

9.0 Access & Maintenance

Nature
Retreat
Reflect
Unique

9.1 Pedestrian Access

Pedestrian Access

Primary pedestrian movement will be from the car park situated towards the south corner of the site.

Hotel & Restaurant

The main hotel and restaurant entrance can be accessed at grade level from the drop off zone adjacent to the central green space. Access into the building takes you into a concierge managed reception lobby. Internally lifts provide level access to all areas.

Apartments

The apartments can be accessed from either the main hotel reception or directly from a secondary entrance to the north of the site.

Villas

Each villa has a separate entrance and can be accessed from ground level directly adjacent to the central green space. A number of car parking spaces are located underneath the villas and can be accessed via lift/stairs to the north of the villas.

Spa

Pedestrians can gain direct level access to the spa entrance which faces the central green space. Access to the spa from the lower level of the car park will be for staff only.

Mini bus

A large electric mini bus to accommodate 30 people (guests and members of staff) will be able to gain access to the site via the main route. One stop will be adjacent to the main hotel entrance, the bus will then turn in the turning circle before making a second drop in the below podium service yard. It will then be able to turn and exit the site via the service route to the west.



Proposed ground floor plan highlighting entrance points

9.2 Vehicular Access

Vehicular Access & Car Parking

Vehicle access for guests and service vehicles to the site will be via the existing entrance on Ferry Road. A service route then extends to the south of the site leading to a concealed undercroft service yard.

Car Parking

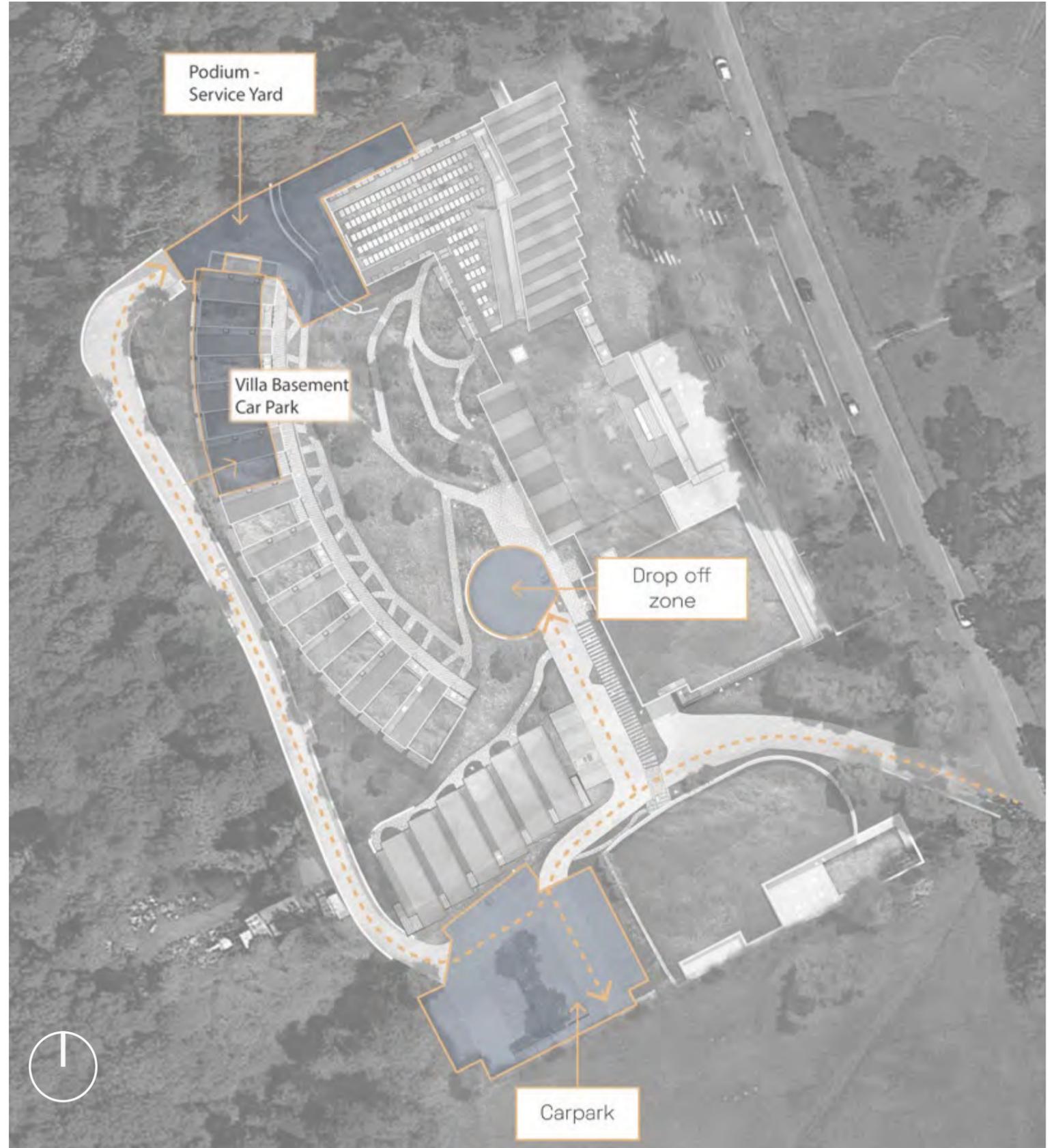
A total of 79 spaces will be provided on site. Car parking spaces for hotel, villa and spa guests are located in a two level sunken deck car park to the south of the site adjacent to the spa complex. Four accessible spaces are located directly adjacent to the main hotel entrance.

An access road adjacent to the villas leads to a further basement car park for use by villa guests. 2 spaces within the undercroft service yard will be dedicated to maintenance vehicles. The main car park will include provision for motorcycles and electric charging points.

