

4.10 Urban Greening Factor

Urban greening has been fundamental element of the proposed masterplan, and throughout the design process the Urban Greening Factor (UGF) has been monitored to ensure it meets London Plan Policy G5 Urban Greening.











The overall UGF Target Score for this mixed-use development planning application is 0.30 as set in the London Plan as it is considered it a “predominantly commercial development”. This is because the square meterage of hospital floorspace (Use Class C2, Residential Institutions) is larger than the Residential Component (Use Class C3, dwelling houses).

The proposed masterplan goes beyond the requirements by contributing to the urban greening with an overall UGF score of 0.32 by favouring the provision of high-quality urban greening by incorporating different surface cover types with different factor scores,

especially the ones with higher factor which broadly indicates their relative higher quality and contribution to the Urban Greening.

The table below and its correspondent colour-coded illustrative green coverage masterplan shown on the right illustrate how the proposed development achieves the 0.32 total greening factor by having a contribution of 32,763 sqm on a 10.4ha site area. Approximately 11% of the this contribution is done by maintaining and enhancing the areas with semi-natural vegetation which have a UGF of 1.0 in the area of the Woodlands.

An important surface cover type contributing to the Urban Greening is protection and enhancement of semi-natural vegetation across the site, which amounts to approximately 11% of the overall contribution.

Surface Cover Code	Surface Cover Type	UGF Score	Area proposed sqm	Contribution sqm
 A	Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1.0	3,475	3,475
 B	Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1.0	544	544
 C	Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm	0.8	2,905	2,324
 D	Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree for overview	0.8	7,748	6,198
 E	Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket)	0.7	9,545	6,682
 F	Flower-rich perennial planting / Rain gardens and other vegetated sustainable drainage elements.	0.7	7,919	5,543
 G	Hedges (line of mature shrubs one or two shrubs wide) – see RHS for guidance	0.6	5,761	3,457
 H	Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	3,320	1,992
 I	Amenity grassland (species-poor, regularly mown lawn).	0.4	4,916	1,966
 J	Permeable paving	0.1	5,814	581
Total Green Area Contribution				32,763 sqm
Total Site Area (Detailed and Outline Applications)				101,674sqm
Total Urban Greening Factor				0.32



Colour-coded Illustrative masterplan

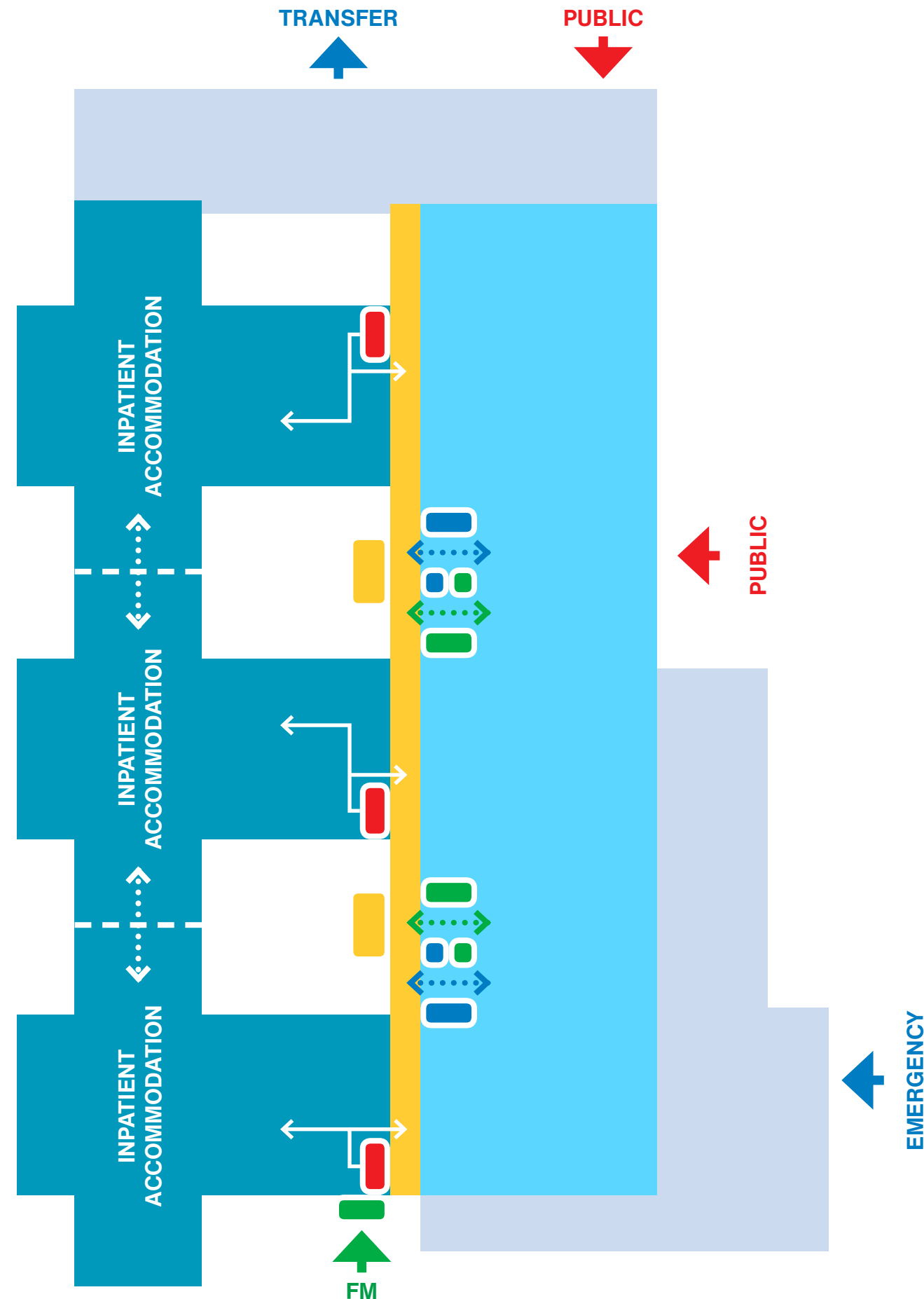
4.11 Clinical Planning Concept

The clinical planning concept for the new hospital creates a clear diagram supporting key design principles of creating short and direct patient journeys, being supportive of patient privacy and dignity and being pandemic resilient, and is based on the whole hospital bubble diagram.

As a diagram the concept is developed from 3 joined T-shaped inpatient wards connected by a hospital street, with 3 public access distributed along the entire length of the street. This basic arrangement then sits on top of the high-tech functions of the hospital.

This basic diagram then starts to be developed and enriched by a combination of responding to site constraints, urban context and the clinical departmental area and adjacency requirements.

The lower floors of the building step out from the forms above responding to area requirements for the high tech functions on those levels.



4.12 Hospital Flows and Stacking Diagram

Hospital Stacking arrangement

Between SOC stage and OBC various clinical priorities informed the design development; most notably the configuration and size of the emergency floor, which needed to be co-located on a single level, had the biggest impact on the design arrangement. In discussion with the clinical leads the hospital department stacking was tested and arranged to ensure key department co-locations and flows through the hospital could be realised. During this phase of the design development the scheme design was submitted to the National Hospital Programme (NHP) review team for input and four pre-application assessments were held with The London Borough of Hillingdon (LBH). From these reviews several suggestions were made and have been taken forward in the design development. These include several smaller suggestions as well as larger impact requirements that needed to be resolved as part of the stage 2 design development. The main design changes that have impacted the design are listed in the five points below.

1. The desire to split the flows between visitors, patient transfers and facilities management and minimise unnecessary cross overs – particularly between visitors to the wards and day to day hospital patient transfers.
2. To ensure resilience within the services yard to achieve a workable solution both within the assigned budget and known site specific environmental challenges.
3. To review the large emergency floor to prioritise daylight into the longer stay elements of the emergency assessment unit (EAU).
4. Clinical feedback around endoscopy and access to the ambulatory areas.
5. Review of entry to the site and locations of the main entrance with greater visibility to Pield Heath Road.

Through July 2021, the comments received from the reviews carried out by the NHP team, the clinicians and the local planning authority were assessed and where possible the design developed to address these to remove significant compromises.

During this process the stacking of the clinical departments evolved to ensure better flows and greater efficiency in floor layouts; additionally, the plant rooms were re-shaped to achieve more efficient arrangements and allow better daylight to the ground floor. This re-organisation helped to reduce the height of the building by one floor and realise a direct link from the multi storey car park into the first floor ambulatory zone; thus enabling the ground floor to be a dedicated emergency floor with the first floor providing all of the ambulatory and outpatient services. The main entrance/non-clinical support functions and hospital command centre then occupy a corner of the ground and first floor enabling welcoming non-clinical space and key support activities with good vantage over the site entry and main entrance/ hospital transport services.

L7 Clinical Support, Other Support, MEP

L6 Adult Inpatient, Clinical Support, Other Support

L5 Adult Inpatient, Clinical Support, MEP

L4 Maternity and Neonates, Clinical Support

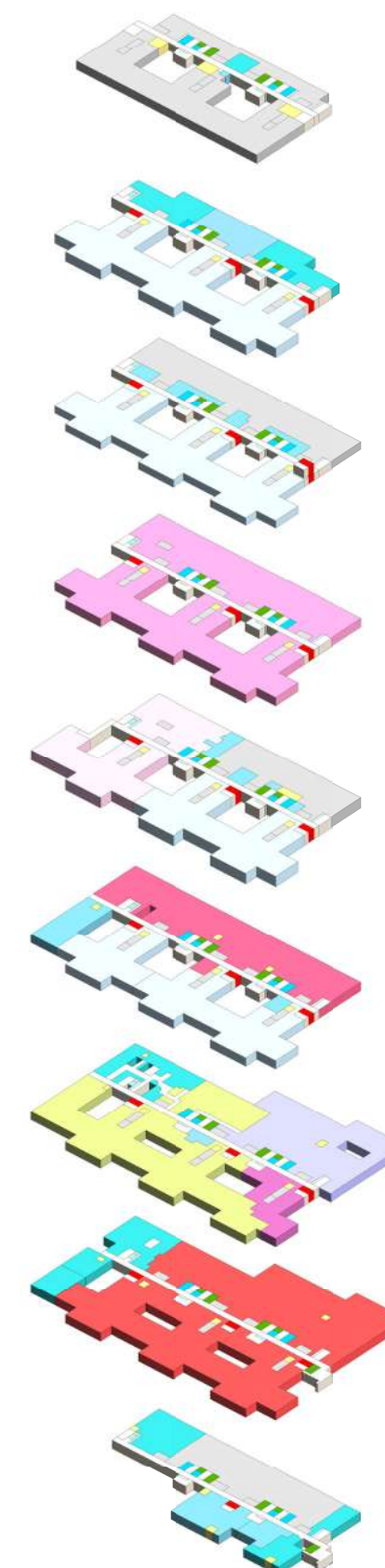
L3 MEP, Children's Unit, Clinical Support, Adult Inpatient

