





This addendum to the original design and access statement seeks to identify the adjustments to that statement that are required as a consequence of the revisions to the approved scheme and to demonstrate how the scheme has been developed to maintain the spirit of the original design intent.

Subsequent to the granting of planning consent, UNUM Partnership were appointed to carry the design forward into the next stages

On review of the scheme approved for outline planning consent and in developing and working up the design, a number of issues have had to be re-visited and re worked.

These include ;

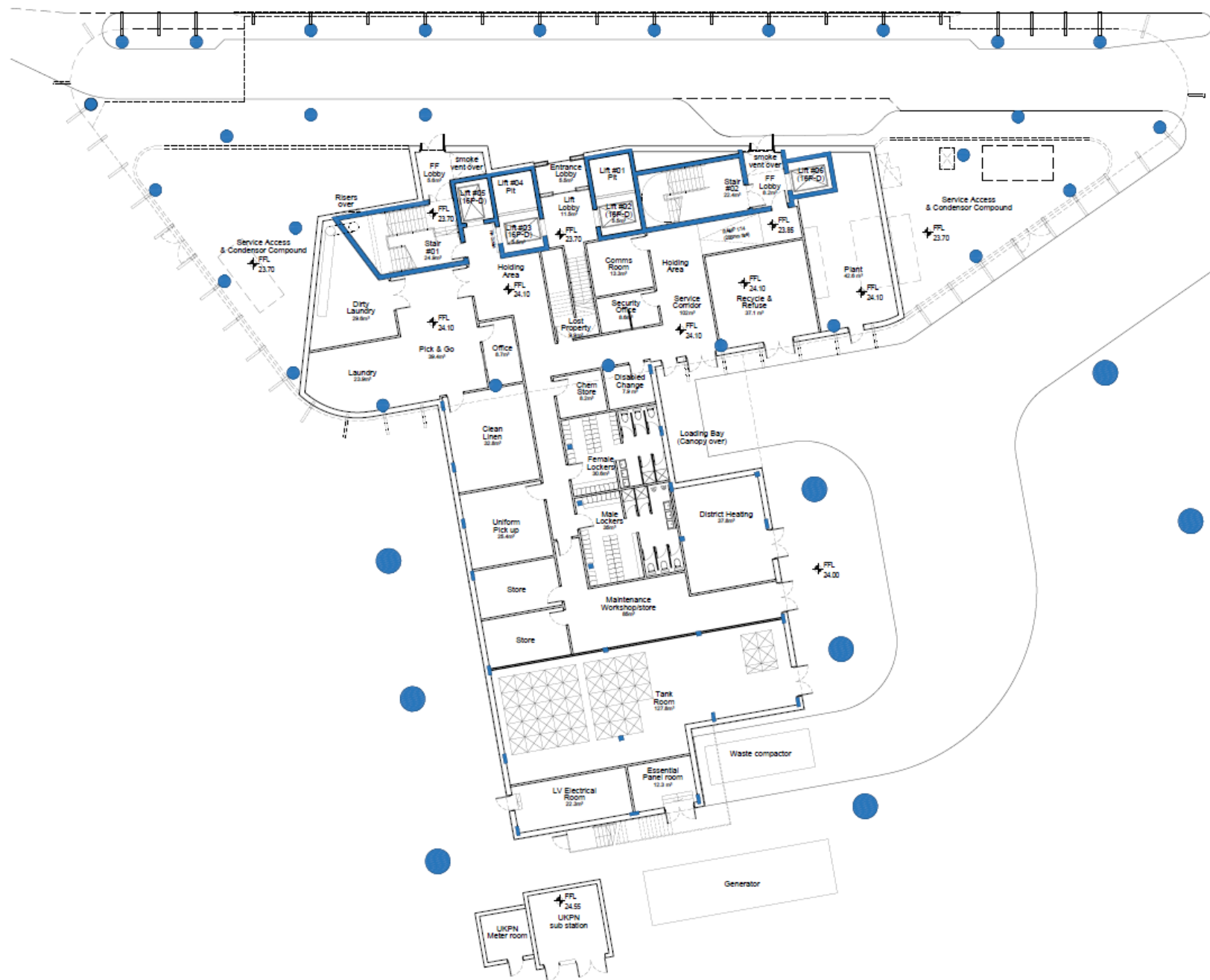
2.0 - The operational rational of the hotel.