Cycle Parking

36 cycle spaces will be located on site within a secure covered cycle storage area adjacent to the service yard. The service yard spaces will be used by staff of the hotel. The provision of a staff shower and changing area will encourage greener modes of travel to and from the building. Importantly, the proposed level of cycling parking will serve to facilitate and encourage cycling to and from the site and therefore supports local planning policy. In addition to the minimum requirement as set by locally adopted standards, additional cycle spaces will be provided on site for hotel guests and visitors with short stay cycle parking provided in the central landscaped area. DCC adopted parking standards suggest an "individual assessment" is required for cycle parking for Hotel use classes and a provision of 1 space per 100sqm for "A3/A4/A5" land uses. x1 enlarged cycle bay (1.2m x 2.5m) is located adjacent to the disabled parking spaces.

As outlined in the guidance, all cycle parking shall adhere to the 'Sheffield stand' design detail. The cycle parking design will nevertheless be sensitive to the luxury nature of the proposals.



Proposed ground floor plan demonstrating vehicular access

9.3 Servicing

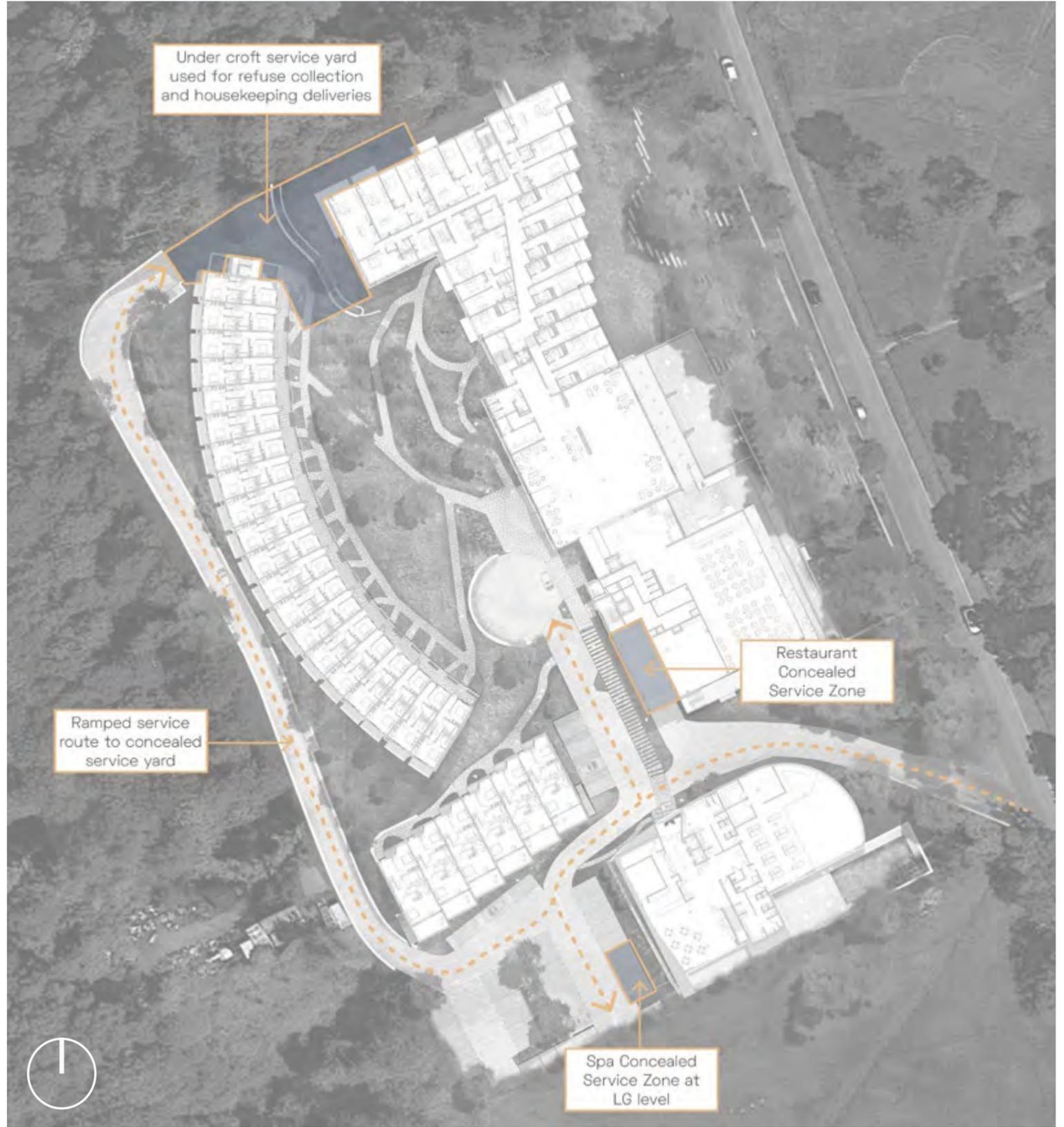
Servicing

Postal deliveries will be made via the main reception with larger deliveries of linen made via the service route direct to the under-croft service yard. Food deliveries will gain access to a concealed drop off zone adjacent to the restaurant.

Refuse

Total refuse for the development has been calculated in line with the operators requirements and council recommendations which refer to BS5906-2005. Collections will be twice a week and an on site compactor will ensure sufficient capacity is achieved.

The main refuse store is located below the podium level within the service yard. Additional refuse collection points are located adjacent to the restaurant and spa complex. Management will ensure bins are relocated to the central store and adjacent to the rear of the refuse vehicle. There will be dedicated bins for recycling and for general waste in line with council recommendations.



Proposed ground floor plan demonstrating vehicular access

9.4 Emergency access

Emergency Access

Access routes and parking are designed to allow access for the fire service to enable them to get within 18 metres of the dry rising inlet within the hotel or 45 metres to the furthest point of the villas, an extract of the site wide fire strategy is shown to the right.

Emergency vehicles can travel around the perimeter of the site via the service access road and enter the area under the podium to turn.

Hotel

The area of hardstanding directly adjacent to the restaurant will enable emergency vehicles to connect into a dry riser with the stair core and the south end of the building.

In addition an area of grasscrete will be located directly adjacent to the central hotel stair core. This will enable an emergency vehicle to be within 18 metres of a second dry rising inlet.