L2 Operating Theatres, Critical Care, Adult Inpatient, Clinical Support

L1 Imaging, Other Treatment, Ambulatory Care, Other Support

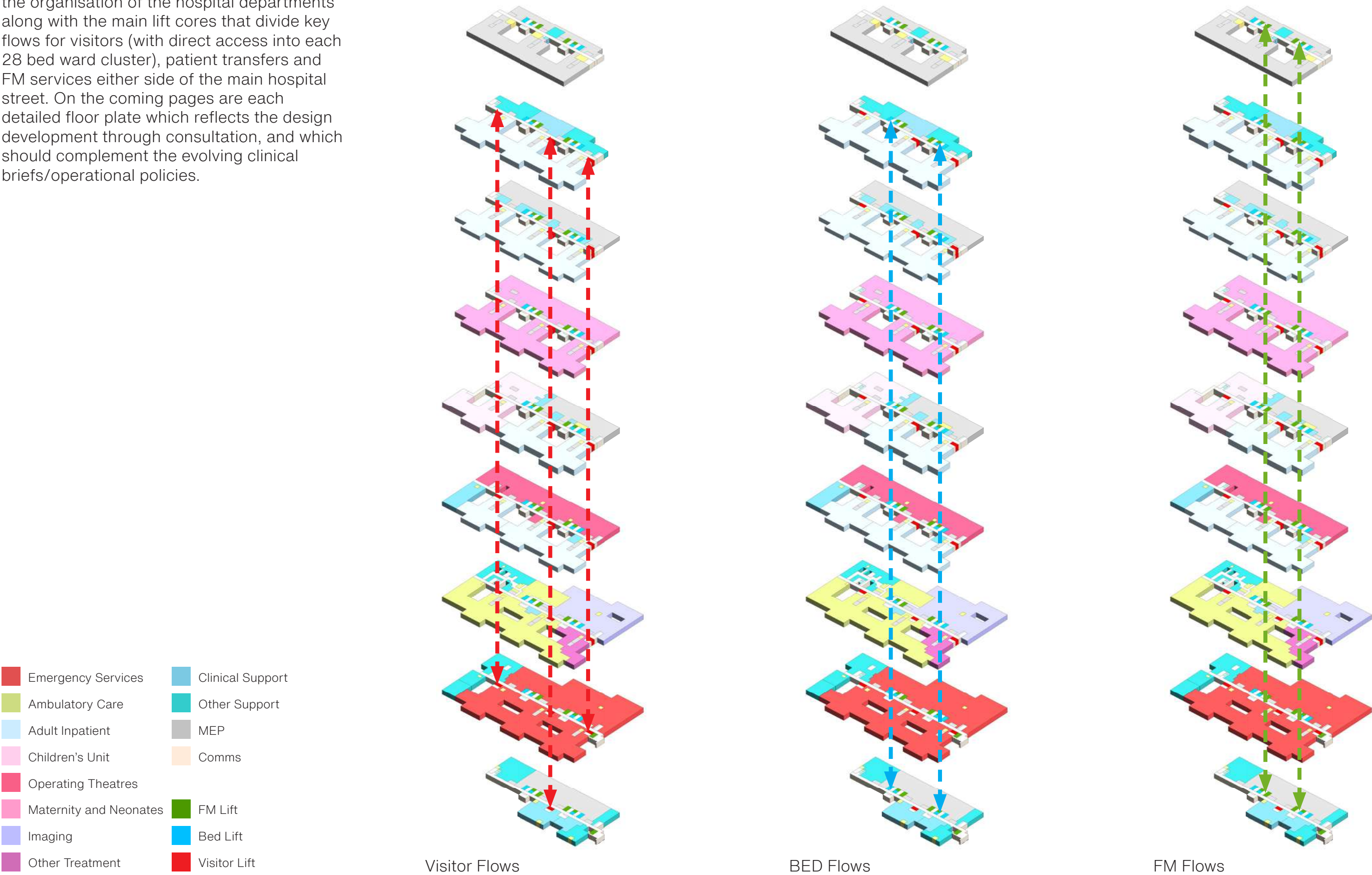
GF Emergency Services, Other Support

B1 Clinical Support, Other Support, MEP



4.12 Hospital Flows and Stacking Diagram

The adjacent stacking diagrams illustrate the organisation of the hospital departments along with the main lift cores that divide key flows for visitors (with direct access into each 28 bed ward cluster), patient transfers and FM services either side of the main hospital street. On the coming pages are each detailed floor plate which reflects the design development through consultation, and which should complement the evolving clinical briefs/operational policies.



4.13 Hospital Plans by Floor

Basement Floor

The basement floor is primarily a support floor with staff access, comprising the electrical plant room spaces and water tanks, supporting soft FM and logistics (in turquoise), the pharmacy, mortuary, and catering departments. The ICT intake spaces are shown (in yellow). The plant spaces at this level are mainly for the electrical HV/LV equipment and have been labelled to reflect the MEP naming conventions for these.

To the north of the plan is the catering kitchens, these have a dedicated lift cored that enables food distribution to each level directly from the catering department. Within the catering area are the associated change rooms and office support spaces.

Mortuary

The mortuary is located centrally with easy access from the patient transfer lifts. The department is organised to enable discreet access for bereaved families with access from the central red visitor lift core. To the south of the floor plan are two dedicated lifts that serve the hospitals logistics. For transfer to a hearse for funeral parlour collection these lifts will used with a discreet parking bay up in the logistics yard at ground floor. The mortuary is organised to allow visitor access and separate body storage as well as the supporting office spaces.

Pharmacy

The pharmacy has been developed in the central location immediately north of the mortuary. This is a staff only area and is located at this level to enable ease of deliveries from the logistics lifts to the south and then ongoing distribution to each FM lift core to the inpatient areas/out patient pharmacy (located at level 01 above). The pharmacy area is self-contained with robots, storage, and office spaces to support the activity.

Logistics and Soft FM

To the south of the plan is the logistics and soft FM space. This is collocated near to the logistics lifts that service from ground floor along with the back up ramp for resilience. These areas remain under consideration at this stage as the balance between which FM space is kept within the retained estate and which has to be located within the new build currently the accommodation shown reflect the last iteration of these thoughts, but it is envisaged this will change along with some of the FM allocations higher up the building.

The alternate fire escape from logistics meets the resilience ramps at approximately 2.5m above the basement floor level and so does not interrupt the floor layout at the ground floor above. The two logistics ramps are under cover at ground, but the space adjacent is external space for delivery drop off/collection and the ramp is open, thus allowing for a drop pit from ground to basement both for resilience and future electrical equipment replacement.

Emergency Services

Ambulatory Care

Adult Inpatient

Children's Unit

Operating Theatres

Maternity & Neonates

Imaging

Other Treatment

Clinical Support

Other Support

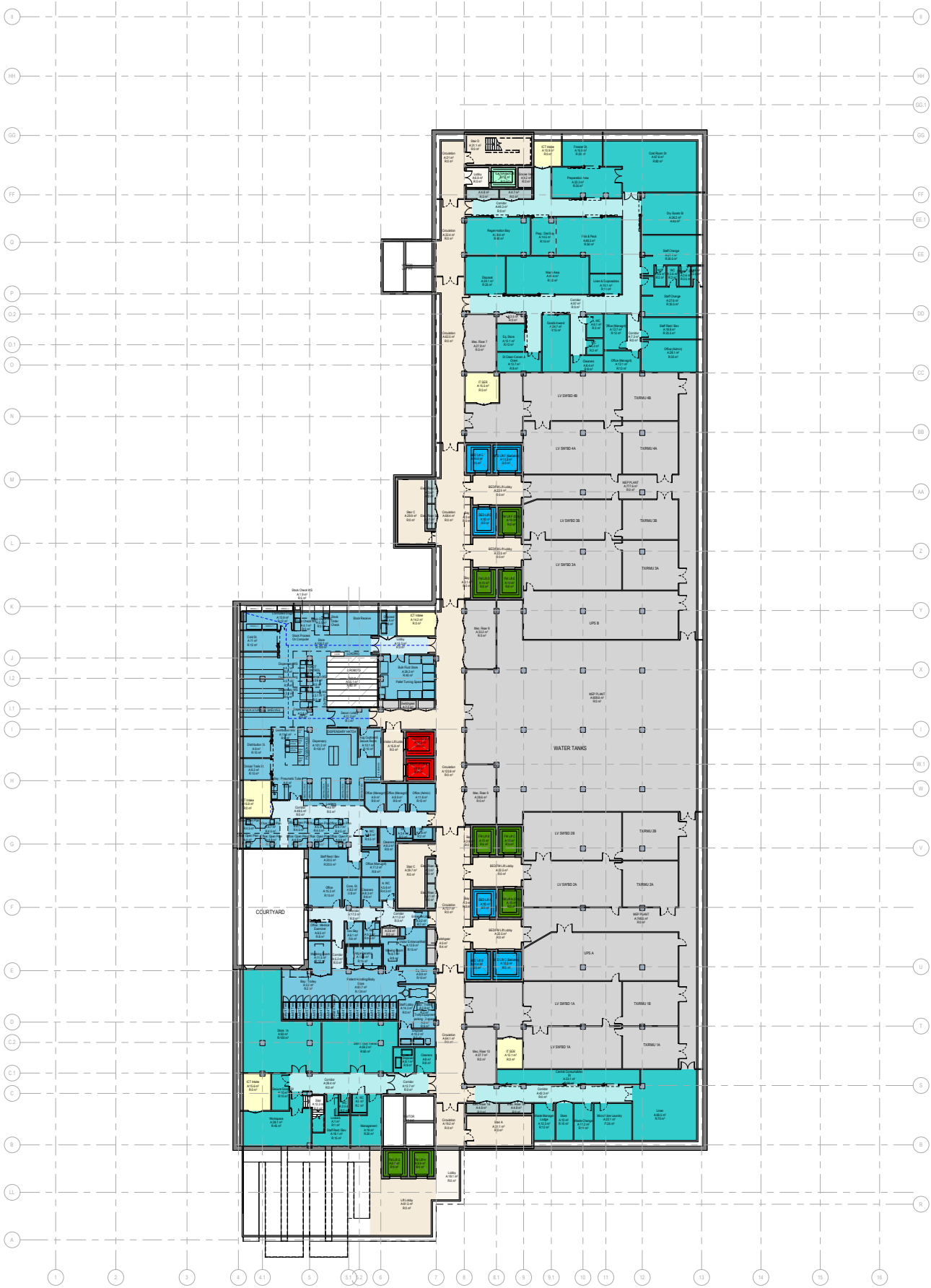
MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Basement Floor Plan

4.13 Hospital Plans by Floor

Ground Floor

The ground floor is dominated by the Emergency services which occupies over three quarters of the floor plate (shown in red on the adjacent plan). The remainder of the floor houses a double volume main entrance area with supporting café, toilets, PALS services and security. In addition, there is also the patient discharge lounge, some staff change rooms and a staff wellbeing area (all coloured turquoise on the adjacent plan).

The Emergency Floor

The emergency floor is made up of the emergency department, providing a fast turnaround and patient flow and is located on the right (eastern side of the hospital street); on the western half of the hospital street are the Same Day Emergency Care (SDEC), the frailty unit and the two Emergency Assessment units that include 12 HDU spaces. Clinical support and multi-disciplinary teams' bases are spread evenly across the floor plate providing office, seminar, and staff rest facilities.

For the emergency floor, all the walk-in entrances and ambulance drop off is located on the eastern side of the building. The walk-in entrance provides direct access into the UTC streaming area that in turn can direct patients into either the majors area, minors (UTC spaces) or the Children's and Young Persons emergency, SDEC and PAU.