3.0 - The structural stability issues and retained services.

4.0 - The fire and escape strategy.

5.0 - The servicing strategy.

6.0 - The cladding strategy.



Ground floor plan

Following extensive dialogue with the hotel operator and hotel brand, the hotel is re-planned as outlined in this section, floor by floor, as follows:

Ground floor:

(As approved planning drawings) housing entrance lobby for guests arriving via vehicle drop off. Vertical circulation core, Back of House facilities and plant rooms.



First floor plan

First floor:

This floor becomes the principal public area for hotel guests. Accommodation includes restaurant and associated kitchen, bar and bar cellar / storage and a suite of meeting rooms.

The approved planning drawings included a restaurant and bar on the top floor of the hotel.

This review concluded that we could not achieve building regulation compliance with only two stairs due to the increased occupancy load of persons at the top of the building.

Additionally, locating a public restaurant and bar above guest floors caused a crossover with security of the guest floors which would in reality be nearly impossible to remove.

The solution is to move the public areas to the first floor. The loss of views from a restaurant at the top of the hotel is unfortunate but the security issues are paramount.

It is proposed that the restaurant at first floor will take advantage of the views of the south apron and runway that are available under the elevated ramp.

First floor meeting centre:

The main change to the massing of the building is to add a second storey on the wing which projects Westwards beneath the MSCP2 vehicle ramps.

There is adequate height under the ramp to achieve this whilst still maintaining access for HAL personnel to safely inspect the vehicle ramps. We therefore propose, within this amendment to add a second floor onto the service wing of the hotel.

This extension will house a suite of meeting rooms and associated break out space. The advantage of this additional space is that it concentrates all high occupancy spaces / public area of the building on the lower floors. A third staircase is introduced serving an alternative means of escape from this level only.

This was required to satisfy building regulations.



Second floor plan

Second floor:

The hotel entrance lobby is moved from first to second floor level. The development of the design identified and rationalised structural zones, service voids and floor to ceiling heights throughout the hotel.

This process recognised that the elevated link to T2 had to meet the hotel at second floor level rather than first (as per the approved planning drawings). This ensures the maintenance of both the minimum clearance height of 4.1m to the underside of the elevated link and have the link meet the correct deck of the car park.

The solution proposed was therefore to relocate the hotel lobby floor placing it at the same level as the bridge arrival point. Therefore, the second floor now includes the hotel lobby, reception, FOH offices, guest gym and a small number of guest bedrooms.

This simplifies the separation of resident and non-resident by eliminating the cross over which existed previously.

The re-stacking as described above is to improve the security arrangements of the hotel. All public areas are concentrated on the lower floors.

This allows unrestricted movement of non-resident guests from ground up to second floor, including guest arrival via car, taxi or coach (ground floor) or on foot from T2 or public transport system (via elevated link) to the hotel reception.

The food and beverage areas and the conference centre can be accessed by resident and non-resident alike and the resident Guest floors can be secured by use of electronic key cards for guest use within either the lift cars or upper floor lift lobbies.