Apartments

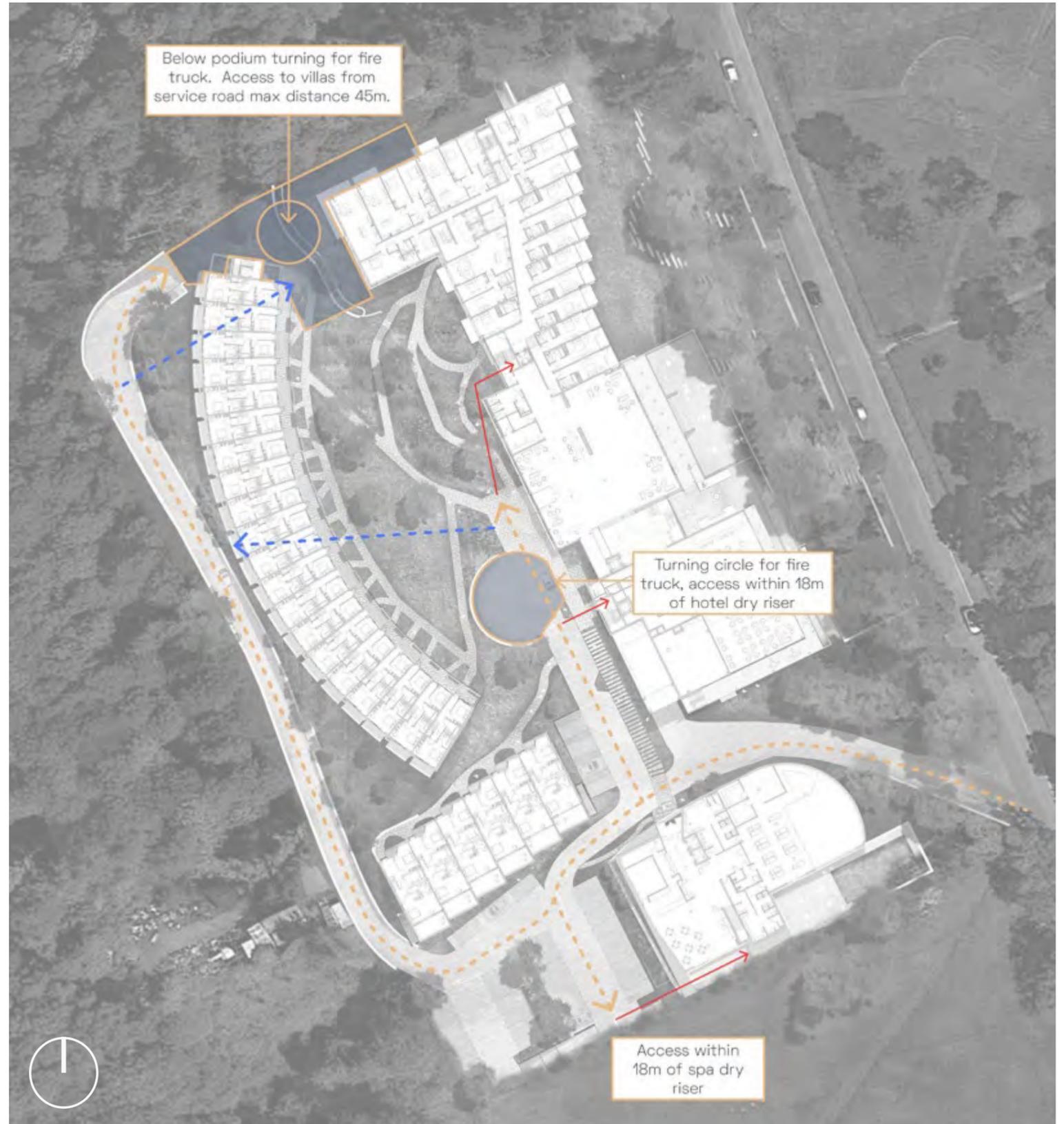
The second dry riser inlet within the main hotel will allow emergency services to gain access to the apartments located within the northern end of the main building.

Villas

Access to the villas will be via the car park or service road to the west of the site.

Spa

Emergency vehicles will be able to access the spa from the principle access road and car parking area.



Proposed site plan - emergency access

- - -> Fire truck route
- - -> Dry riser connection
- - -> Max 45m hose

9.5 Refuse & Recycling

Refuse & Recycling Collection

The estimated total refuse and recycling for the development has been calculated in line with Dorset council recommendations and British Standard guidance. A key aim was to minimise the number of collections and therefore cause minimal disruption to guests. A compactor will compress all general waste to a 3:1 ratio. The refuse store within the development have been sized to accommodate the total number of refuse bins required. Bins will be taken to the main collection point within the hotel basement by tow truck from temporary collection points adjacent to the restaurant and spa and by housekeeping staff from the villas and apartments. The refuse vehicle enter the below podium area via the service road and will turn by reversing a maximum of 12metres in order that refuse operatives do not exceed 10 metre travel distance to access the bin store.

Hotel

- X1 - 1100 litres bin general waste
- X1 - 770 litres bin general waste
- X1 - 1100 litres bin recycling
- X1 - 770 litres bin recycling

Restaurant/ Bar

- X1 - 770 litre bin general waste
- x1 - 140 litre bin general waste
- X1 - 770 litre bin recycling
- x1 - 140 litre bin recycling