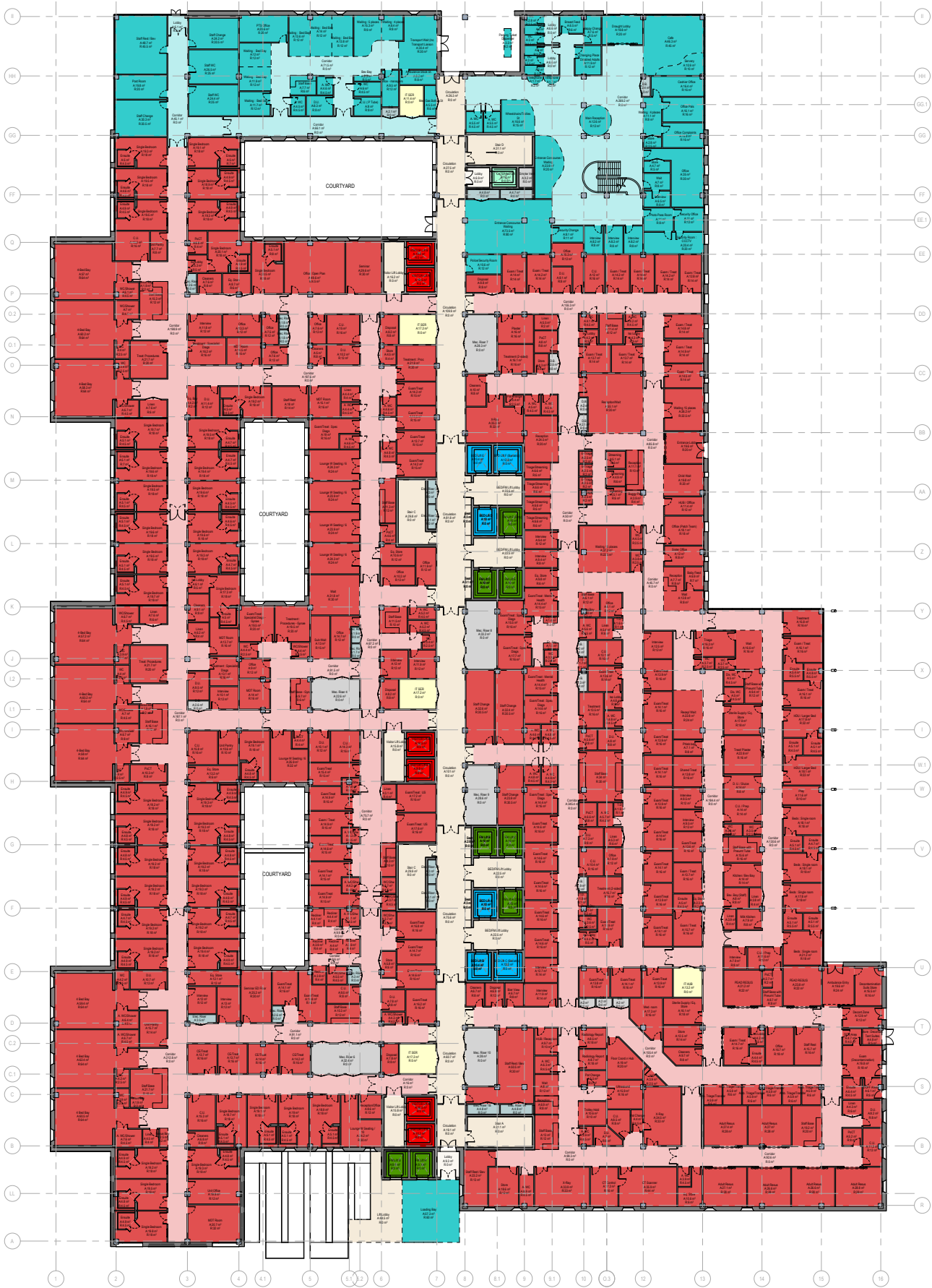
The ambulance entrances provide direct access into the ED triage space, with a clear route through directly into both and adult resus and a dedicated children's resus space. The diagnostics services providing CT, X-Ray and Ultrasound services dedicated with the ED are co-located next to Resus, providing direct access into CT. The x-ray rooms are provided in two locations, the one in the UTC and the other within the diagnostics area. This has been done to streamline patient flow within the department.

In addition to the majors, minors, SDEC, Resus, EAU and frailty areas and children's ED associated with an integrated emergency floor, there are dedicated decontamination spaces with direct access from outside and two dedicated mental health treatment spaces with dual access. All rooms across the floor plate have been designed to maximise repeatability; the bedroom spaces within the EAU and frailty areas are designed to repeat standard ward bedrooms and open bay areas in terms of size and all achieve access to natural daylight. The proportion of single bedrooms to four bedded bays has been discussed with the clinical leads to achieve an appropriate balance that best reflects patient group input.

Main Entrance, Staff Support and Discharge Lounge

The main entrance to the building was moved to the north corner through the dialogue and design engagement; this move creates an obvious and visible entry point to the hospital with good co-location to the multi storey car park and the site entrance from Field Heath Road. Around the main entrance the support services and café/retail opportunities have been placed. The main entrance support spaces are located over two floors with interlinking double volume space, stairs, and lifts. This creates a corner to the new hospital that support activity at the ground and first floor – allowing direct links across into the multi storey car park, whilst maintaining a clear drop off and hospital transport collection space at the ground floor.

The patient discharge lounge is located to the north of the plan immediately adjacent to the pickup/drop off area to ease access for both hospital transport and family pick up. New to the discharge lounge are large staff change rooms, WC's and a wellbeing area that looks out of the landscape. This is located here for easy access for staff when either arriving or departing from work.



Ground Floor Plan

4.13 Hospital Plans by Floor

Level 1

The first floor comprises the ambulatory services (coloured green on adjacent plan) made up of the medical day unit, outpatient clinics, the endoscopy department. The imaging (pale purple) and the therapies area (darker purple) along with the outpatient pharmacy (blue) and the main entrance (turquoise) make up the remainder of the floor. The support spaces provided in the main entrance activity include office spaces, social services interview rooms, café and retail spaces, the outpatient pharmacy dispensary and the multi faith spaces. These have been located where most accessible within the floor plate to assist with patient flows between clinics and enable the implementation of the digital strategies for the new hospital; it is envisaged that this along with the non-clinical spaces will help transform the patient experience and ease demand on over utilised/under-utilised spaces within the outpatient clinics.

The first floor is positioned with a direct bridge link from the multi storey car park. This link was developed through the design process to allow easy access for patients attending the medical day unit oncology services as well as people attending the orthopaedics clinic. By locating the main entrance functions over two floors with double volume atria in the north east corner of the building the design is able to provide key links back into the multi storey, whilst maintaining very clear and obvious entry points from the ground floor too. This use of space will help create a welcoming and contemporary access into the hospital that can also double up as providing controlled access and egress flows for pandemic/lock down situations if required.

The Medical Day Unit

The medical day unit is located at the northern end of the floor plan, close to the car park entrance. This is to enable easy access for chronic/repeat attendance patients

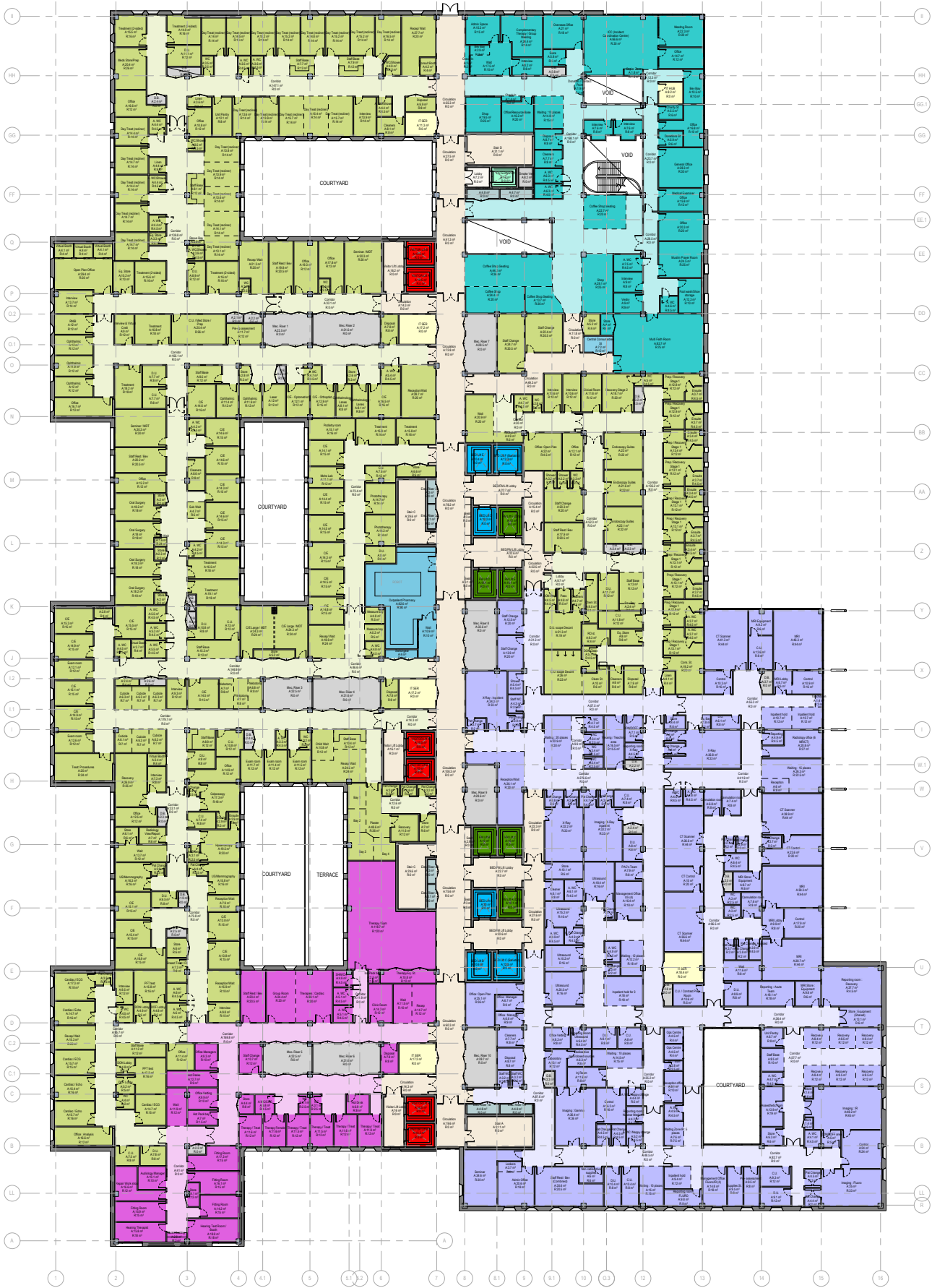
who will need to access either oncology clinic space of the general medical day unit regularly. The MDU is split into two collocated areas. During the design development additional chemotherapy recliner spaces were added to the oncology element of the brief.

The Outpatient areas

The outpatient spaces are perhaps one of the more complex areas to achieve on plan as each area has many specialist rooms, but equally needs to be used continually to bring value to the space. Throughout the design development there has been a challenge to support specific specialty clinic needs whilst balancing the flexibility and more general use of the consulting rooms. To achieve this within outpatients there are the following areas.

- Ophthalmology clinic with dedicate testing and treatment rooms. This is located immediately south of the Medical Day Unit to provide easy access from main entrance and the car park bridge link.
- Orthopaedics. The space is designed with dedicated plaster room space, areas for consultation and smaller cubicle spaces to achieve the fracture clinic turn around. The orthopaedic clinic is located centrally within the outpatient area allowing flex with the generic outpatient treatment and consulting rooms as well as easy access into the imaging X-Ray department. This co-location has been settled to ease patient flow and bring better efficiency.
- Central to the outpatient area is a series

Emergency Services	Clinical Support
Ambulatory Care	Other Support
Adult Inpatient	MEP
Children's Unit	Comms
Operating Theatres	FM Lift
Maternity & Neonates	Bed Lift
Imaging	Visitor Lift
Other Treatment	



First Floor Plan

4.13 Hospital Plans by Floor

of general consulting exam rooms that can be used flexibly on different days of the week. Within this area there are dedicated treatment rooms for dental, oral surgery, dermatology phototherapy and two larger consulting spaces (co-located to open into one large space) for group therapy sessions.

