 450mm
Slats material: FSC Hardwood -
Planters dimensions: 2300 (l) x 2300 (w) x 900 (h) mm
Method of fixing: Integrated seats in moveable planters
Colour: Dark Grey

05/ EXF-04 Door barriers
Height: 1320 mm (including root for submerged fixing)
Material: Mild steel
Finish: Hot dip galvanised & powder coated (RAL TBC)
Method of fixing: Root fixed
Accessories: Rubber buffer for impact absorption

06/ EXF-05 Bollards to north and south ends of the public realm
Flat Top Sheffield Stainless Steel Bollard
Height above ground: 1000 mm
Material: Stainless steel
Grade: 316
Method of fixing: Root fixed
Notes: Removable bollards where required

07/ EXF-06 Drop down Bollards at Fire Access area
Post
Height above ground: 670mm Diameter 114 mm
Material: Stainless steel

Seating in



6.5 External Furniture & Fencing

- Products Palette

08/ EXF-07 Cycle Shelter to Public Realm

Sedum Roof Cycle Shelter

Dimensions: 15.5 x 4.5m. (81 bicycles)

Roof: Green roof

09/ EXF-08 Racks to Public Realm and Staff Cycle Shelter

Semi Vertical Cycle Rack

Finish: Hot dip galvanised & powder coated (RAL TBC)

10/ EXF-09 Hoops to Public Realm Cycle Shelter

Sheffield Cycle Stand

Finish: Hot dip galvanised & powder coated (RAL TBC)

Method of fixing: Root fixed

11/ EXF-09 Tree Grill in Public Realm with Engineered Tree Pit

Dimensions: 1200 x 1200 mm

Finish: Powder Coated

Colour: Black

12/ EXF-10 Facade Greening System on southern brick wall

Stainless Steel Wire Rope

Method of fixing: Wall mounted

13/ EXB-02 Fabricated metal fencing to service yard

Height: 3500 mm

Material: Mild steel

Finish: Hot dip galvanised - powder coated

Colour: RAL 9005 (Black)

14/ EXB-03 Bi-folding Gate to Service Yard

Bi-folding Gate

Height: 3000 mm high, 4000 mm clear opening

Finish: Hot dip galvanised steel hinges

Colour: RAL 9005 (Black)

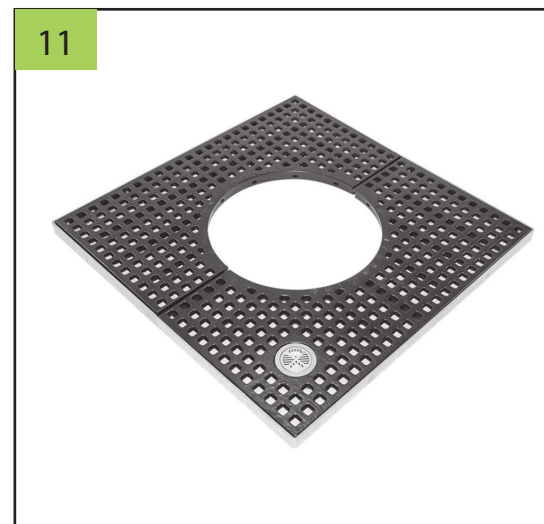
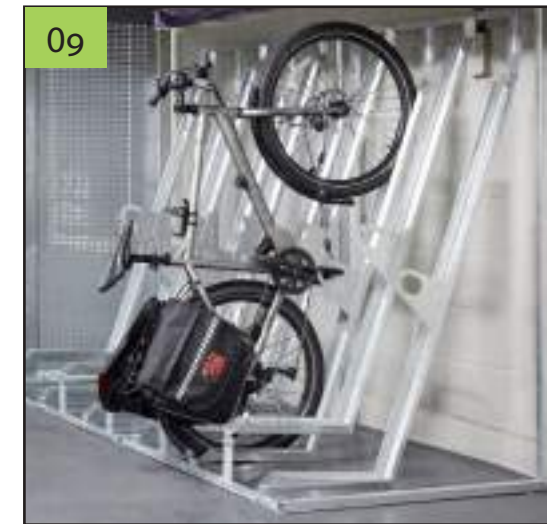
Method of fixing: 800mm fixation into concrete

15/ EXF-11 Litre Bins in Public Realm

Dimensions: 1260 (l) 420 (d) 900 (h) mm

Material: Steel

Finish: Galvanised and Powder Coated



NOTES

Wayfinding signage - style/type and locations to be agreed

General/recycling bins requirement in public realm TBC

6.5 External Furniture & Fencing

- Products Palette

16/ EXF-13 and 14 Raised planters to planting and food growing at roof terrace
Bespoke Planter Edge
Dimensions: as shown on plan
Height above ground: 900 mm
Finish: Blackened Steel
Method of fixing: On top of roof terrace insulation boards

17/ EXF-02 Seating at roof terrace
Length: 2400 mm
Depth: 410 mm
Base material: Mild steel
Finish: Hot dip galvanised & powder coated
Colour: RAL 9005 (Black)
Slats material: Hard wood
Accessories: Backrest (numbers TBC)

18/ EXF-15 Picnic Set at roof terrace
Green Gate Picnic Set
Dimensions: 1800 (l) x 600 (w) x 745 (h) mm
Material: Galvanised and powder coated
Slats material: FSC Hardwood -
Method of fixing: Root fixed/ Surface mounted

19/ EXF-16 Steel Storage Shed
Premium Metal Shed
Dimensions: 2600(w) x 2200 (d) x 2180 (h) mm
Material: Metal
Colour: Grey

20/ EXF-17 Greenhouse
Dimensions: 2547(l) x 1925(w) x 2353(h) mm
Material: Metal ad horticulture glazing 3mm
Colour: Black