Apartments

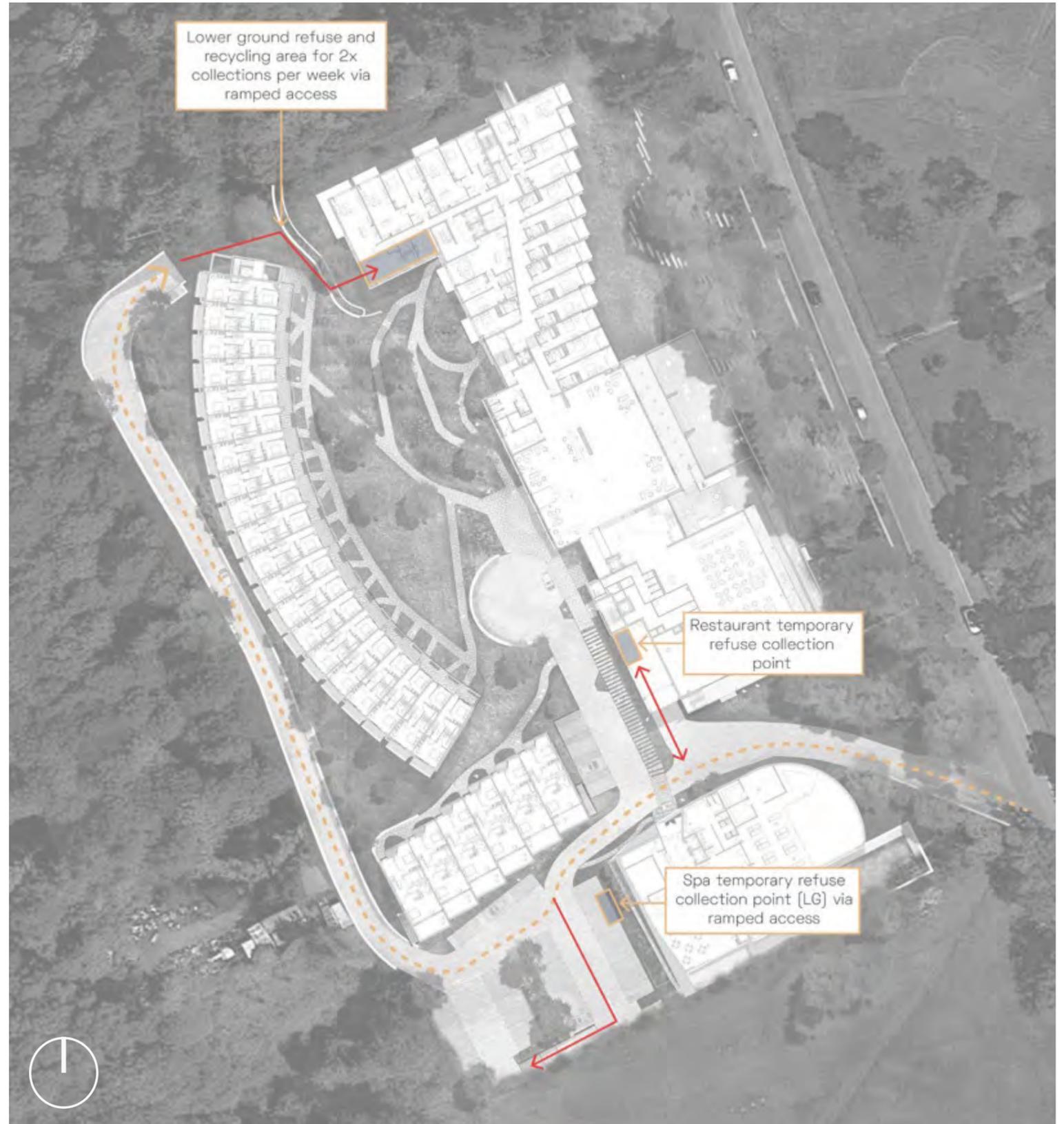
- X1 - 1100 litres bins general waste
- x1 - 140 litre bin general waste
- X2 - 1100 litres bins recycling
- x9 - 140 litre bins glass
- x4 - 140 litre bins food

Villas

- X1 - 770 litres bins general waste
- X2 - 240 litre bin general waste
- x1 - 1100 litres bins recycling
- X1 - 770 litre bin recycling
- X1 - 240 litre bin recycling
- x9 - 140 litre bins glass
- x4 - 140 litre bins food

Spa

- X1 - 1100 litre bin general waste
- X1 - 360 litre bin general waste
- X1 - 240 litre bin general waste
- X1 - 1100 litre bin recycling
- X1 - 360 litre bin recycling
- X1 - 240 litre bin recycling



Proposed site plan - refuse and recycling collection plan

9.6 Maintenance / Cleaning

Servicing



Glazing Cleaning

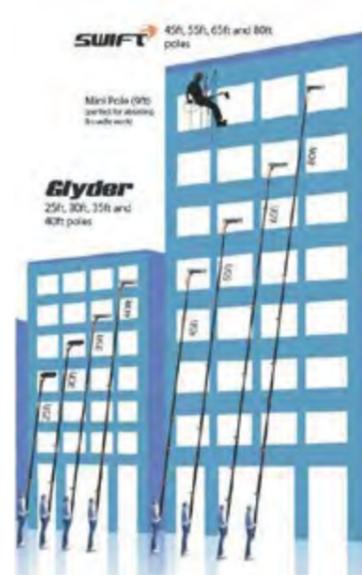
Window cleaning will be carried out on windows using water fed pole and reach system. This can reach windows up to 25 metres high. The highest on this development being 11 metres to head of window.

Ionised water is stored in a tank in/on a van/lorry, which would be parked as close as possible to the elevation to be cleaned. With a reach and wash system the hose connected to the water tank is capable of being extended up to 90 m. Another 90 m hose can be connected to this if required.

Roof-lights on the villas will be cleaned by use of a telescopic boom/ MEWP.

Maintenance operators should note that many of the rooms within the development are bedrooms and therefore require a high level of privacy, appropriate arrangements should therefore be agreed in advance with the hotel.

The diagram above indicates glazing zones that will be accessible to reach and wash pole operators.



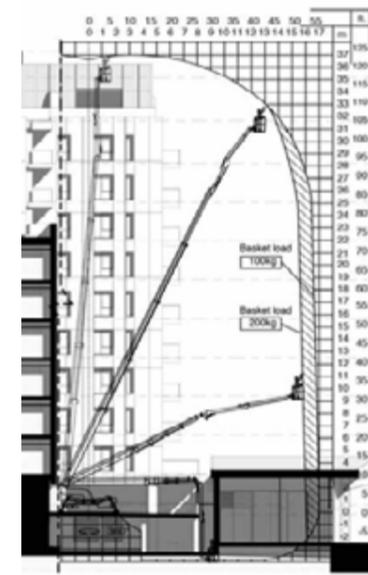
Glass Replacement Strategy

Glazing at ground floor level can be accessed from the directly adjacent external area. Replacement glass at higher levels will be completed via access arrangement selected by a specialist to suit the specific requirements (e.g. scaffold, crane, boom/MEWP.)