Typical Guest floor plan

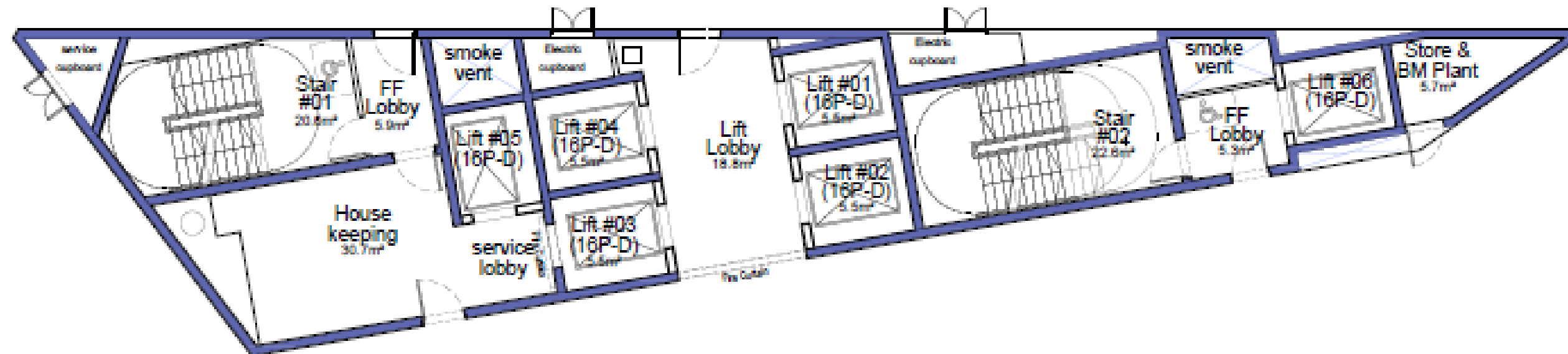
Typical guest room floor

The benefit of the re-planning and structural solution for the core of the building has resulted in us being able to gain an additional 1 no bedroom on each standard bedroom floor. The hotel brand (Hilton Garden Inn) standard bedroom is now planned although it should be noted that each bedroom is approximately 1.3sqm smaller than the brand standard.

“Non- standard” bedrooms are formed in the 4 corners of the floor plate and other spaces within the unusual lozenge plan form are used for housing building services and Back of House operations.

Lift provision

As part of the design development process, an analysis of the lift requirements to provide the necessary level of service, indicated the need to increase in the number of lifts. Consequently, there are now 4 passenger lifts, 1 service lift and 1 fire-fighting lift. One of the guest lifts will be configured with front and rear doors so it can double as a backup service lift if required. This is an increase on the approved scheme.

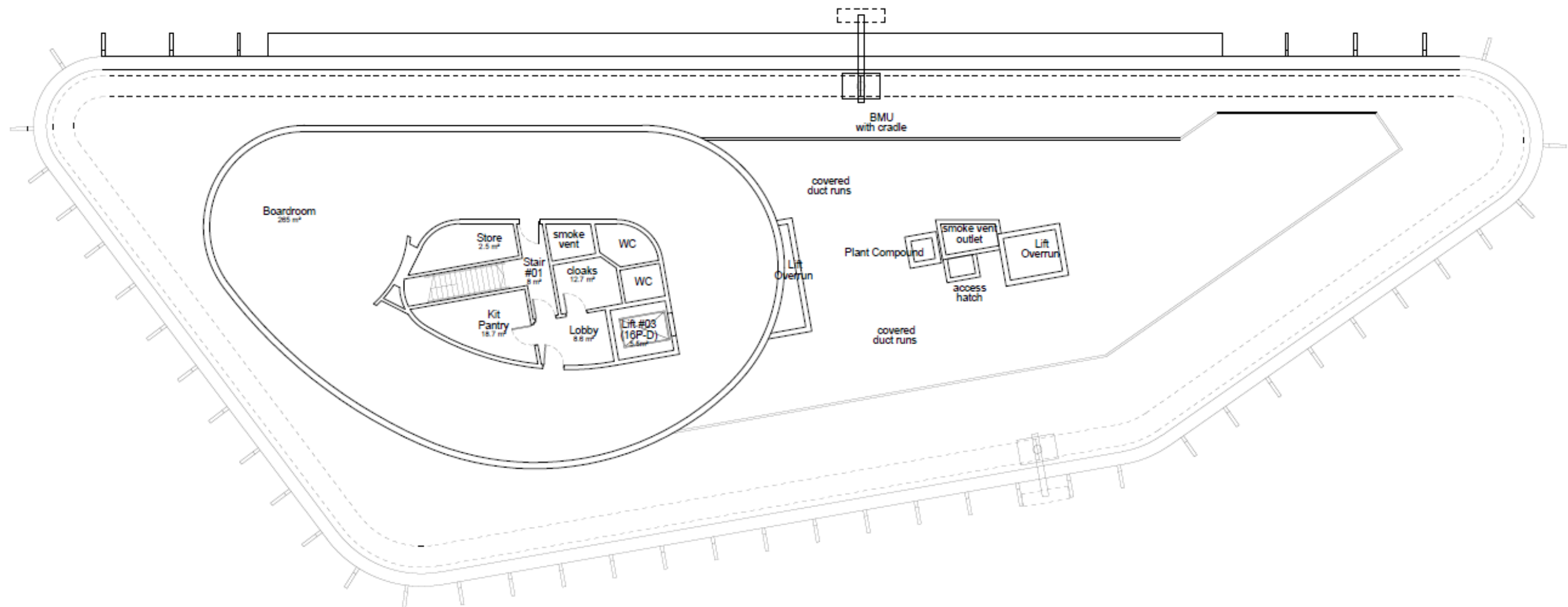


Typical Core plan

Typical core plan

The core comprises 6 no. lifts (4 guests, 1 service lift and 1 fire-fighting lift), 2 no. staircases, housekeeping, service risers and smoke ventilation for stair fire-fighting lobbies.