The outpatient pharmacy is located centrally on the floor to allow easy access from multiple clinics and the café areas will provide large seating areas to support the clinics and avoid large clinical waiting areas, by using digital technology to assist with flows and improving the experience for both patients and staff.

Main Entrance and Multi faith spaces

The remainder of main entrance support spaces are located at this level (in the area coloured turquoise on the plan) and are linked to the ground floor with a feature stair (to encourage using stairs) and double volume spaces. These are surrounded by the retail spaces to help make for a welcoming non-clinical feel to the front of house spaces. In addition to these, there are the multi faith rooms that enable flexibility of usage for different faith groups and the ability to flex usage on different days of the week.

On the top north east corner of the floor plate is the command centre, which affords a good view over the main entrance as well as down the eastern side of the building towards the ED which is essential when co-ordinating a major incident response.

Endoscopy

Through the design development the requirement for an additional endoscopy room was concluded. This has been incorporated within the plans, providing three endoscopy treatment rooms. The endoscopy department is located on the eastern side of the floor plan to allow easy access from patient transfer lifts, thus avoiding a cross

over between inpatients and outpatients. Each of the recovery prep rooms has been provided with their own toilet facilities this improves patient privacy and dignity, but also helps with the flow and efficiency within the department. The decontamination space is located within/adjacent to the endoscopy department, allowing access from/to other parts of the hospital.

Imaging

The imaging department is placed above the ED on ground floor and is easily accessible from patient transfers from either ED, critical care, the wards as well as for outpatient access. The main entrance to the department is roughly central on the first floor, providing easy access to each of the sub-department break downs. X-Ray and Ultrasound are near to the entrance to allow for easy outpatient flow with the highest footfall. The CT and MRI area is easily accessible and has a dedicated inpatient area that enables separation in pandemic times to enable elective/outpatient diagnostics to continue more easily. The nuclear medicine area and interventional imaging suites are located to the periphery of the department within their own clusters.

Support spaces are distributed between each of the clusters affording a good spread of reporting and viewing areas as well as office and seminar space. All the major equipment rooms (CT/MRI) can relatively easily be access from an external wall/knock out panel with simple corridor routes to enable future equipment replacement.

The floor plans have been developed through five engagement sessions over 2021/early 2022. These sessions included two meetings prior to the planning and NHP feedback, site visits for the orthopaedic, ophthalmology and endoscopy services and a further three engagement meetings to refine the plans since October 2021 and have received input from a broad spectrum of clinical professionals.



CGI - Hospital street outside the outpatient area



CGI - Therapies area

4.13 Hospital Plans by Floor

Level 2

The Second floor comprises the intense departments for theatres, the critical care, the respiratory ward and then the pathology services as well as the CSSD.

Theatres

The theatres occupy the eastern side of the floor plan (coloured dark pink) on the one side of the hospital street. The department is set out in a long linear fashion to ensure and efficient flow and to enable a separation between the inpatient and day case patients accessing the seven-theatre suite. Within the theatres three are sized as larger theatres, with 4 sized at a standard size for operating theatres. The recovery spaces are organised into stage 1 and stage 2 recovery; the stage one recovery is split into two halves to allow for green/red flows usage and the second stage recovery is organised as a series of pods for patients to prep and return to as part of the day procedures. Support spaces and storage are located across the department and have been developed in discussion with the theatre clinical team.

Critical Care

The critical care occupies half of the space located to the left of the hospital street (pale blue coloured) and is organised in two parts to make up the 22 critical care beds. Access into the critical care is easily achieved from either patient bed lift core, allowing easy transfer from ED as well as easy transfer up to the ward areas above and imaging (CT) on the level below. All patient bedded areas have natural daylight. Four isolation spaces are located within critical care with two being allocated to each half of the unit.

Respiratory Ward

The respiratory ward (the northern/ top part of the pale blue colour) is located on this level alongside the critical care area. This ward is the first of a series of nine generic ward clusters made up of the 28 beds. The ward

is designed to split into two 14 bed halves, each comprising 10 single bedrooms and a four-bed bay. All patient rooms have en-suite facilities and four of the bedrooms in this ward have isolation lobbies in line with IPC discussions through the design development.

Pathology

The pathology department (coloured dark blue on adjacent plan), comprising a hot automated laboratory, blood transfusion service with supporting cold storage and offices occupies the north western wing of the plan. All departments are easily accessible off the main hospital street with easy access for sample collection and drop off.

CSSD

The sterile supplies stores (darker shade of blue within the critical care wings leading to the hospital street) are located on this floor and are accessible for easy delivery and distribution from offsite sterile supplies providers.

The floor plans for level 2 have been developed through five engagement sessions set up in formal meetings over 2021/early 2022. A further two additional meetings were arranged to close out the floor plans outside of the user engagement weeks for theatres, critical care, and pathology to refine the pathology requirement and best fit within the available space. The plans reflect these additional engagement meetings.

- Emergency Services

Ambulatory Care

Adult Inpatient

Children's Unit

Operating Theatres

Maternity & Neonates

Imaging

Other Treatment

Clinical Support

Other Support

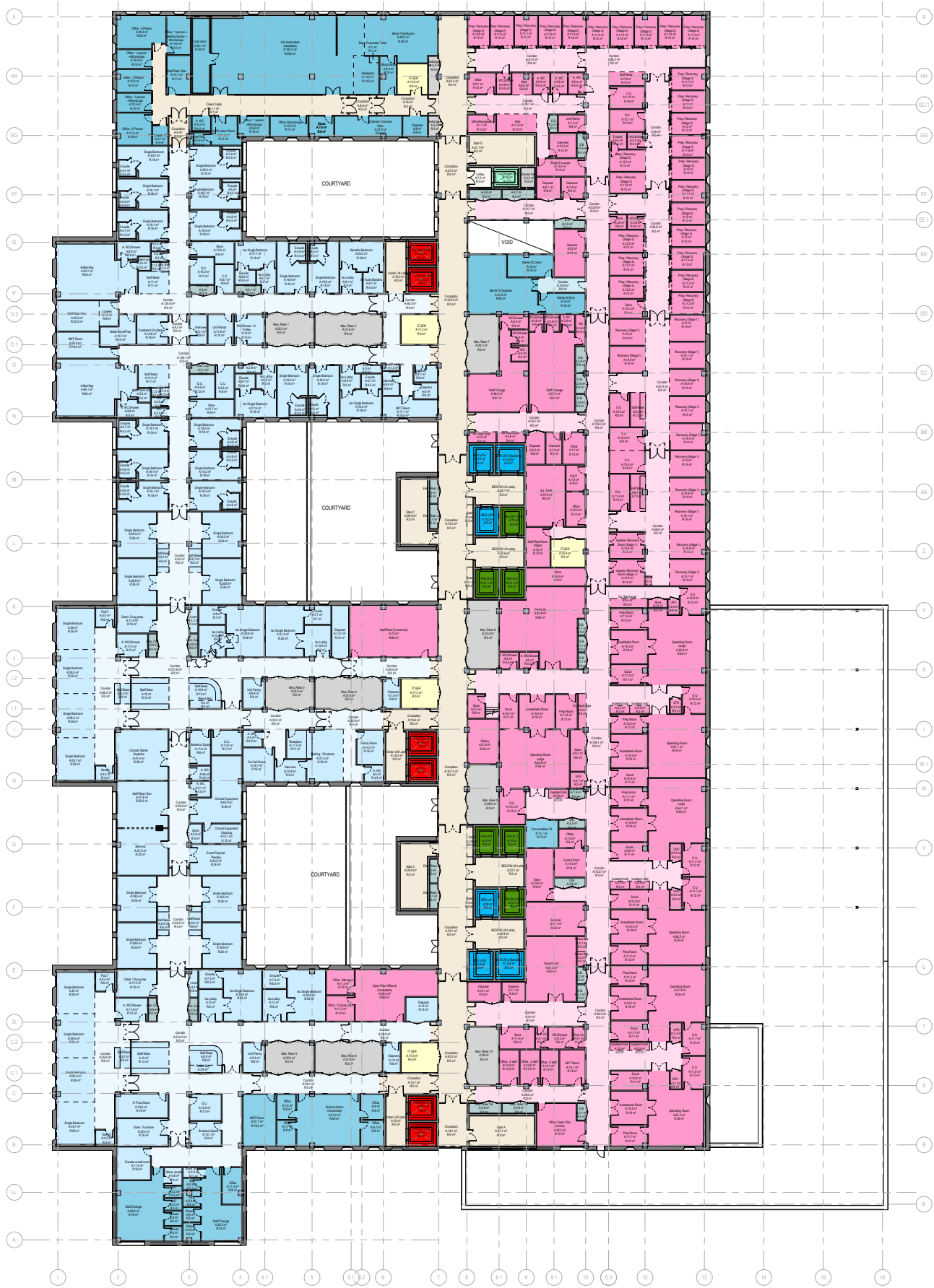
MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Second Floor Plan

4.13 Hospital Plans by Floor

Level 3

The third floor is where the building tiers back from the lower hot floors in terms of clinical accommodation. A key design development over the OBC period was to refine the positioning and shape of the MEP plant spaces to achieve the most efficient layouts to support modern methods of construction and air handling unit installation and easy replacement and to minimise extensive risers. On this level the first of the large plant rooms is located. This is directly above the operating theatres to serve the space immediately below. The remainder of the floor comprises two generic adult wards and the children’s and young people’s services.

Children and Young People’s (CYP)

The CYP space (coloured pink on the adjacent plan) is located to the north of the plan. This department was one of the more complex areas to develop during the OBC detail department layout design, primarily because the ward areas are required to serve two very different groups (teenagers and young children) both with very different needs. Additionally, the bed and support space complement does not match the requirements of a standard ward template.

The CYP area is organised into an inpatient half on the left (western side of the hospital street) and the day care and outpatient half on the eastern side of the hospital street. Each area is accessible off the hospital street and access into the entire northern portion of the plan can be orchestrated though door controls/lift access which can be concluded in the next design stage. Both inpatient wards can be accessed independently, thus avoiding the unnecessary cross of teenagers with very young children. However, but co-locating these two elements of the children’s services efficient staffing can be achieved.

The day care, ward and hospital street afford access onto a large roof terrace that provides

the requisite outside space recommended within the HBN for Children’s accommodation in acute hospitals.

Adult wards

The next two general adult wards (pale blue colour on the adjacent plans) are located on this level immediately south of the children’s area. These wards are part of the nine generic ward clusters made up of the 28 beds each. The ward is designed to split into two 14 bed halves, each comprising 10 single bedrooms and a four-bed bay. All patient rooms have en-suite facilities and two of the bedrooms in each of these wards’ isolation lobbies in line with IPC discussions through the design development.

The floor plans for level 3 have been developed through five engagement sessions set up in formal meetings over 2021/early 2022. These sessions included two meetings prior to the planning and NHP feedback and then three meeting from October 2021 through January 2022. A further mini options appraisal was carried out to justify additional space required to achieve the clinical co-locations. This was done with additional clinical user meetings to cover both the CYP spaces and the Children’s emergency department on the ground floor. The plans reflect these additional engagement meetings and the changes requested.