Non Glazed facade

The external stone and zinc facade is of low maintenance and will provide a robust finish resistant to heavy wear and tear. The timber cladding is pre-weathered and will not require regular re-coating or maintenance.

General external maintenance, should it be required, will be conducted using a MEWP/ self propelled telescopic boom or less accessible areas or extensive/ long term maintenance work via a mobile or free standing scaffolding system.



Telescopic boom / MEWP

Mobile elevating work platforms (MEWPs) are specifically designed to lift people to a position where they can work at height safely within the platform. Before carrying out any work at a height, a comprehensive site specific risk assessment should be carried out by a competent person. This should clearly identify all risks involved when using the MEWP and the measures needed to eliminate or control those risks. Particular attention should be given to planning travel to and from the work area, accessing the work area, lighting (to aid good visibility), and carrying out the work task at a height. The ground conditions surrounding the building are designed to take the loadings of a MEWP and should provide a firm and level ground. Any temporary covers should be strong enough to withstand the applied pressure.

The space available around the perimeter of the building has been assessed and many areas should allow adequate dimensions to allow safe passage for the MEWP to travel around. Due to the constrained nature of the site not all areas will be accessible via MEWP/ boom.

9.7 Maintenance / Cleaning

The buildings are surrounded by areas of hard standing (blue), see plan opposite. This provides a safe working platform for window cleaning and routine building maintenance.

Areas which do not have hard standing located directly adjacent to the facade have low level planting or grass. If emergency maintenance is required in these areas then scaffolding will be utilised. When erecting scaffolding towers sole plates will be used to spread the load and form a suitable base.

Many of the buildings have terraces or balconies which will also allow direct access to parts of the facade. Roof access points are shown in red on the plan to the right.



Proposed site plan - roof access

Roof access
Hardstanding

9.8 Safe working at roof

Hotel/ Apartment roof

Access to the rooftops will be required infrequently for any maintenance or cleaning procedures. Any rooftop access will be completed in accordance with the building manager and will be undertaken by personnel who have carried out the appropriate risk assessments/method statements.

This roof is divided into three main areas:

1. Flat green roof -

Direct access to roof is via means of upper level doors and a fall restraint system. These doors should be locked at all times and only accessible to trained operatives. Access for occasional maintenance purposes only.

Green roofs are self-sustaining but require maintenance of the vegetation at least twice a year such as removing weeds or replacing dead plants. Fall restraint / latchway system will be in place on these areas. To be designed, installed and maintained by specialist (safety inspections required every 6 months).

2. Pitched roofs -

The north extension to the main hotel has steeply pitched roofs with separating valley gutters. Regular access to the pitched roofs is not considered necessary. Should emergency maintenance access be required erection of scaffolding/ temporary safety measures will be required. All users of the equipment should be trained and competent in the use of the equipment and techniques.

Walking on the roof should be avoided for safety reasons and to prevent damage to the roof which could result in damage to the structure.

3. High level flat green roof-

Direct access to roof is via means of external stairs to a section of roof between the apartments and hotel rooms. Handrail/guarding is fitted to ensure that the guarding is a minimum 1100mm above finished roof level and compliant with Approved Document Part K.

A mansafe system then allows access to the Roof-mounted photovoltaic array. This is designed to be largely self-cleaning but an annual wash-down is recommended to remove any accumulated grime/grit. The system has a minimum design life of 25years.

2 bed villa roof

Again the villas have steeply pitched roofs with separating

valley gutters. Regular access to the pitched roofs of the villas is not considered necessary. Should emergency maintenance access be required erection of scaffolding/ temporary safety measures will be required. All users of the equipment should be trained and competent in the use of the equipment and techniques.

Walking on the roof must be avoided for safety reasons and to prevent damage to the roof which could result in damage to the structure.

3 bed villa roof

The 3 bed villas have steeply pitched roofs adjacent so regular access is not considered necessary.

Sections of green roof/ PV panels and roof-lights will require infrequent maintenance so a fall restraint / latchway system will be in place on these areas.

Spa roof

Access to the green roof is via means of a 90 degree ladder and a fall restraint system down the centre of the roof.

Access hatches are not within 2m of the edge of the roof and trained operatives will be used. Access for occasional maintenance purposes required only.

Hazard Elimination

No plant areas is to be located on any of the roofs within the proposed development and all flues terminating above roof level will be accessible for any maintenance required from the floor level below via the riser. This helps minimise exposure to fall hazards.

Fall Restraint v Fall Arrest

A fall restraint system is proposed as opposed to a fall arrest system. A fall restraint system involves the use of personal fall protection equipment to restrict the maintenance operatives range of movement and prevent them getting into a situation of a fall..