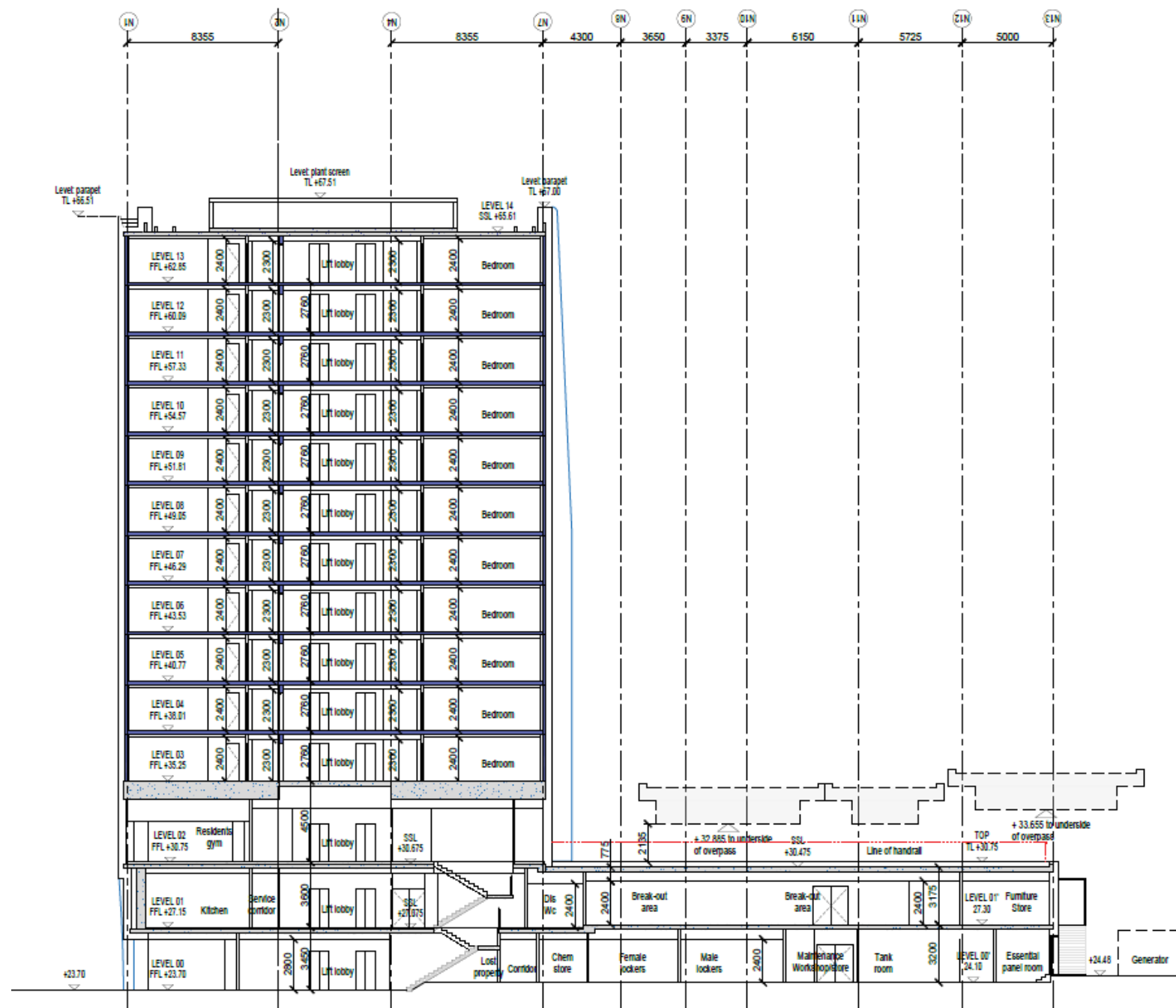
The walls enclosing this principal core and several cross walls are the main structural skeleton of the hotel providing stability.

14th floor plan

Boardroom

The proposals now incorporate a boardroom at roof level as an adjunct to the meeting suite.