6.5 Precedents



Raised planters to public realm



Cycle shelter to public realm with green roof

7.0

Supporting Strategies

7.1 Access and Movement

- Vehicular, Pedestrians and Cycles

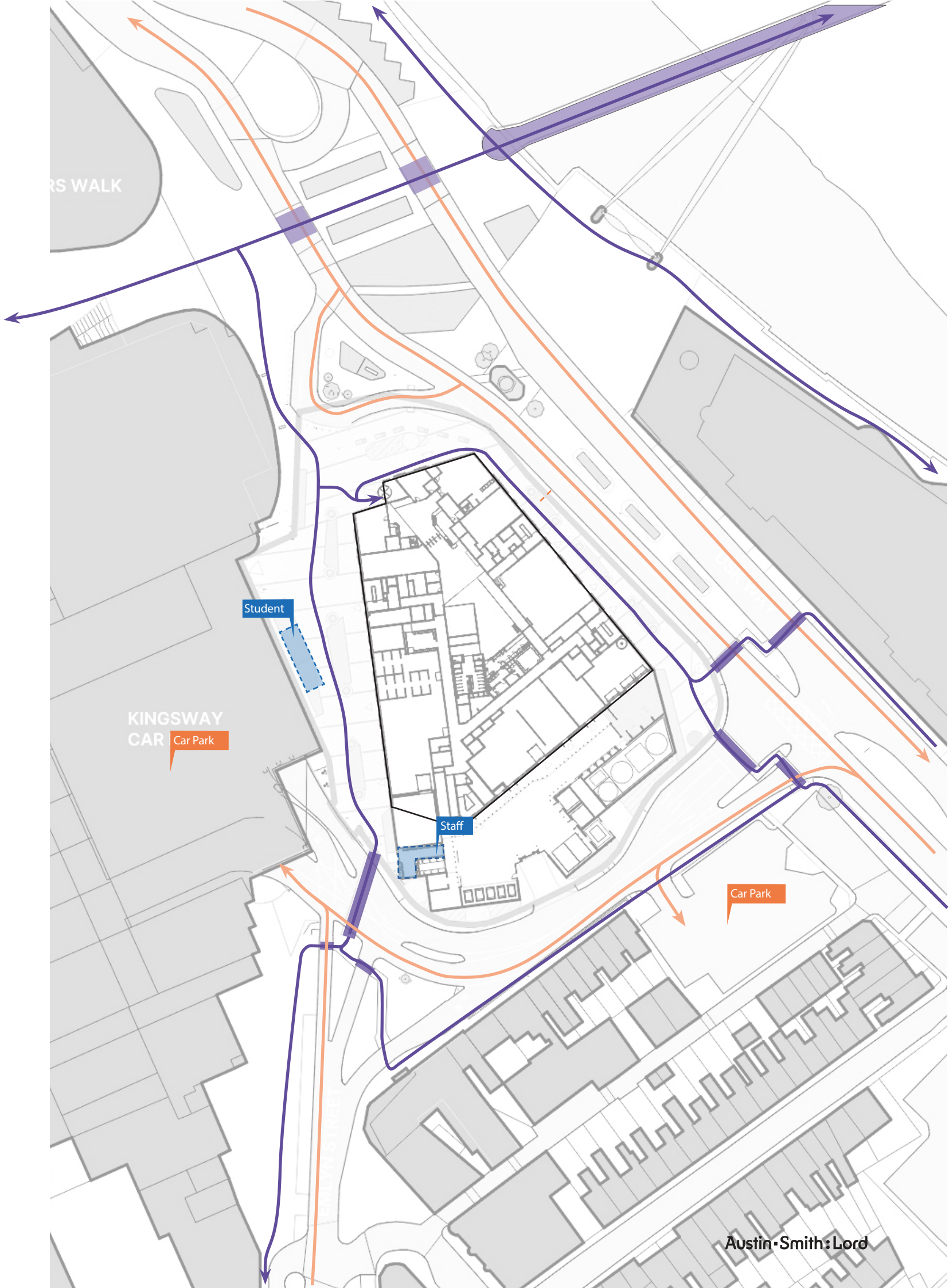
- Pedestrian / Cyclist Access
- Vehicular Access
- Pedestrian Crossings
- - - Cycle Stores

The site benefits from excellent connectivity to the city, with established vehicular, pedestrian, and cycle routes.

Travel to the site by foot or bicycle will be prioritised, with new and enhanced accessible public realm to provide better connectivity in this part of the city. The new development will connect to pedestrian and cycle routes from Friars Walk, Kingsway to the south, and across to USW, the River Usk and the footbridge.

Provision for cyclists is also a key feature, with two distinct types of bicycle parking: secure facilities for staff located within the service yard (accessed by a designated pedestrian/cyclists gate) providing 54No. spaces; secure student cycle parking to the west of the site, integrated into the new public realm providing 80No. spaces.

While there will be no on-site parking, staff and students will have access to nearby car parks, including the multi-storey Kingsway car park, a surface car park on Emlyn Street, and the Friars Walk car park to the north.