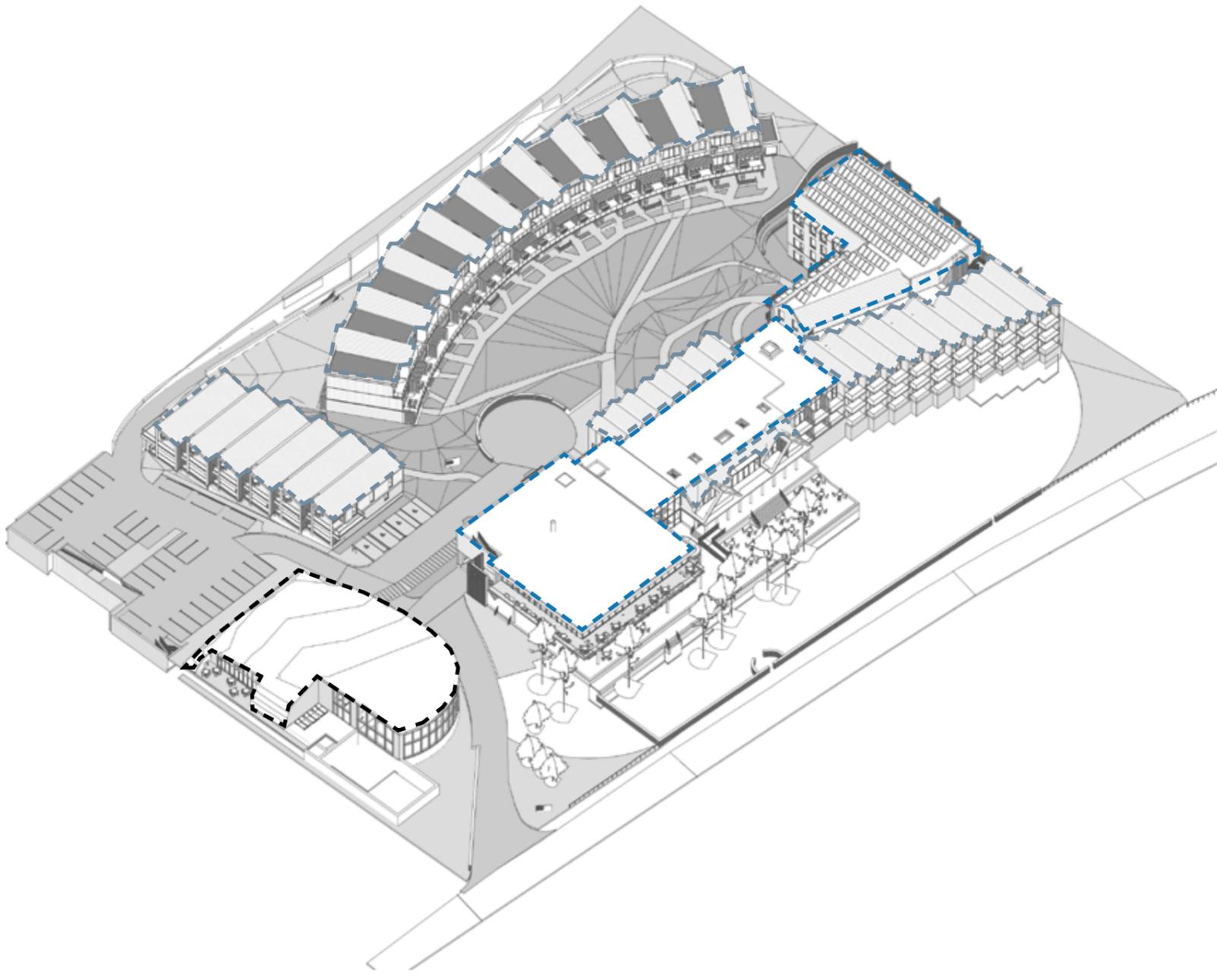
This is preferable to a fall arrest system, which allows operatives to fall within an acceptable force and clearance margins, as it does not require the same level of rescue planning and emergency evacuation.

Roof Drainage

Some deciduous trees overhanging the roof areas,

therefore occasional blockages could occur for example from dead or nesting birds or a build up of grime. Occasional access to clean and maintain the guttering towards the perimeter of the roof will be undertaken by appropriately trained, registered and supervised operatives and the fall restraint system will restrict the maintenance operative range of movement to the limits of the roof area so that they cannot fall from the edge.

9.9 Safe working at roof



3d diagram of roof access



= Direct access to roof is via means of upper level doors and a fall restraint system. These doors should be locked at all times and only accessible to trained operatives. Access for cleaning and occasional maintenance purposes only. Fall restraint / latchway system down centre of roof. To be designed, installed & maintained by specialist (safety inspections required every 6 months).



= Access to the roof is via means of a 90 degree ladder and a fall restraint system. Access hatch not within 2m of the edge of the roof. Trained operatives should be used. Access for occasional maintenance purposes only. Fall restraint / latchway system down centre of roof.



= Regular access to the pitched roofs not necessary. Should emergency maintenance access be required erection of scaffolding/ temporary safety measures/ MEWP will be required. Fall restraint / latchway system down centre of roof on green roof areas.

The west of the spa is designed so the roof is not accessible from the surrounding ground level to prevent unauthorised access.

9.10 Accessibility

Hotel Wheelchair Accessible Bedrooms

Part M of the building regulations states that 10% of the sleeping accommodation in hotels should be designed for independent wheelchair users. The remainder should include facilities that make them suitable for people who do not use a wheelchair, but may have mobility, sensory, dexterity or learning difficulties. The scheme includes 3 wheelchair accessible hotel guest rooms which have level access from the reception.

Standard Bedrooms

The standard bedrooms will not be designed to be fully wheelchair accessible but level access will be provided via lifts and vertical and horizontal circulation has been designed to meet building control recommendations. All bedrooms will incorporate fixtures and fittings that can be easily operated; finishings that are matt or semi-matt and good colour and tonal contrast to ensure fittings and features can be readily identified.

Apartments

Lifts provide level access to all apartments. Internally generous spaces will provide room for circulation with accommodation provided over single level.

Villas

Villas are designed to comply with Part M - visitable dwellings. This allows wheelchair users, to approach and enter the dwelling step free and to access habitable rooms and sanitary facilities on the entrance storey. Wall-mounted switches and socket outlets in habitable rooms will also be reasonably accessible to people who have reduced reach.

Vertical circulation

All internal changes in floor level have both stepped and lift access. All passenger lifts will be designed to meet the requirements of BS EN 81-70: 2003.

Reception, Bar and Restaurant

The reception desks are located close to the main entrance and would be immediately visible to a guest entering the building. Check in points will include a lower height counter at 750mm to accommodate wheelchair users. Unisex wheelchair accessible WCs are provide close to the reception, bar and restaurant alongside standard and ambulant WCs. The wheelchair accessible WC will be

designed in accordance with BS8300 2009 with min internal unobstructed dimensions of 1500mm x 2200mm.

Staff Facilities

Staff facilities will include wheelchair accessible WC, shower and changing facilities.