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Other Treatment
- Clinical Support

Other Support

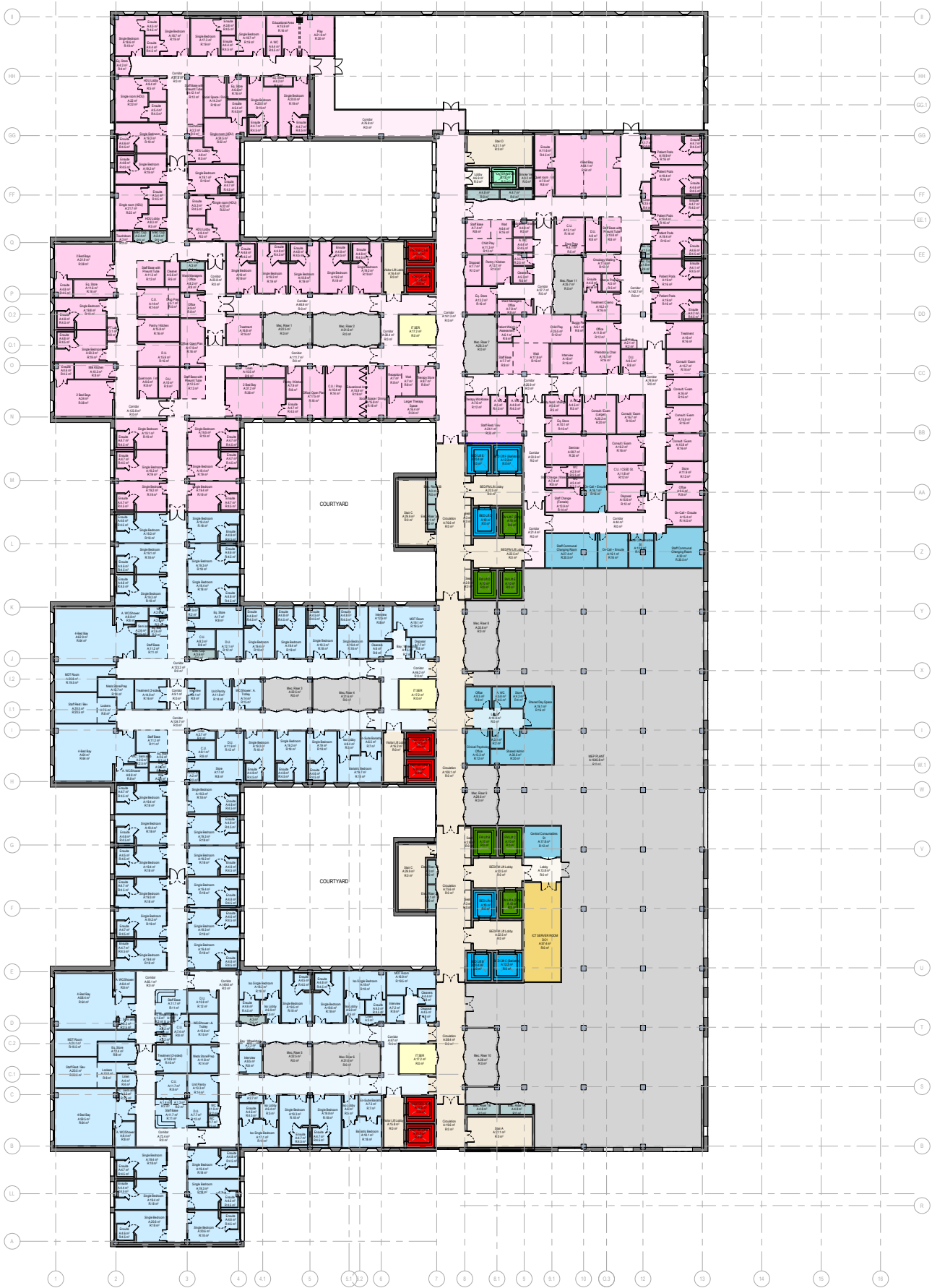
MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Third Floor Plan

4.13 Hospital Plans by Floor

Level 4

The fourth floor is dedicated to the maternity department, comprising the ante natal clinics and ward type accommodation on the left-hand side (western side of the plan) and the delivery suites to the eastern side of the plan. The central hospital street allows direct access into each component of the maternity department directly from the street, thus minimising travel between parts of the department which is a large floor plate.

Maternity

There was originally some staff support areas and a staff dining room at this level, but through the design development of the layout, this was moved elsewhere within the building and has been strongly supported by the clinical team.

The delivery suites and the mid wife led birthing unit are made up of large sized delivery rooms, all of which get natural daylight. These straddle the entire perimeter of the eastern part of the plan, with all the supporting staff change, stores and staff bases filling the remainder of the floor plate. The two obstetric operating theatres occupy the southern end of the labour along with staff changes, partner changes, the requisite anaesthetics, and prep rooms as well as the HDU space and theatre recovery. During the design development the number of recovery bays was increased, and the associated HDU bed space reduced to meet user requests based on anticipated usage. The two bereavement rooms are discreetly positioned in their own area between the birthing unit and the labour ward, being very much part of the ward (operationally), but quietly positioned within a discreet area.

The triage spaces were moved to be adjacent to the labour ward as part of the final iteration of the plan and the associated office spaces for ANC moved to within the ante natal day spaces/outpatient area.

Post Natal

The post-natal ward is positioned centrally in the plan, allowing for the shared six transitional care beds to be managed by the adjacent neonatal area. The post-natal ward is set up to be like a standard ward, but much of the supporting space and two bedded bays (as opposed to four bedded bays in a standard ward) are unique to this area.

Neonatal

The neonatal cot space occupies the south western wing of the floor, with the associated office, parent days space and seminar space on the right-hand side of the plan beneath the delivery suites. The neonatal cots are organised into the HDU and SCBU areas to enable current nursing specialties. All patient areas get natural daylight and through vision panels the centralised staff bases, and corridors will be well lit. The plans were adapted to make best use of the space, which changed significantly from the original room list. This was agreed during the user engagement process.

The floor plans for level 4 have been developed through five engagement sessions set up in formal meetings over 2021/early 2022. These sessions included two meetings prior to the planning and NHP feedback and three meetings since October 2021. The plans reflect discussions at these engagement meetings and the changes requested to neonatal and the location of the triage rooms from the final meeting.

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Other Support

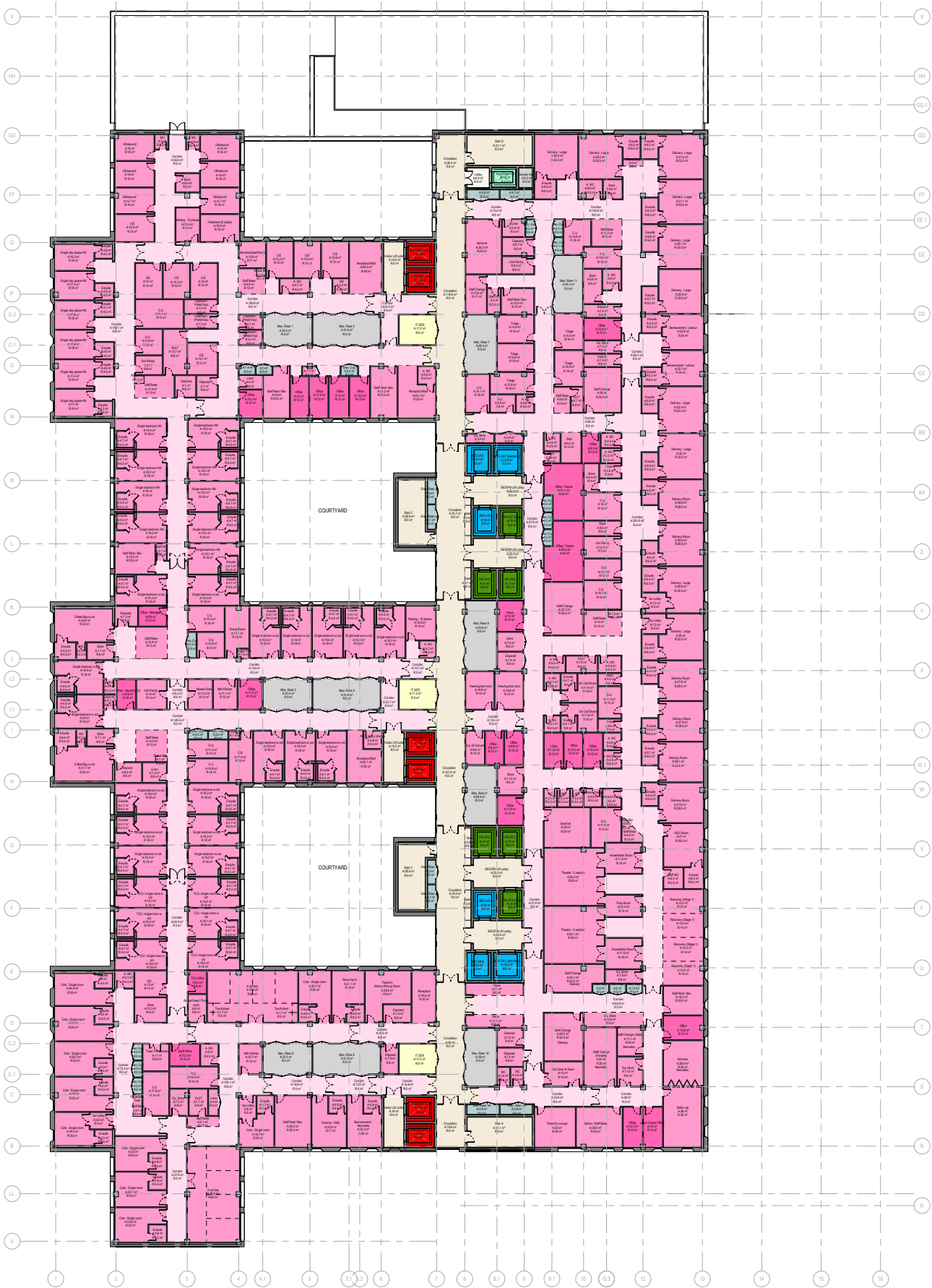
MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Fourth Floor Plan

4.13 Hospital Plans by Floor

Level 5

The fifth floor is the first floor of three general wards, with associated support space and a large plant room. Through the design development this plant room was changed dramatically to create a linear arrangement that could service the entire floor providing a full two grids to accommodate an efficient plant layout and easy replacement strategy under MMC.

Adult wards

Three general adult wards (pale blue colour on the adjacent plans) are located on this level. All have direct access from visitor lift cores, thus ensuring the crossover of flows between inpatient transfers to theatres/ endoscopy/theatres is avoided. These wards are part of the nine generic ward clusters made up of the 28 beds each. The wards are designed to split into two 14 bed halves, each comprising 10 single bedrooms and a four-bed bay. All patient rooms have en-suite facilities and two of the bedrooms in each ward have isolation lobbies in line with IPC discussions through the design development.

Located around each of the green (FM lifts) and blue (patient transfer) lift cores are support accommodation for the wards. The support accommodation comprises a mixture of FM support space, staff admin and change spaces and the patient therapy gym and physio area. The support space has been arranged across each floor adjacent to the wards and through the user meetings the allocation of this space has been done to complement the proposed wards to be allocated within each of the general wards.

The floor plans for level 5 have been developed through five engagement sessions set up in formal meetings over 2021/early 2022. These sessions included two meetings prior to the planning and NHP feedback and then three meeting from October 2021 through January 2022. The plans reflect

these additional engagement meetings and the changes requested.