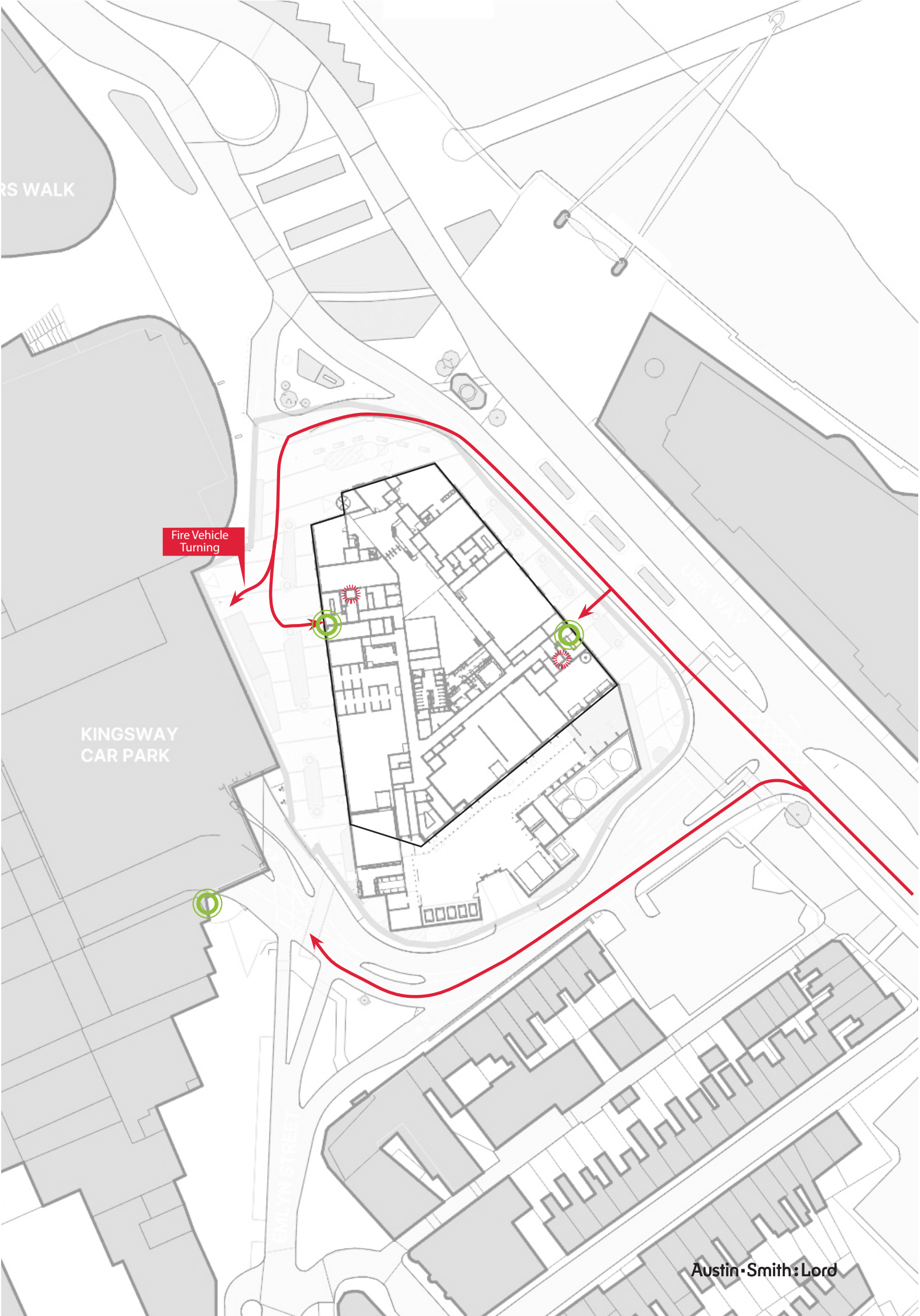
7.1 Access and Movement - Fire

- Fire Vehicle Access
- Firefighting Shaft
- Dry Riser Inlet

Emergency vehicles, including the Fire Service, can access the majority of the perimeter of the new building and site.

As stipulated within the outline planning consent for the site, clear access is required to be maintained across the area of new public realm in order to provide emergency access for a fire tender to the Kingsway car park. The landscape design has been arranged to provide a clear route and turning head, with surfaces to be designed for the appropriate loading. Access will be controlled with drop-down bollards or similar.

The building will be served by two dedicated firefighting shafts, located to the east and west. Each shaft includes both a firefighting lift and staircase, providing safe access for the fire service for emergency response in the event of a fire. A fire appliance needs to be able to drive to within 18m of the dry riser inlet point for these firefighting shafts.



7.1 Access and Movement

- Deliveries & Refuse/Recycling

-  Service Access
-  Refuse Store / Waste & Recycling Skips
-  Kitchen Waste
-  National Grid Access
-  Sub-Station / Plant
-  Main Deliveries

The site's main deliveries will be routed through the secure service yard, with goods brought into the building via the most appropriate access points. This will primarily be via the service entrance, giving access to the good lifts internally.

Two dedicated refuse stores are provided: one for general waste and recycling and another housing five recycling skips which are associated with the workshops. Kitchen and food waste will be managed within the kitchen itself before being transferred, through the building towards the service yard, for collection.

The service yard includes three substations, two private owned by the College, and another owned and maintained by National Grid. The NGED substation has its own direct access point from Emlyn Street, ensuring National Grid operatives can access them independently 24/7 without needing to pass through the service yard.



7.2 Security & Safety

The safety of students, staff and visitors is very important in relocating to the city centre site. Engagement has taken place with the College, NCC and South Wales Police to understand the risks and the potential mitigation to consider within the design proposals. A Security Needs Assessment was also produced by an independent specialist, with a series of recommendations to be considered which largely align with the Police recommendations.

The design proposals have been developed in consideration of security and safety, including the recommendations received, whilst balancing these with other key objectives for the development including the Council's vision for providing high quality landscaped public realm areas and building appearance/design, as well as coordinating with site constraints including restrictions associated with below ground utilities. In summary the following measures are included within the proposals;

Site layout and landscaping;

The public realm is well illuminated and monitored with CCTV for safety/security. The external spaces provide clear sightlines for passive supervision and avoid hidden areas. The public realm is treated as a high-quality landscaped space providing connectivity between the city centre to the north and Kingsway to the south.

Cycle storage to be enclosed, secure, monitored and illuminated. Secure longer stay cycle storage parking is provided in two locations on the site.

An 80 space secure enclosed shelter is located within the public realm space to the west. This will be accessed via an access controlled entrance gate, for college learners only. The shelter includes internal lighting and will be monitored by CCTV coverage. The shelter is positioned to be set off from the façade of the existing multi-storey car park adjacent - this set off allows for future maintenance access to the façade of the car park. This area will be secured off at each end with locked gates to prevent unwanted access.

A 54 space secured fully enclosed space for staff cycle storage is located within the southern 'service' yard area, accessed via the pedestrian footpath to the southern boundary at Emlyn Street. This access point includes a secure steel gate openable via access control.

The proposed soft planting has been selected to suit the ground constraints, provide ecological value and visual interest in the public realm, and in consideration of limiting possible hiding places.

Vehicular attack potential - barriers/deterrent to prevent malicious use of vehicles to drive into the building/people. Hostile vehicle mitigation has been considered in the design of the external site layout, considering recommendations from the Security Needs Assessment and advice from the Police advisors. Higher risk areas and mitigation includes;

Western public realm - bollards at the north and southern end of this space to prevent unauthorised vehicle access into the pedestrian area. Collapsible bollards are proposed to the northern end to allow emergency and maintenance access when required.

Frontage to main entrance - an area of high quality public realm. Vehicle protection has been incorporated into the landscape including raised HVM linear seating areas, partly set along the edge of a planted rain garden, as well as additional bollards.

Usk Way frontage - the landscaped streetscape is maintained along this boundary, including a series of planted rain gardens and new tree planting. These features are designed to offer a degree of protection to the building façade and public realm in this area, with additional bollards located at the north east corner to offer a higher level protection to the glazed frontage of the training restaurant.

Service yard security - the service yard will be enclosed with masonry walls, varying in height but a minimum of 2.4m high, with an additional area of colour coated steel mesh screening set above the masonry. Vehicle access to the yard from

Emlyn St is via motorised access control gates covered by CCTV. Additional building protection within the service yard from vehicular attack/collision provided with a row of bollards set in front of the building elevation.



7.2 Security & Safety

Building;

Building to have one ‘main entrance’ and security control point. The main entrance is positioned at the north end of the site, facing towards Friars Walk, USW and the Usk footbridge - prominent and easily accessible. The main entrance doors include access control.

The main reception/foyer area includes a secure line of access control ‘speed gates’, with reception designed to serve both the non-secure and secure sides of the barrier line.

Ground floor areas that will be used by the community, and/or for events, are zoned from the rest of the building with access control to the doors giving access beyond this point.

The training restaurant will be publicly accessible and has a separate external entrance, as well as access from the foyer internally. The restaurant prevents a ‘breach’ of the building secure line, as there are multiple internal access-controlled doors preventing further access. The dedicated external entrance will be locked when not in use, and provides opportunity for the College to operate this facility independently from the main building when desired.