It is intended that this will offer a unique facility with unparalleled views of the airport. Access will be via dedicated guest lift by use of electronic key cards allowing access to this level only. The number using this facility will be within the available capacity of the escape stairs.



Typical building cross section

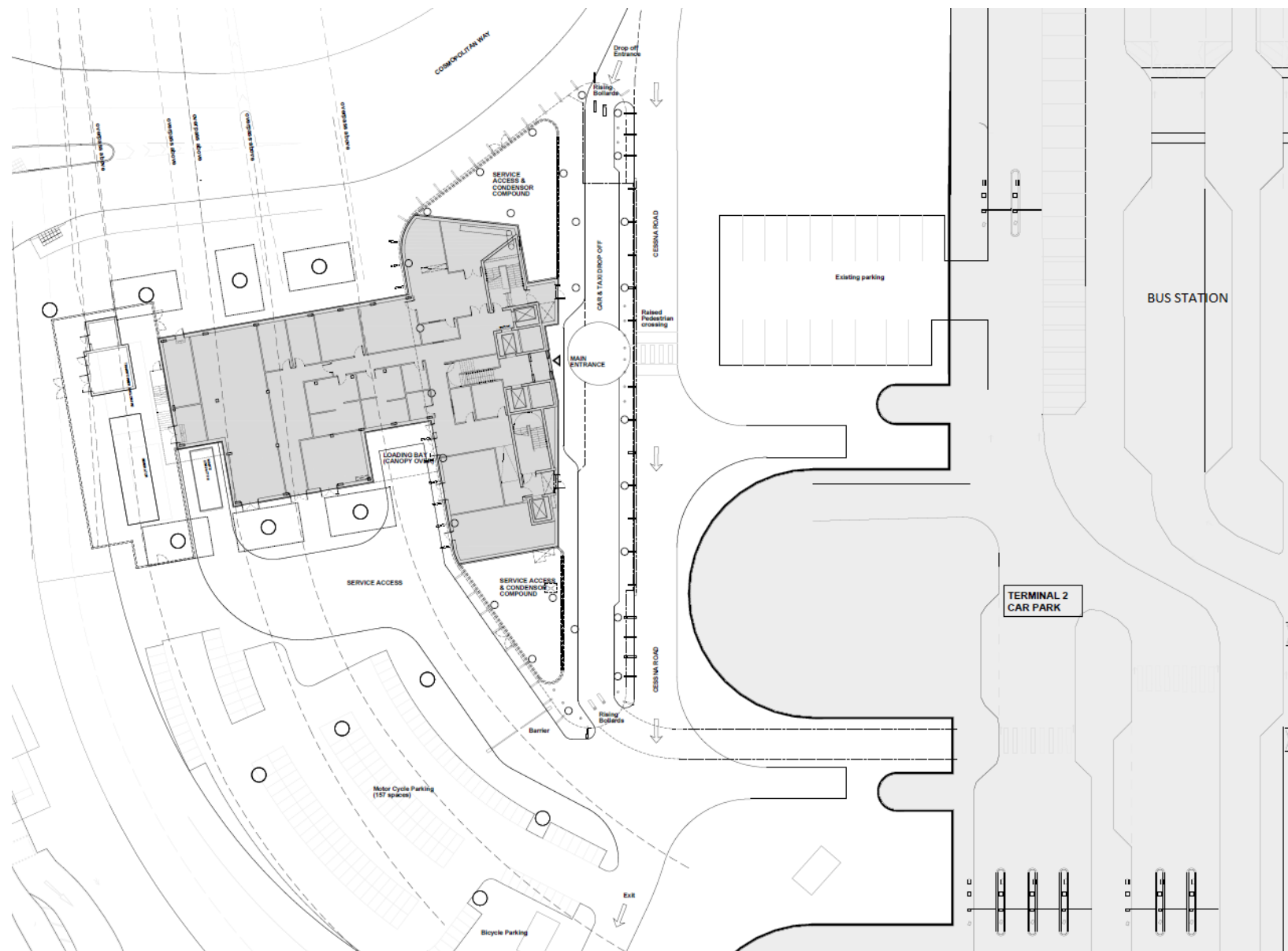
Revised Building Section

As part of the review of the approved design, and in the course of re-stacking the building section, it became evident that it would be possible to rationalise the section and achieve a more efficient use of the volume.