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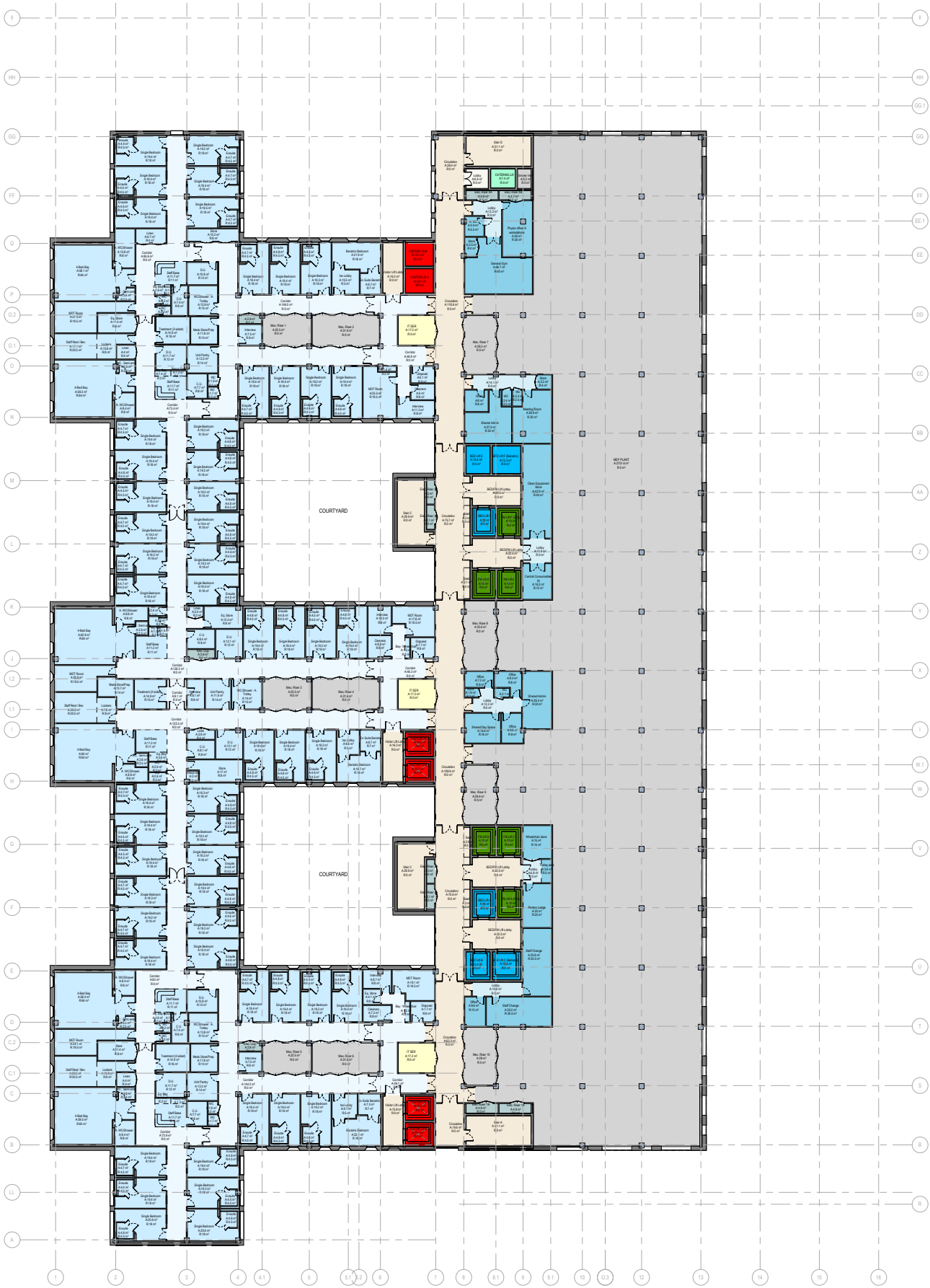
MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Fifth Floor Plan

4.13 Hospital Plans by Floor

Level 6

The sixth floor is the second level of three general wards, with associated support space and the space allocated for dining rooms as well as some office accommodation.

Adult wards

Three general adult wards (pale blue colour on the adjacent plans) are located on this level. All have direct access from visitor lift cores, thus ensuring the crossover of flows between inpatient transfers to theatres/ endoscopy/theatres is avoided. These wards are part of the nine generic ward clusters made up of the 28 beds each. The wards are designed to split into two 14 bed halves, each comprising 10 single bedrooms and a four-bed bay. All patient rooms have en-suite facilities and two of the bedrooms in two of these ward have isolation lobbies, the third ward has four isolation lobbies to single bedrooms to serve the haematology beds, in line with IPC discussions through the design development.

Located between the green (FM lifts) and blue (patient transfer) lift cores are support accommodation for the wards. The support accommodation comprises staff admin and change spaces and the patient therapy space with two large gym areas to support the rehab wards at this level. The support space has been re-arranged following the user engagement sessions to maximise space and get daylight into most staff admin areas. This space has been allocated to complement the proposed wards located at this level.

Trust Office Space

The layout for the Trust office space has been redesigned through the duration of the design development to better reflect changing working patterns. In lieu of 29 individual offices the design has been developed to rather provide for more collaborative shared spaces with a selection of open plan bookable spaces and handful of individual

offices and bookable virtual private booths. To complement this a breakout and beverage space has also been provided to get better use out of this floor plate and increase potential office working spaces.

The toilet and MDT spaces are located at the south end of this space affording the opportunity to open these out into larger spaces with access out on to a roof terrace. In addition to the MDT space a further staff wellbeing area has been located at this level, also with access to the roof.

Dining Area and Servery

The dining room and servery is located at the north end of the plan. There is easy access into this area from the hospital street. Adjacent to the main dining room, there is the servery which has a dedicated catering lift to enable direct food distribution from the kitchens at basement. The associated toilets and hand washing facilities are adjacent to the dining space.

Emergency Services

Ambulatory Care

Adult Inpatient

Children's Unit

Operating Theatres

Maternity & Neonates

Imaging

Other Treatment

Clinical Support

Other Support

MEP

Comms

FM Lift

Bed Lift

Visitor Lift



Sixth Floor Plan

4.13 Hospital Plans by Floor

Level 7

The seventh floor is primarily a plant room floor with supporting FM (in turquoise) and ICT spaces (in yellow). The plant spaces at this level serve the wards below through dedicated risers. Along the length of the hospital street are dedicated ICT spaces which include an ICT workshop, stores, and a main Data Centre. The other IT data centre is located at level 3. There is also an area identified for possible Mobile Network Operator (MNO) IT space should it be required, but at this stage in the development this is not a certainty.

The turquoise coloured space at this level comprises FM support space. Currently this reflects the bed management and decontamination space, however this remains an ongoing discussion as the what is best suited within the new building or the retained estate and will evolve further during design stage 3.

The floor plans for level 7 have been developed through five engagement sessions and workshops with the MEP/ICT engineers over 2021/early 2022. These sessions included two meetings prior to the planning and NHP feedback and then three meetings from October 2021 through January 2022. The plans reflect these engagement meetings and the changes requested. Generally, over each floor the IT server and intake rooms have been located to enable the resilience/ reach of IT cabling and the location of each is shown in a yellow colour across the floors.