The Hair and Beauty salon at ground floor will serve the public. Access to this is via the building main entrance foyer, with supervision from the main reception and the separate salon reception. The spatial arrangement, circulation and access control strategy prevents a ‘breach’ of the building secure line.

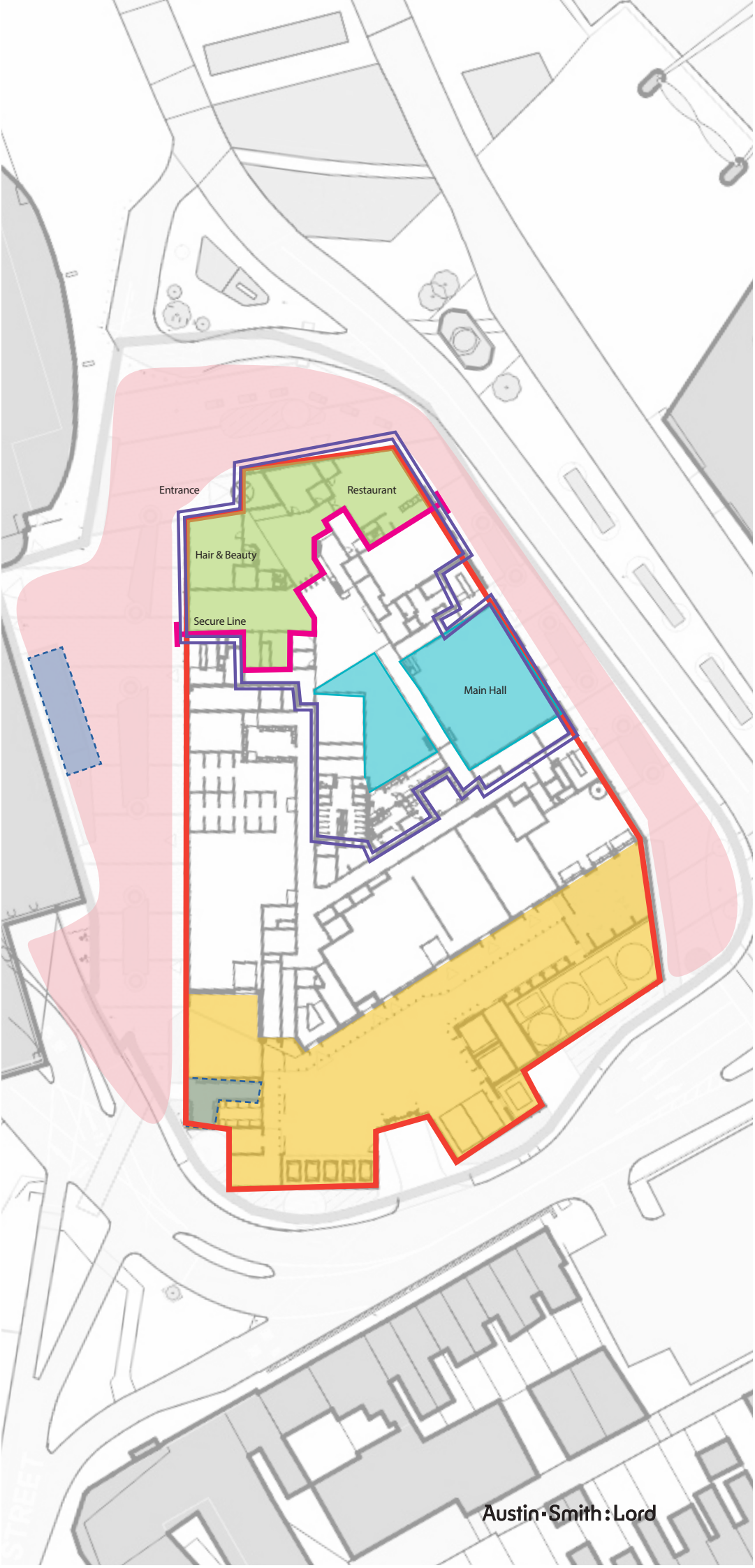
In the event of a serious security event, the College will put into effect their lock-down policy to maintain safety of the building occupants. This will include the ability to lock internal doors, and close of areas of glazing where appropriate and practical to do so.

The building features an intruder alarm system. In a fire alarm situation, the building security and final building exit points will be managed via a double knock alarm system to ensure fire exits are not inadvertently used and/or left open.

College has a lock-down strategy which has been considered in the design. Extensive CCTV coverage is provided throughout the building, to monitor building entrance/exits and all circulation routes and key spaces.

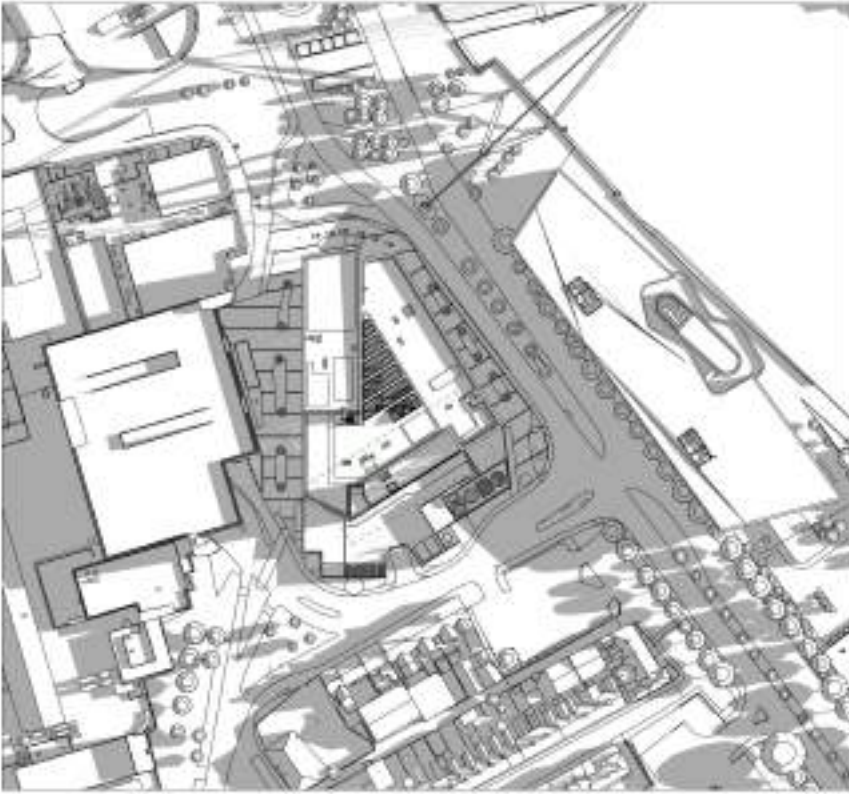
Generally, the main principles of the secure by design standard have been implemented in the proposed scheme, including LPS 1175 ratings.