Consequently, by rationalising the floor to floor heights on the guest floors and with the re-structuring of the public areas onto 3 floors at the lower levels it was possible to introduce an additional floor of guest rooms and yet still maintain the level of the roof as that of the approved scheme.

It is noted that the proposed addition of the boardroom exceeds the approved height but given that the configuration of this sits well back from the façade, the perception of the building mass from the ground remains as per the approved scheme.

As noted in the section on the above, the inclusion of this boardroom will create a unique facility which will complement and enhance the appearance of the hotel.



Site layout as proposed

Revised Drop off

The revised design also reconsidered the configuration of the hotel entrance at ground floor and the drop off sequence.

The approved scheme drop off is rather tight and could lead to potential congestion on Cessna Road at the interface with the junctions for the drop off.

The revised scheme extends the drop off along the entire frontage with the entrance and exit being at the north and south ends of the footprint. These access point feed in and feed off Cessna Road in a far cleaner manner and are likely to minimise any traffic flow issues, leaving Cessna Road relatively free for through traffic.

The revised drop off will handle any cars, taxis and mini buses. Any coaches will use the stands in the bus station under the MSCP and guests will have a very short walk across to the hotel entrance. A raised pedestrian crossing over Cessna Road is proposed to ensure safe crossing for these pedestrians



Ground floor plan showing retained services

The structural stability issues due to the ground conditions and working around the retained services

Stair and lift cores:

Structural stability of the building has been a challenge due to the limited number of piles which can be achieved within a relatively small building footprint in comparison to the building height.

This is further complicated because the pile and ground beam / pad foundations had to be designed around a number of “essential” Heathrow services underneath the building footprint.

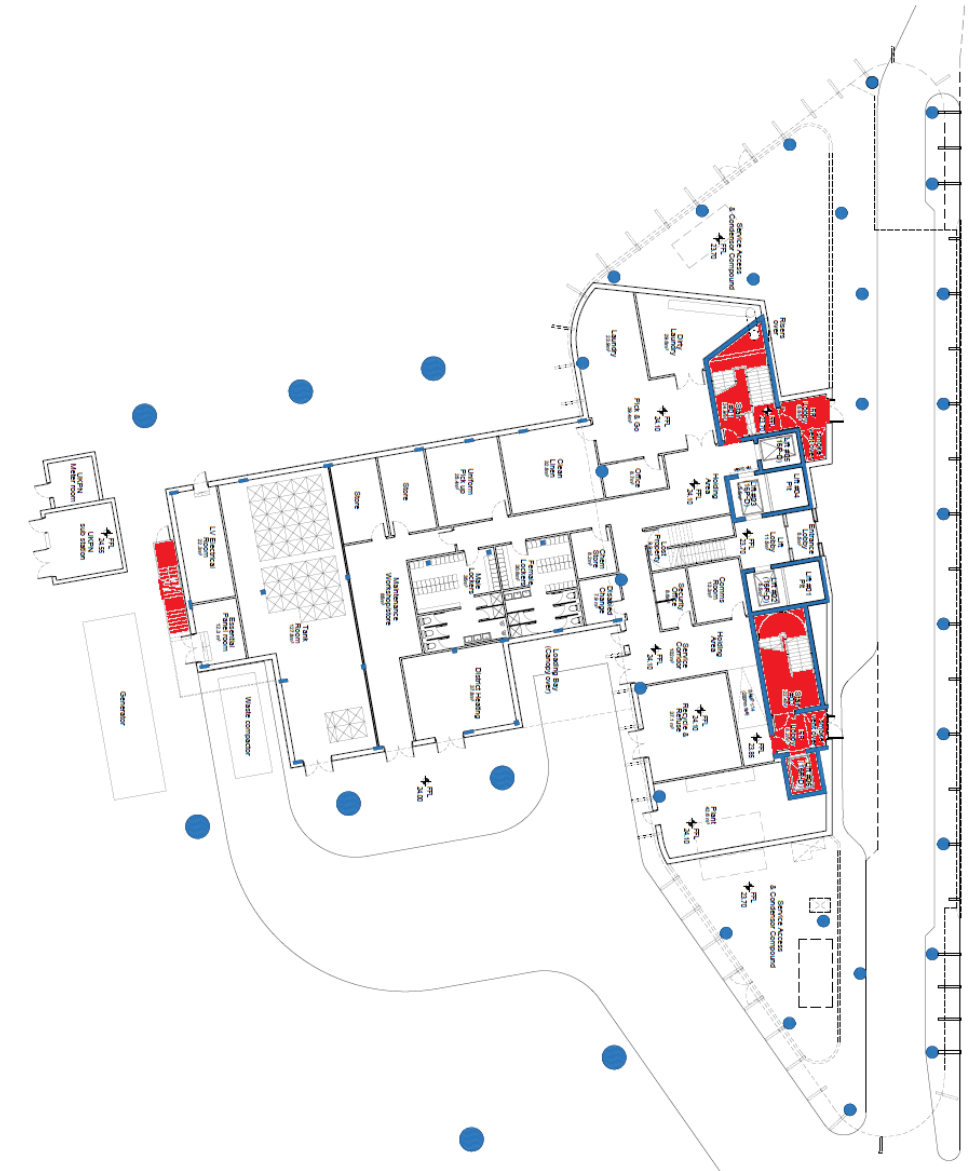
A number of these services could not be diverted and so the foundations “dance” around them.