- Emergency Services

Ambulatory Care

Adult Inpatient

Children's Unit

Operating Theatres

Maternity & Neonates

Imaging

Other Treatment
- Clinical Support

Other Support

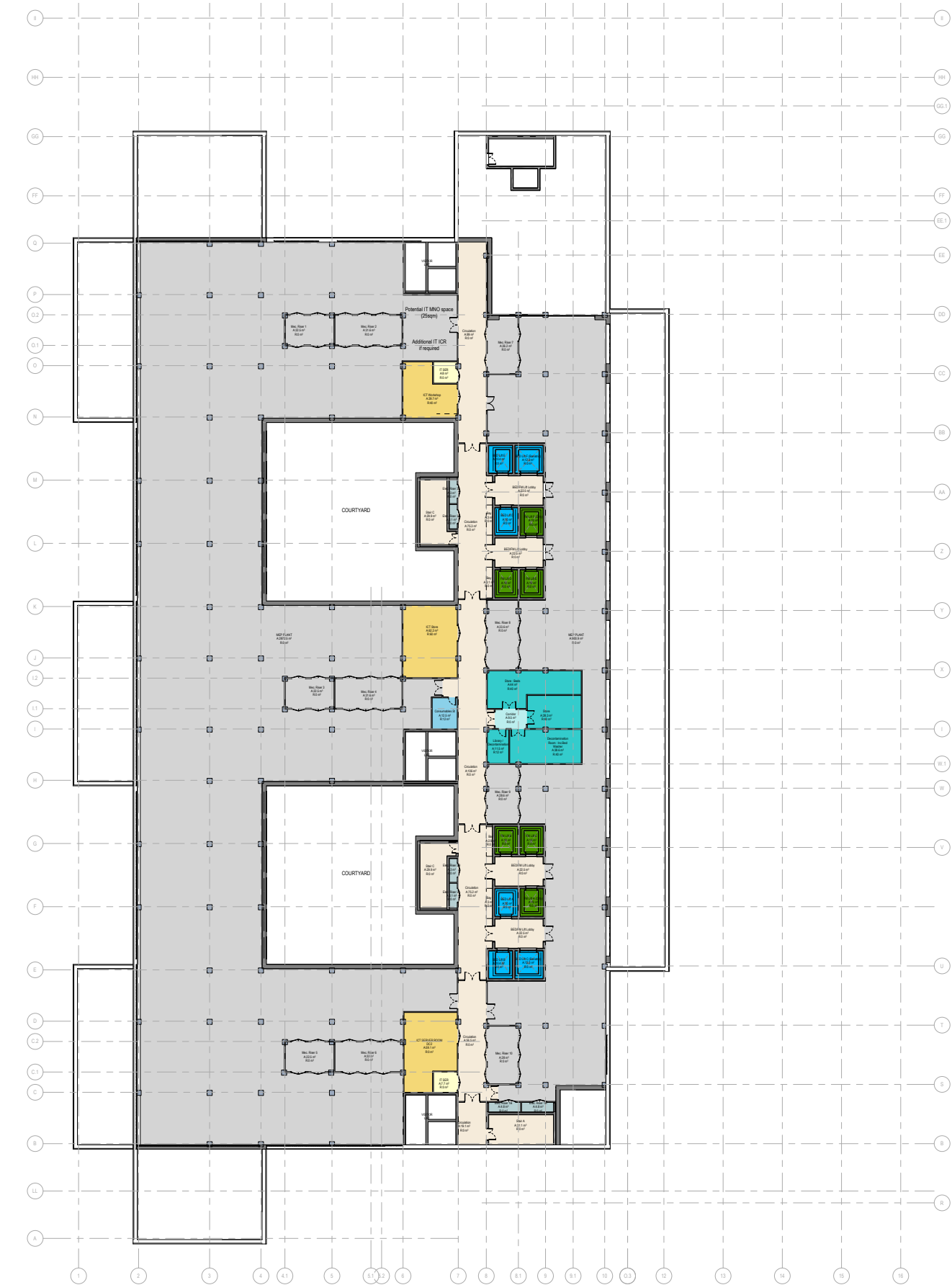
MEP

Comms

FM Lift

Bed Lift

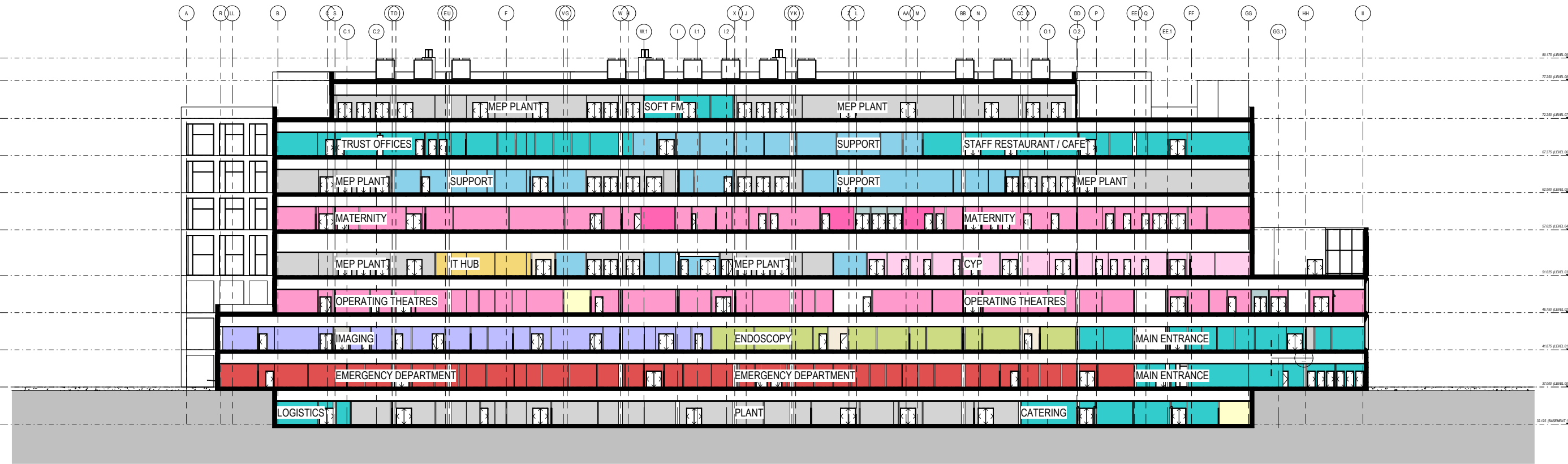
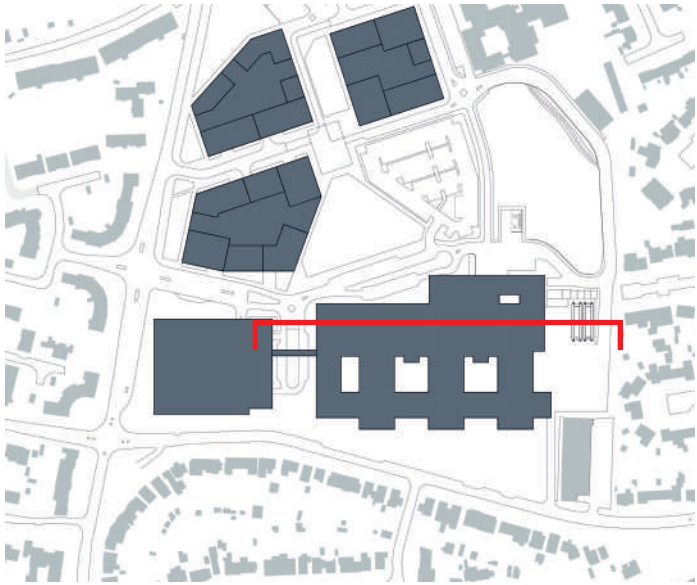
Visitor Lift



Seventh Floor Plan

4.14 Hospital Sections

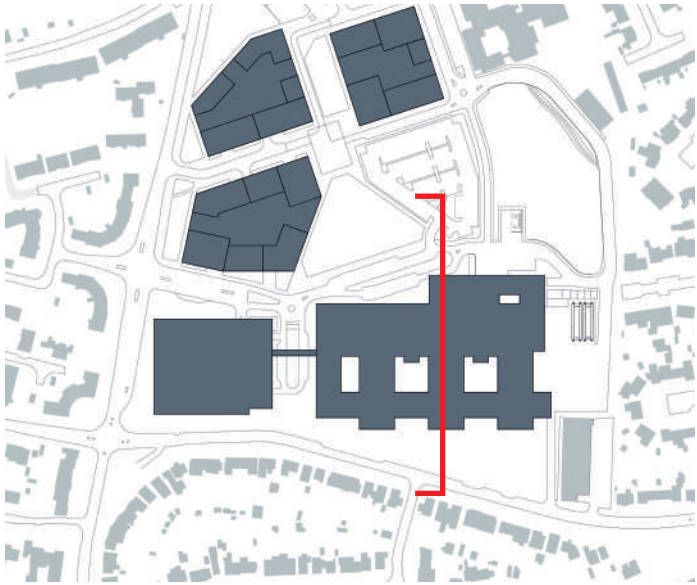
- Emergency Services
- Ambulatory Care
- Adult Inpatient
- Children's Unit
- Operating Theatres
- Maternity & Neonates
- Imaging
- Other Treatment
- Clinical Support
- Other Support
- MEP
- Comms
- FM Lift
- Bed Lift
- Visitor Lift



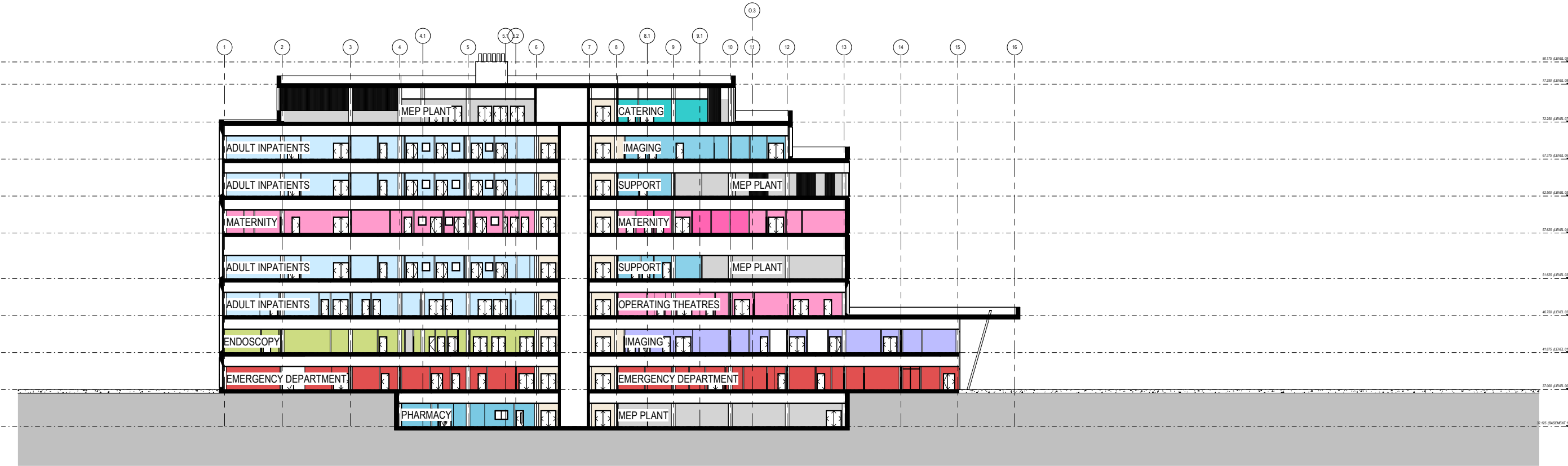
Longitudinal Section (North-South)

4.14 Hospital Sections

- Emergency Services
- Ambulatory Care
- Adult Inpatient
- Children's Unit
- Operating Theatres
- Maternity & Neonates
- Imaging
- Other Treatment
- Clinical Support
- Other Support
- MEP
- Comms
- FM Lift
- Bed Lift
- Visitor Lift



4 LAYOUT



Cross Section (East-West)

4.15 Multi-storey car park

942 public and staff car parking spaces are provided in the masterplan for hospital use.

781 spaces are provided in a multi storey car park (Ground plus five decks) within the phase one works and accessed from Field Heath Road.

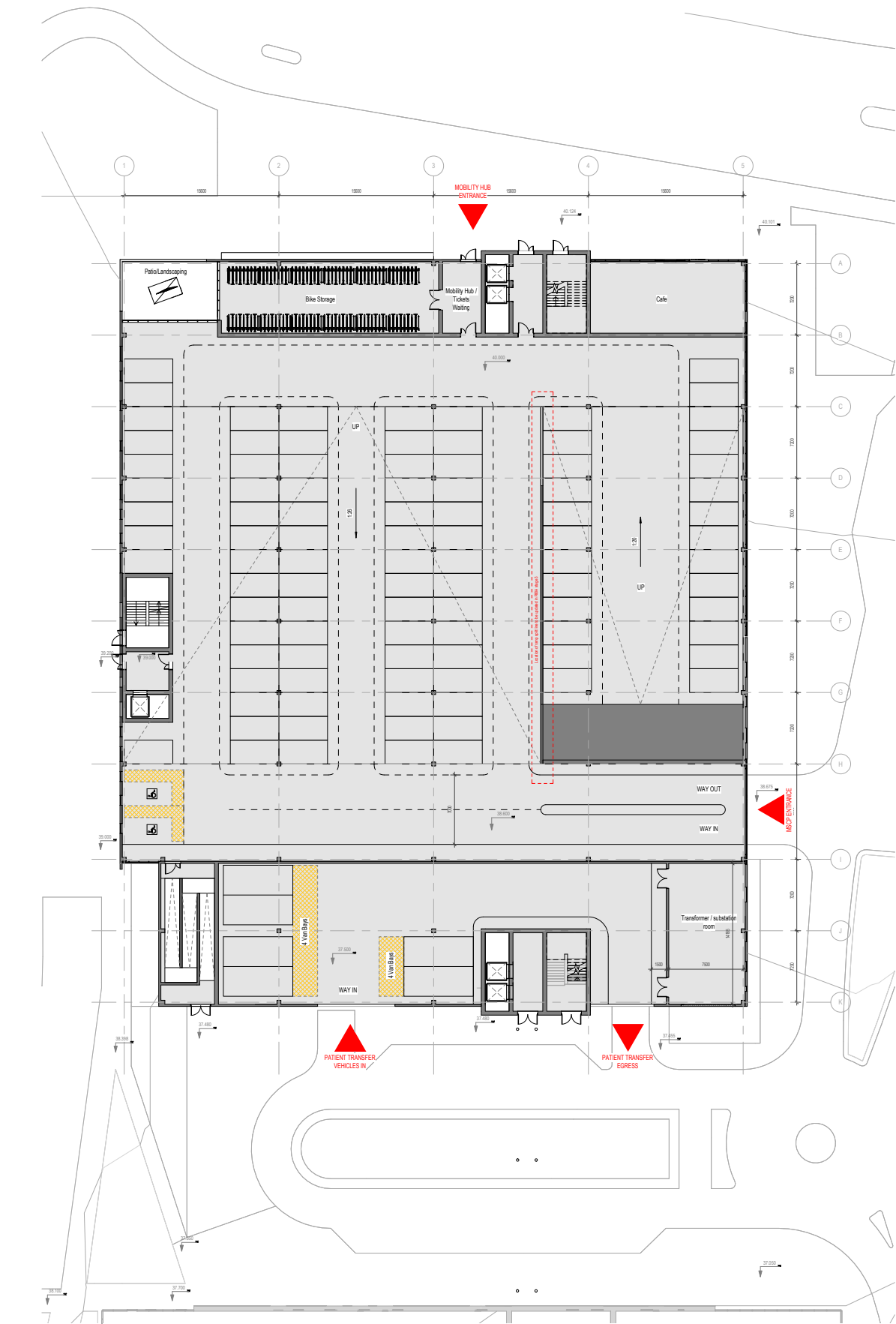
A further 161 spaces at surface level are provided in phase 1C adjacent to the Emergency Walk-in entrance.

The multi storey car park houses at ground floor level the mobility hub functions including, car sharing a secure cycle parking, a repair workshop and a cafe.

The cycle parking includes internal long-stay secure cycle racks for circa 192 bicycles with a dedicated access separate from transport hub to reduce conflicting movements.