- Public
- Controlled Community Use
- Secure Boundary Line
- Service Yard
- Cycle Storage
- Public Realm
- Independent Lockdown for Events

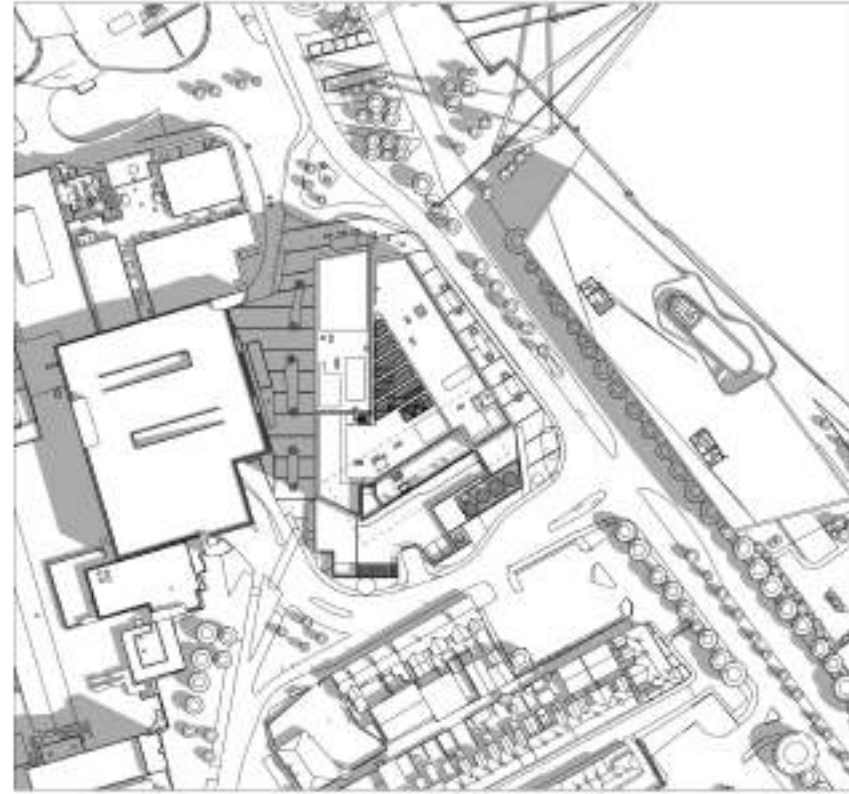


7.3 Solar Study - Summer Solstice

[3 of 17] [June 21, 2028 - 07:01]



[6 of 17] [June 21, 2028 - 10:01]



[9 of 17] [June 21, 2028 - 13:01]

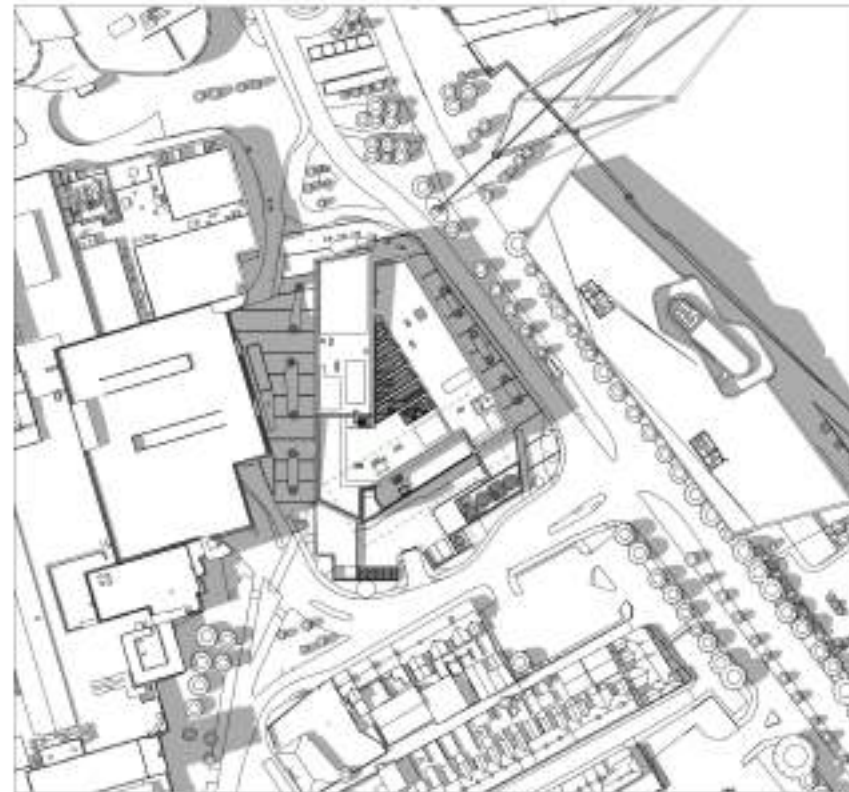


The Summer Solstice solar study here demonstrates the impact of the proposal on surrounding buildings in the summer. It shows that shadows cast in the height of summer have very minimal impact, and are generally limited to the public realm surrounding the building itself, with some shadows in the afternoon and evening falling on Usk Way.