Stairs

All stairs and handrails are to be designed to meet approved document part K i.e. risers 150 - 170mm, treads min 250mm, edge of treads and risers clearly identified, handrails easily grasped, extended 300mm horizontally beyond top and bottom risers and continuous at landings, good colour and tonal contrast to assist people with a visual impairment to define the boundaries of the space and the location of key features. Flights are to be designed to have a maximum of 12 No risers. Stair cores are provided in close proximity to the passenger and service lifts and signage will be provided to clearly identify the location of both stair cores.

Ramps

All ramps and stepped access to be Part M compliant.

Externally paths will be no steeper than 1:21 gradient to give gentle sloped approach to villas from hotel building and access to spa and car park. With this gradient no handrails will be required within the landscape.

Levels and access to be reviewed during the detailed design phase with Purbeck DC building control.



Typical hotel room



Typical apartment

9.11 Secure by Design

A meeting with the local crime prevention officer will be arranged post planning which will allow us to agree and adopt suitable measures to the building design to keep the site and its occupants safe. We intend to adopt Secured by Design security measures to ensure best-practice guidelines are followed. The below points provide a summary of some of the concerns and measures that we may need to adopt in to the building design. Following our meeting with the local crime prevention officer we will be able to clarify which measures are most applicable to the application site.

The below information was obtained from Secured by Design's Commercial Developments Guidance Document, Version 2 that was issued in 2015.

- Creating a sense of place where residents, employers, employees and legitimate visitors are able to go about their daily routine, in places that are easily legible. Crime and anti-social behaviour are facilitated by a lack of definition of ownership of a space.
- The space should be structured in a way that has clearly defined routes for all user types, that has natural forms of surveillance and physical protection systems. Places that encourage activity and have a managed/ maintained environment will help prevent the occurrence of crime. With half the apartments overlooking the courtyard and pedestrian routes around the site it is believed the form of the building will help minimise crime occurring.
- Changes in floor surface colour help demarcate routes around the site for different users, we would look to adopt this approach in to the design of the landscaping. We would also ensure that the lighting of roads, segregated footpaths and car parks will be designed to BS 5489-1:2013.
- Ensuring routes around the site are well lit and inviting will help people feel welcome. We would also ensure the landscaping design does not negatively impact on the lighting design to the point that lights are no longer useful.
- Routes being reinforced with desire lines are important to ensure good levels of permeability are maintained as well as ensuring that routes are legible, we intend to have the building's main entrance act as a natural end marker to

create clear desire lines through and across the site.

- Planting next to paths should be designed as not to cause pinch points in the path as a result of plant overgrowth. We would therefore look to provide clearly defined layers of planting rows set back from the path allowing larger plants to be placed back further from the path, with smaller plants at the immediate edges to paths. Buffer zones should also be created through planting where paths run adjacent to buildings.
- Having clear external signage will allow visitors to navigate the space and ensure they are not entering areas they should not be, would be unsafe for them or propose a threat to staff.
- Within the building the adoption of electronic pass control cards/ keys will ensure that different building users are kept safe and kept in appropriate areas.
- Having secure systems will also ensure areas of risk, for example areas of roof, are made as safe as practicable through the integration of barriers and/or fall arrest systems.
- Adopting CCTV systems will help deter anti-social behaviour and crime as well as not creating natural areas to hide in the building design like under-crofts or excessive recesses. The provision and location of cameras will be discussed in detail with the operator.
- Adopting limited or non-combustible materials in to the building design will prevent the likelihood or impact of arson attacks.
- The use of secure doors/windows to relevant security ratings like PAS 24 and/or ensuring that building fabric systems are robustly constructed will minimise the likelihood of unintended access.
- Any cleaning equipment and/or fuels required on site would need to be kept secure in locked areas at all times.
- Within the building the adoption of electronic pass control cards/ keys will ensure that different building users are kept safe and kept in appropriate areas.

The proposals will be developed in detail with the proposed operator for the site. We would also look to undertake a review meeting with Secure By Design to incorporate any specific requirements they flag for the site.

9.12 Sustainability

Sustainability



Natural Materials

Sustainable design is at the heart of the scheme. Reduction of carbon impacts, promotion of sustainable travel and working environments and the promotion of occupant wellbeing are all key considerations.

Building materials have also been selected for their suitability for this unique coastal environment as well as durability and end of use recyclability. Stone, zinc and aluminium curtain walling are extremely durable products with a lifespan in excess of 60 years and minimal maintenance requirements. These materials can be re-used in the case of future demolition. Timber cladding is a carbon neutral product and will be sourced from sustainable plantations. A grey coating has been selected to provide a pre weathering finish to reduce the requirement for re coating and future maintenance and provide a consistently even finish.

The design team have adopted a holistic view to consider environmental impacts at both constructional and operational stages. Passive/ sustainable strategies such as opening vents, photovoltaics, good daylighting design, rainwater harvesting and green roofs have been adopted where site constraints allow.



Green Roofs

Building services will have a substantial bearing on the full life-cycle performance of the building and a detailed examination of carbon and energy implications will be carried out at an early stage.

The project seeks to achieve a high degree of sustainability by evaluating the options and adopting the most effective strategies from the outset. The design team are keen to fully engage with the Dorset sustainability team to enable this as part of the planning process.

Other energy efficiency measures include Low Energy LED lighting, fast recovery low volume storage hot water, key card operate room lighting and heating.



Renewable Technology

The design follows the be lean, be clean, be green energy hierarchy which is summarised below:

Be Lean

The new buildings will be designed with a highly efficient building envelope to reduce heat loss from the building. The external walls, roof and glazing will have high resistance to heat transfer (low U values) and low air infiltration rates. Windows will provide natural day light to the bedrooms and solar glazing will reduce solar gain.

Be Clean

The operation of the hotel is designed to help reduce energy consumption by guests including:

- Turning the room to standby mode when the key card is removed from the key switch.
- Specifying and installing only rated electrical equipment in the hotel.
- Using lower flow rate and higher efficiency shower heads, reducing hot water consumption.