The solution included moving both stairs and all lifts into the central core area. This simplified the grounding of the lifts and stairs, thereby cleaning up the vehicle drop off at ground floor level.

The amended floor plans indicate the vertical circulation and services riser core for the building.



Typical floor

1st floor

Ground floor

The fire and escape strategy

As part of the design review, an assessment of the fire and escape strategy was undertaken. The size and height of the proposal requires the provision of 2 fire-fighting cores, with one of these cores incorporating a fire fighting lift. The occupancy load imposed by the approved scheme would have significantly increased the size of the stairs to handle that capacity and the formation of stairs cores needs to be changed to include fire-fighting lobbies and lift.

The combination of the restacking of the accommodation and concentrating the circulation in a central core has allowed the incorporation of the necessary life safety measures. However, the increase in lift requirement and the inclusion of full fire-fighting stair cores, has required the increase in the building footprint. This has been achieved by pushing out the central section of the east façade to “inhabit” the fin zone on this elevation.



Typical floor

1st floor

Grd floor

The servicing strategy

Major plant locations:

The approved planning drawings included a large (450sqm) plant space on the top floor of the hotel. Through the detailed design process this has been rationalised. The approved planning drawings indicated a significant ground floor under-croft which was scheduled for access to maintain HAL sub-surface plant. Extensive dialogue with the asset managers of each of the sub-surface utilities concluded that access need only be maintained to each of the access manholes. We have agreed cable replacement strategies with each of the service providers and the result is that there is space within these under croft areas to house air handling plant and condensers for the hotel. Other air handing plant is housed within a well created above the service bay within the depth of the proposed second storey of the wing which extends west from the tower. Roof top plant is now restricted to heat recovery units. Other major plant (electrical, water storage, district heating interface) are located within the ground floor of the western wing of the hotel



The cladding envelope

UNUM have developed the external design of the hotel as approved at outline planning stage.

The external envelope design has been developed in line with the adjustments to the plan form and development of the guest room layout. While it departs from the configuration of the original scheme, it has been developed to retain the same design character

The tapering fins applied to the N, W and S facades fulfil their function at the lower levels by adding to privacy to guest rooms at the level of the vehicle ramps.

Tapering with height to emphasise the verticality of the building and revealing glazing at the higher level when viewed from an oblique angle as well as opening up views from the bedroom windows.

The orientation of the bedroom windows is now vertical which underpins the verticality of the building.



The intention is to create continuous vertical ribbons of glass reducing the contrast between glazing and spandrel. There will be no horizontal window transom rails. The glazing will be held in place internally. This will be combined with slightly glossy finished metal cladding sections.



On the Eastern façade, the fins only exist at the N and S end. The vertical emphasis to the central portion is given by the rhythm of the vertical glazing lines punctuated by shadow gaps on the cladding which repeat the rhythm of the other elevations

The bedroom floors sit on a base of glazed curtain walling at first floor. The fins taper at the head of the building to emphasise the “top, middle and bottom” of the hotel.

At ground floor, we propose to screen the plant area using a high quality decorative metal filigree, subject to approval from all appropriate parties.

The design of the link bridge is ongoing. We are looking to refine the design considering the optimum solution for off-site fabrication including pre-cladding if possible.

The cladding will include externally expressed mullion face caps emulating the fins on the hotel.

There will be large glazing sections facing South towards the the Airbus A380 stands at T3.