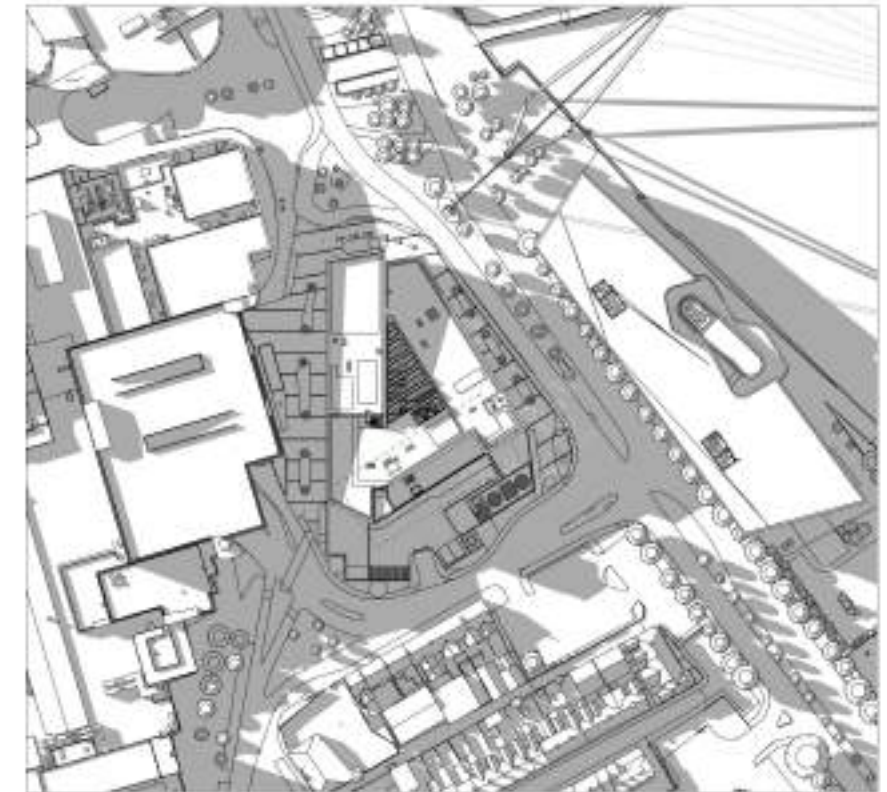
The proposal doesn't cast any direct shadows on the houses to the South, and these are more likely to be shaded by the adjacent multistory car park in the late evening. The proposed building sits further into the site than the previous Leisure Centre building, and so presents better opportunity to avoid overshadowing despite the higher overall mass.

Note: This is a simple shadow-path simulation; for a more detailed assessment of daylight and sunlight, refer to the Stantec report: NE0101-STN-XX-XX-RP-N-00014

[12 of 17] [June 21, 2028 - 16:01]



[15 of 17] [June 21, 2028 - 19:01]



7.3 Solar Study - Winter Solstice

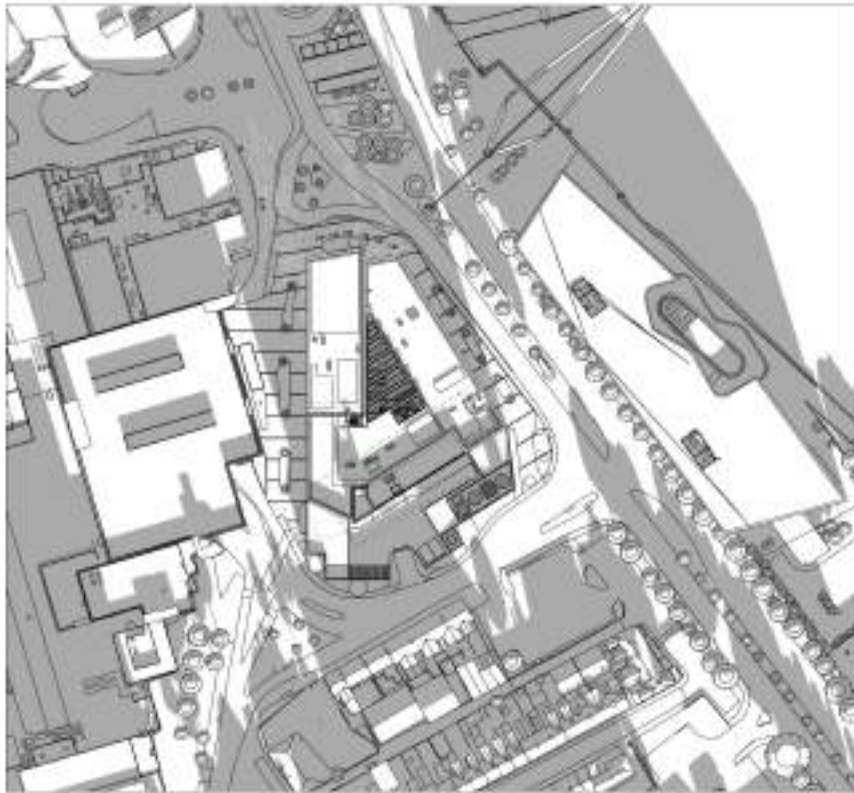
[2 of 6] [December 21, 2025 - 09:23]



[3 of 6] [December 21, 2025 - 10:23]



[4 of 6] [December 21, 2025 - 11:23]



The Winter Solstice solar study here demonstrates the impact of the proposal on surrounding buildings in the winter. With much lower sun angles, the shadows cast to the North are much longer, but are again confined to public realm and the roads, much of which are already overshadowed by existing buildings.

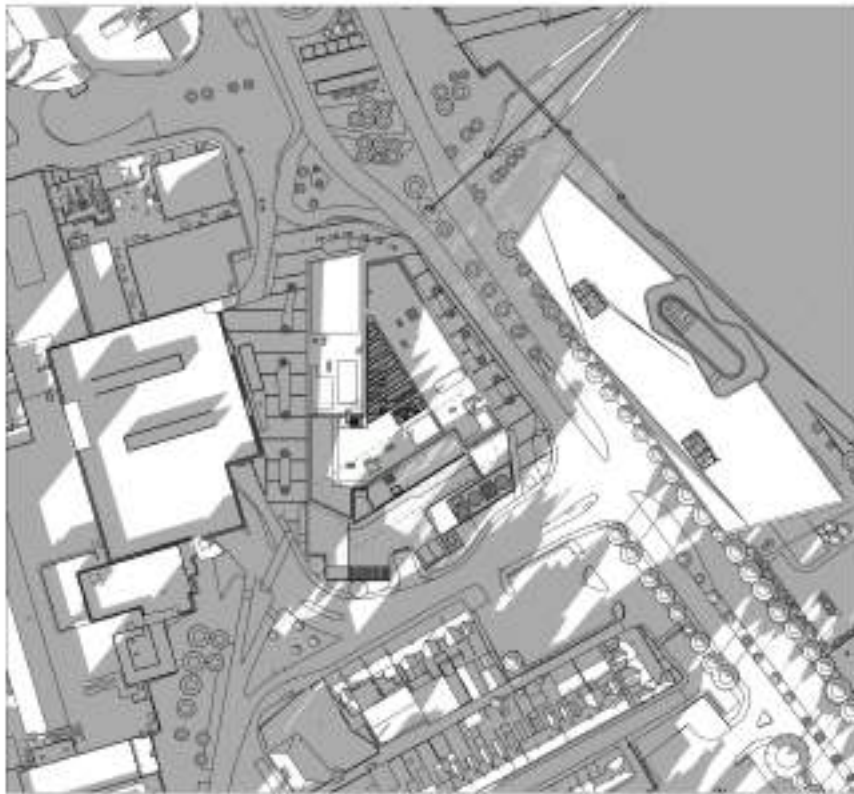
This also demonstrates the houses to the South themselves do not generally cast shadows on the proposed building, with only the potential for some shading in early morning hours.