Be Green

- on site energy generation from photovoltaics
- creation of a site wide community heat network using heat pump technology

9.13 Night Skies

Internal light spill

The spill of light through windows can create significant amounts of light pollution and impact on dark skies.

In general, internal glazing will cause light to spill horizontally and – in the case of sky lights – directly upward. Internal spill can have a similar impact to external lighting, particularly in interrupting and disrupting the continuity of the dark landscape and surrounding rural area.

It is to be noted that the ecology appraisal mentions the woodland boundary and Scots pines within the existing scheme car park are currently highly illuminated by LED floodlights and therefore provide poor commuting and foraging habitat for bats, particularly photophobic species such as brown long-eared bat and *Rhinolophus* sp. An improved (sensitive) lighting scheme holds the opportunity to enhance the site post-development for foraging/commuting bats. As many mature trees as feasible are to be retained as part of the works and no impact upon the woodland is proposed; therefore, no significant negative effect upon commuting/foraging bat species is anticipated. Further work will need to be undertaken to determine whether roosting bats are within the main hotel roof.

Although not located within the park the guidance set out in the ‘South Downs National Park Authority’s - Dark Skies Technical Advice Note Version 2’ has been a useful reference tool and has given the necessary information to submit and assess the lighting schemes for the development and ensure that the Knoll House scheme is appropriate to the landscape setting.

Dark skies are a special quality of the South Downs and benefit both people and wildlife. They are generally defined as skies relatively free of light pollution where you can see a clear starry sky and importantly, our own galaxy the Milky Way, stretching as a ribbon of faint stars across the sky.

Our key aims:

1. To conserve and enhance the natural beauty, wildlife and cultural heritage of the area
2. To promote opportunities for the understanding and enjoyment of the special qualities of the landscape by the public

- New lighting should not adversely degrade the sky quality



Night skies



Low level restaurant lighting



Screens to disperse light



Buffer tree planting to north & west of the site

9.14 Internal Light Spill

beyond the immediate area to be lit

- Angle Lights Downward – no unnecessary light above or near the horizontal

Lamps above 500 lumens should be installed in dark sky friendly fixtures that prevent unnecessary upward light

- Point where the light is needed not in a direction that causes a nuisance to neighbours or wildlife
- Switch off when not needed. Use proximity sensors. Avoid dusk-till-dawn sensors
- Light to the appropriate illuminance – do not over light needlessly
- Avoid bright white and cooler temperature LED's. Avoid uncontrolled decorative lights.
- Install at the lowest possible height to achieve lighting levels will building and signage illuminance appropriate and by downward pointing lights.
- Use and shut the curtains at night

In order to improve and minimise impact of our design we have accessed the following:

- Landscape impact
- Disruption to dark landscape continuity
- Visible intrusion to wildlife and surroundings
- Rural density and remoteness
- Shielding vegetation and buildings

We have also adopted the following principles and mitigation methods:

Area 1. Glazing not to exceed 25% of the floor area.

Area 2. Avoidance of large single continuous areas of glazing such as multi-floor to eaves glazing without any mitigation methods.

Area 3. Use an appropriate visible light transmission(VLT) factor as a primary means of mitigation on different applications to reduce internal light spill.

Glazing Mitigation Methods

Our developing design was analysed against the initial design principles and further development was carried out in order to mitigate the effects of light spill. These methods will be incorporated into all façades of the development as the design progresses.

1. Investigation into breaking up large areas of glazing

Large areas of glazing in remote areas can be very

pronounced intrusions into dark landscapes. We carried out an exercise to investigate breaking up the facade by removing sections of glazing for walls, or using exterior shielding and louvres.

2. Balcony design to minimise impact

An investigation was undertaken to investigate extending eaves, building shielding and screen development and how this would impact on the lighting levels.

The raked/ crescent nature of the hotel building and villas will help shield areas of glazing.

3. Surrounding vegetation

If the lighting development is surrounded by sufficiently dense and high vegetation it may offer a suitable mitigation against lighting. Analysis was carried out into the vegetation surrounding the site. A tree buffer located along the north and west boundary of the site should reduce light spill into the surrounding areas.

4. Appropriate Visible Light Transmittance

Light transmission through 'tinted' glass will be specified. This is glass with specially coated materials, similar to black-out glass or tinted windows, which can reduce visible light transmittance to ~66% This allows the selection of appropriate levels of VLT glazing for a dark sky landscape to achieve comparable levels of luminance.

5. Electronically timed blackout blinds

Upper level windows located within the rooms will look to introduce electronically timed blackout blinds.

6. Restaurant lighting

Lower level atmospheric lighting to be specified within the restaurant zone with overhanging roof.

The spa will not be utilised late at night.

Key

1. Overhanging eaves to enclose
2. Slated screen to disperse light
3. Staggered form to shield
4. Large areas of glazing broken up with fixed panels
5. Automatic blackout blinds to upper levels & controlled VLT



3d view



Elevation development

9.15 Conclusion

The redevelopment of Knoll House Hotel is an opportunity to improve the built environment in this key destination in Studland Bay. The client's brief is to provide a memorable and high quality hotel that is environmentally responsible, highly accessible and respects and enhances its unique setting. Together, the new accommodation and facilities will function as a single luxury resort, providing a level of quality service that Dorset can be proud of and delivering significant job growth.

The building has been designed to meet the client's requirements whilst taking into consideration the aspirations of National and Local planning policies. Sustainability has been central to the development of the proposal with the brief seeking a highly carbon efficient development.

Feedback from the previous application for the site and engagement with local stakeholders has shaped the design process. Since project inception, the importance of the local context and its sensitivities has been recognised. We viewed these as opportunities for the design team to fully explore a scheme with a landscape led strategy that complements the site's unique setting. The scale and form of the buildings consider far reaching site views and respond to the surrounding context, with floor levels set to suit the existing topography and external cladding using local materials.

The historic significance of the main house facade and colonnade of local stone has been recognised and will be preserved and celebrated, complemented with contemporary but sensitive additions. The resulting scheme responds to its brief and provides an appropriate and positive contribution to Studland and its context in terms of density, layout, scale, appearance, landscaping and access.

3d visualisation of the proposed development