Note: This is a simple shadow-path simulation; for a more detailed assessment of daylight and sunlight, refer to the Stantec report: NE0101-STN-XX-XX-RP-N-00014

[6 of 6] [December 21, 2025 - 13:23]

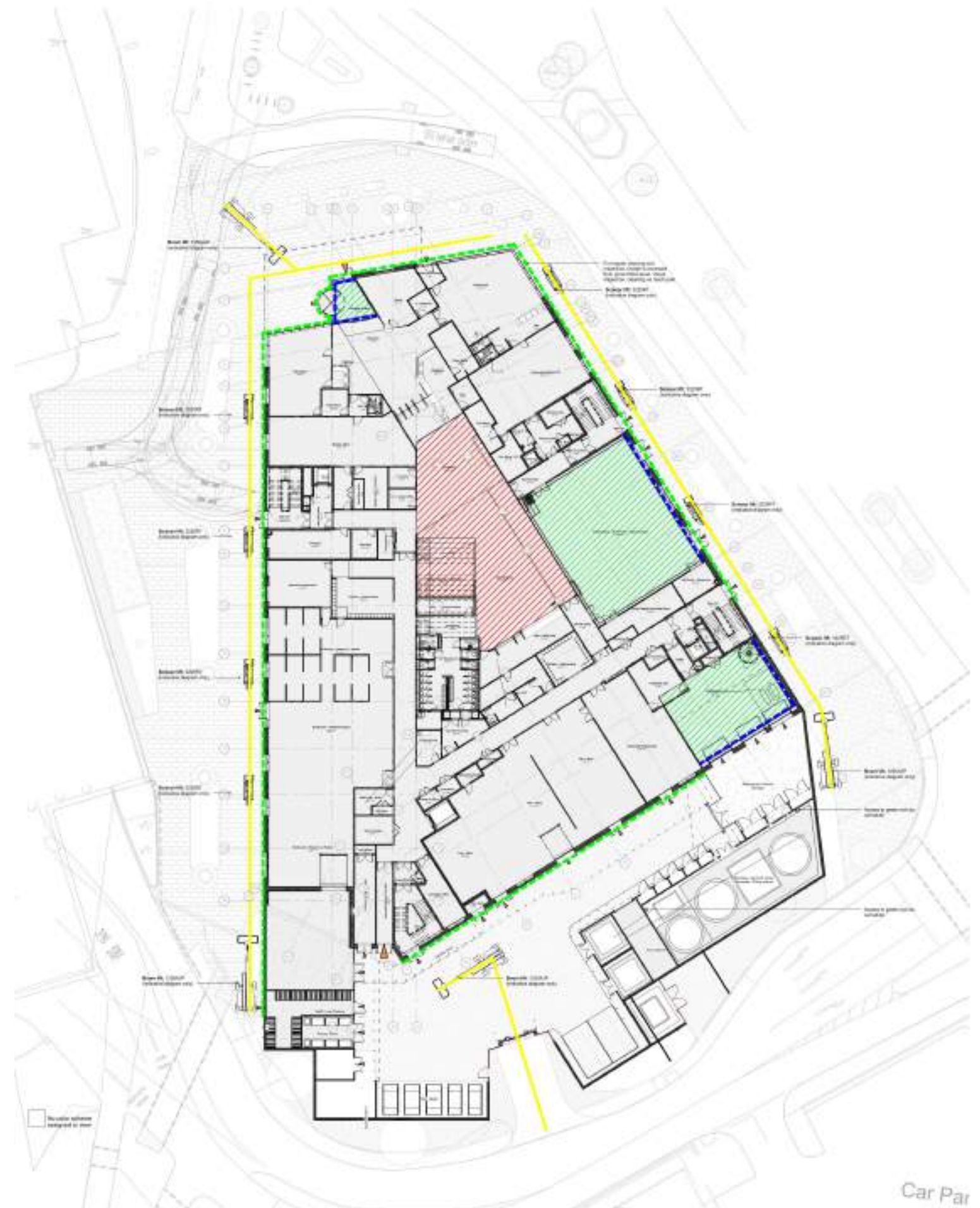


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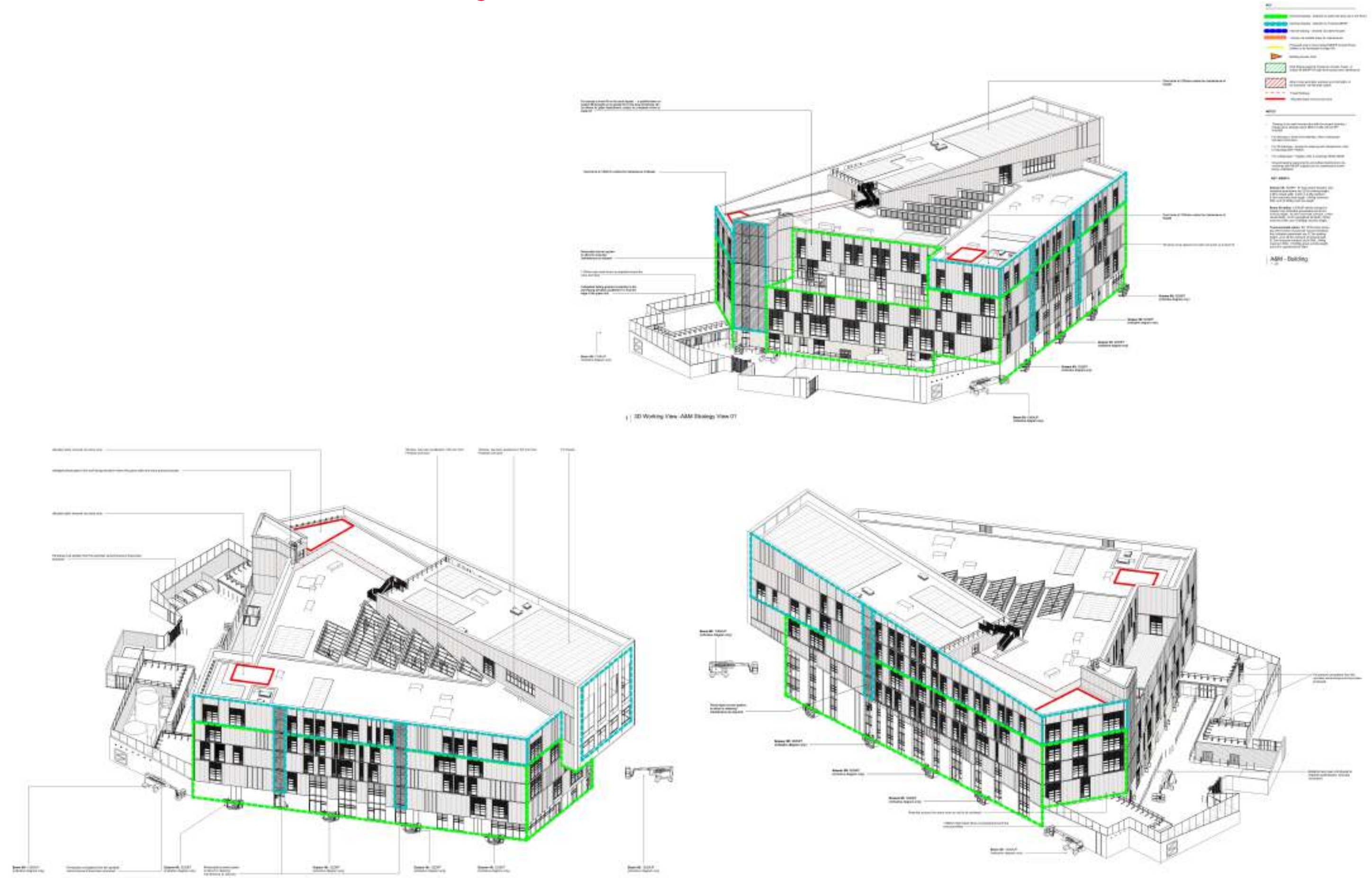


7.4 CDM Risks: Access, Maintenance and Cleaning

CDM review and workshops have been carried out over the course of the project development, from RIBA Stage 2 to Stage 3, to identify areas of design risks and potential solutions to eliminate or mitigate these. The access, maintenance and cleaning strategy has been put together for RIBA 3, with the following pages demonstrating some aspects of the strategy.



7.4 CDM Risks: Access, Maintenance and Cleaning



7.5 Environmental Strategies

Fabric-First Approach

The primary environmental strategy for reducing the operational energy demand of the building is the adoption of fabric-first principles. This approach involves high levels of thermal insulation, thermal bridge free design, MVHR (Mechanical Ventilation with Heat Recovery) and high levels of airtightness.

Daylighting Ventilation & Overheating

The daylighting and ventilation strategies have been fully embedded in the facade design, with windows consisting of various modules to suit specific needs. The diagram adjacent shows the green area above the ceiling as the mechanical ventilation area, which is ducted into weather louvre sections at the head of windows, fronted with thin-bladed barrier louvres that maximise the overall free area. Below the ceiling level, we then have to provide natural ventilation. However, as these windows alone will not provide enough ventilation, they are partnered with inward-opening side vents, that are fronted with barrier louvres. This allows for a full 90 degrees of opening on the side vent, and therefore ample venting into the space. All rooms have been designed to accommodate differing numbers of these modules to hit the various requirements around the building, allowing us to design a standard module that can flex to suit.

Sustainable Drainage

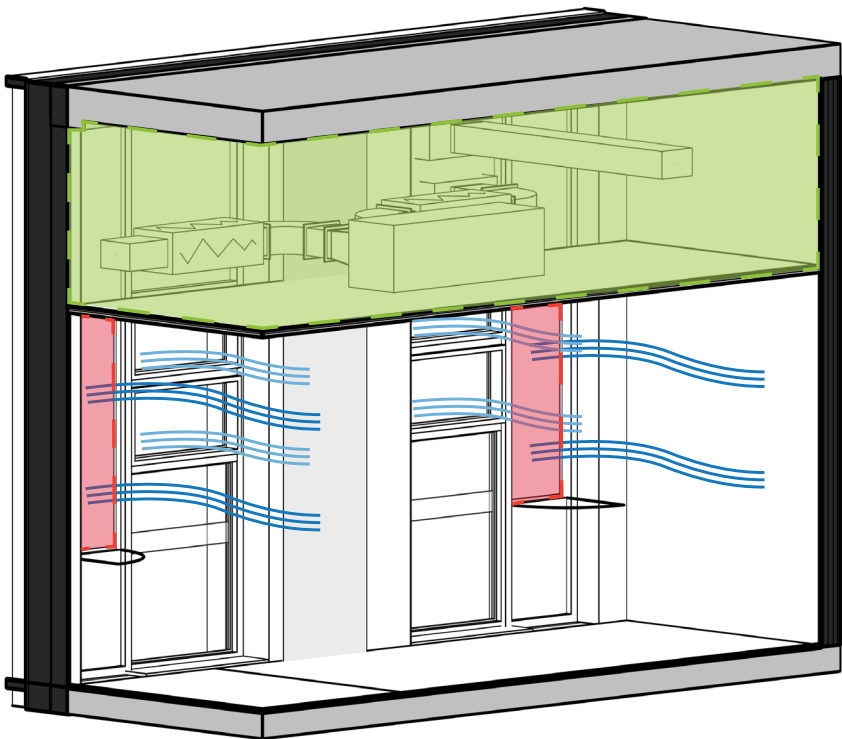
The building and landscape schemes incorporate sustainable drainage strategies, to slow down the rate at which rainwater reenters the system. Raingardens will be used in the landscape, to provide a slow and store effect on the water, while also helping to treat the water and remove pollution and toxins before it re-enters the system.

Photovoltaic Panels

Whilst the roof has been maximised for plant, there is still ample room for accommodating PV panels, to provide renewable electricity to the building. The panels have been distributed in all available areas, mostly on the upper roof section, which naturally pitches towards the South, but also mostly free of any plant and so provides the greatest opportunity for large areas of PV.

Other Strategies

As BREEAM Excellent is a requirement of the brief, a wide range of efficient and sustainable systems and strategies are being implemented under the categories of Management, Health and Wellbeing, Energy, Transport, Water, Materials, Waste, Land Use and Ecology and Pollution.



Conclusion

8.1 Conclusion

This Design & Access Statement accompanies the Reserved Matters Planning Application for the design of a new college building in the centre of Newport, known as the Newport Knowledge Quarter, for Coleg Gwent.

The proposed use is considered entirely appropriate for the location, as the new building will be of educational use, on a site adjacent to the existing USW building. It is also regenerating a key, city-centre site, which has been vacant for several years following the demolition of the leisure centre.

The site is a sustainable location for the proposed development as it benefits from good sustainable transport options including public transport and cycling. These options will be promoted through the College's Travel Plan.

The design development and supporting information contained within this report demonstrates that the proposed scale and position of the building is justified within the constraints of the existing site.

Overall, it is considered that the proposed development is appropriate to the site context, offers significant improvements in landscape and visual appearance, and will provide a high quality, sustainable educational facility for the city centre and the local community.



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