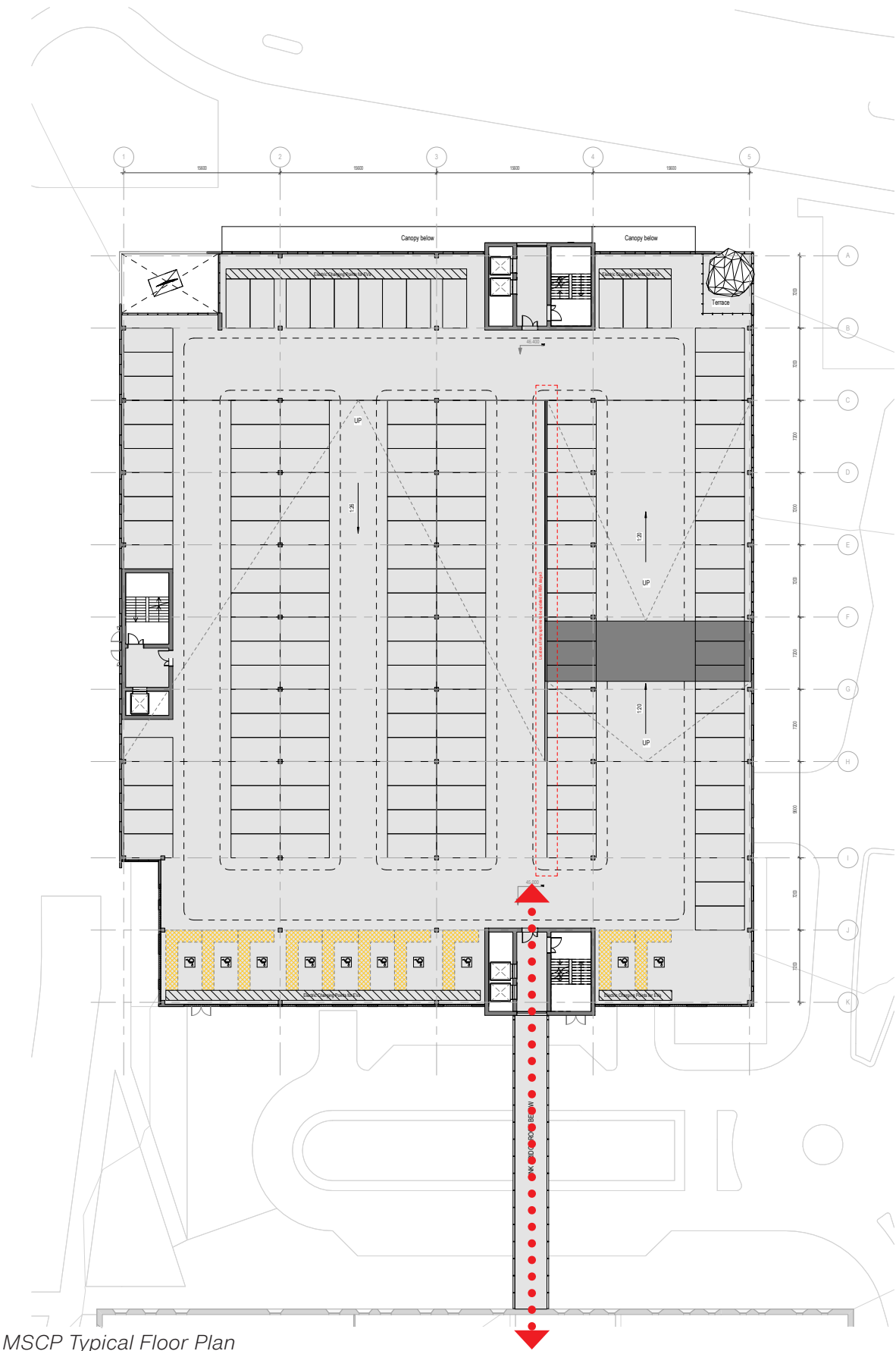
Level	No. Parking Spaces
Ground Floor	98 (2 Accessible)
First Floor	152 (10 Accessible)
Second Floor	157 (10 Accessible)
Third Floor	157 (10 Accessible)
Fourth Floor	157 (10 Accessible)
Roof	60 (3 Accessible)
TOTAL	781

Level	GIA (sqm)	GEA (sqm)
Level 0	4,596	4,660
Level 1	4,579	4,764
Level 2	4,566	4,630
Level 3	4,566	4,630
Level 4	4,566	4,630
Level 5	161	191
TOTAL	23,034	23,505

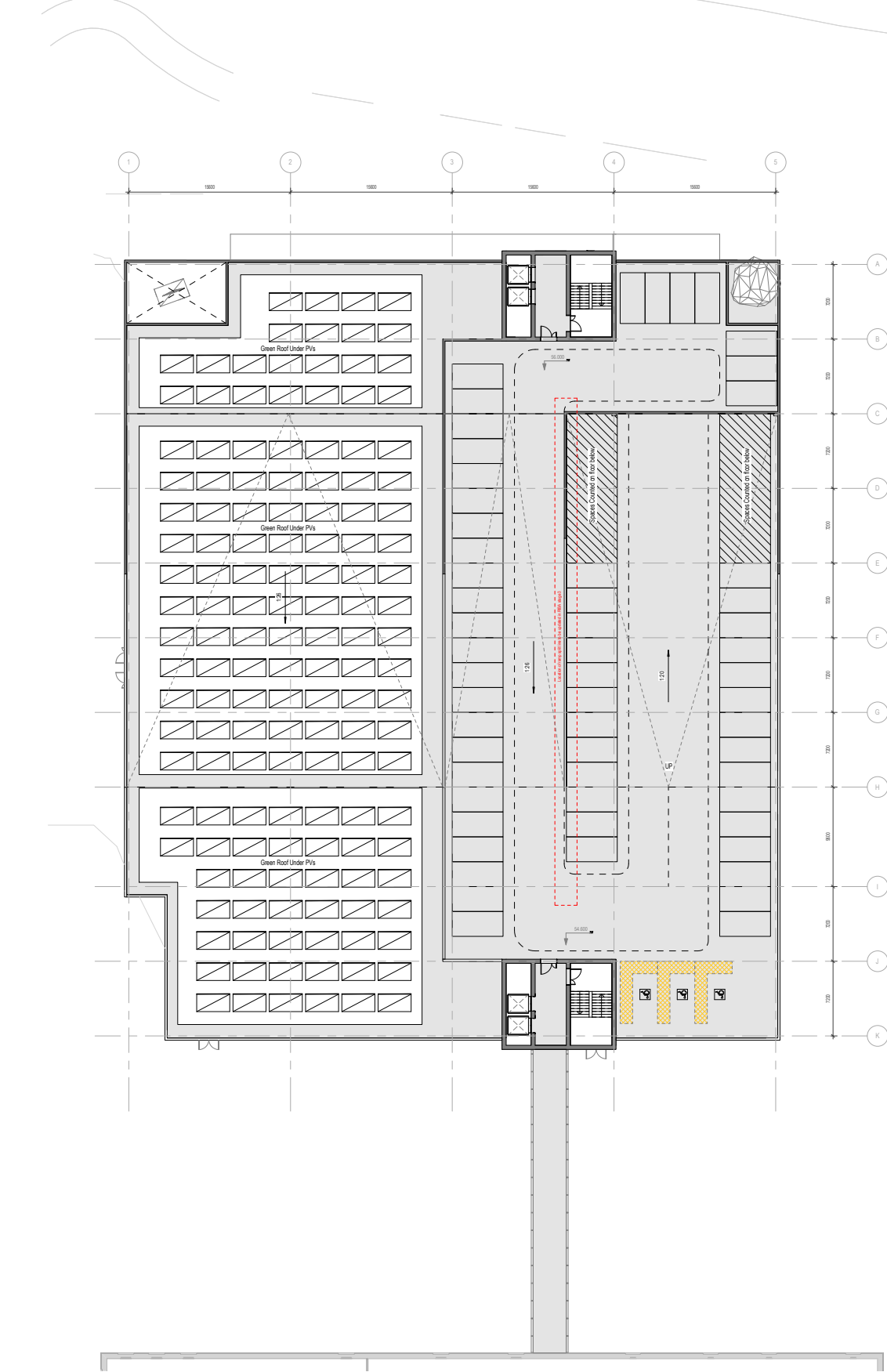


MSCP Ground Floor Plan

4.15 Multi-storey car park



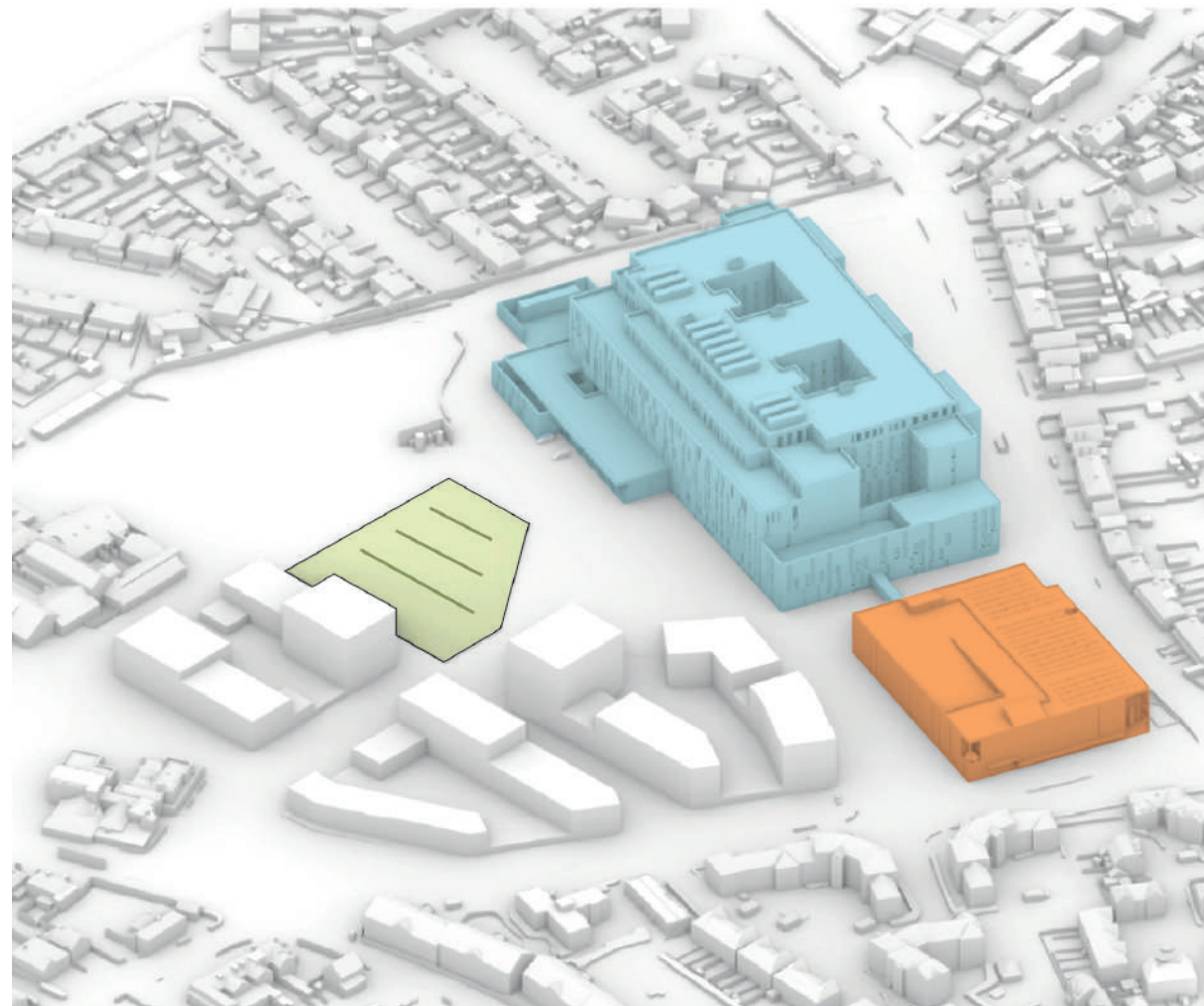
MSCP Typical Floor Plan



MSCP Roof Plan

4.16 Hospital Expansion and Parking Strategy

No Expansion



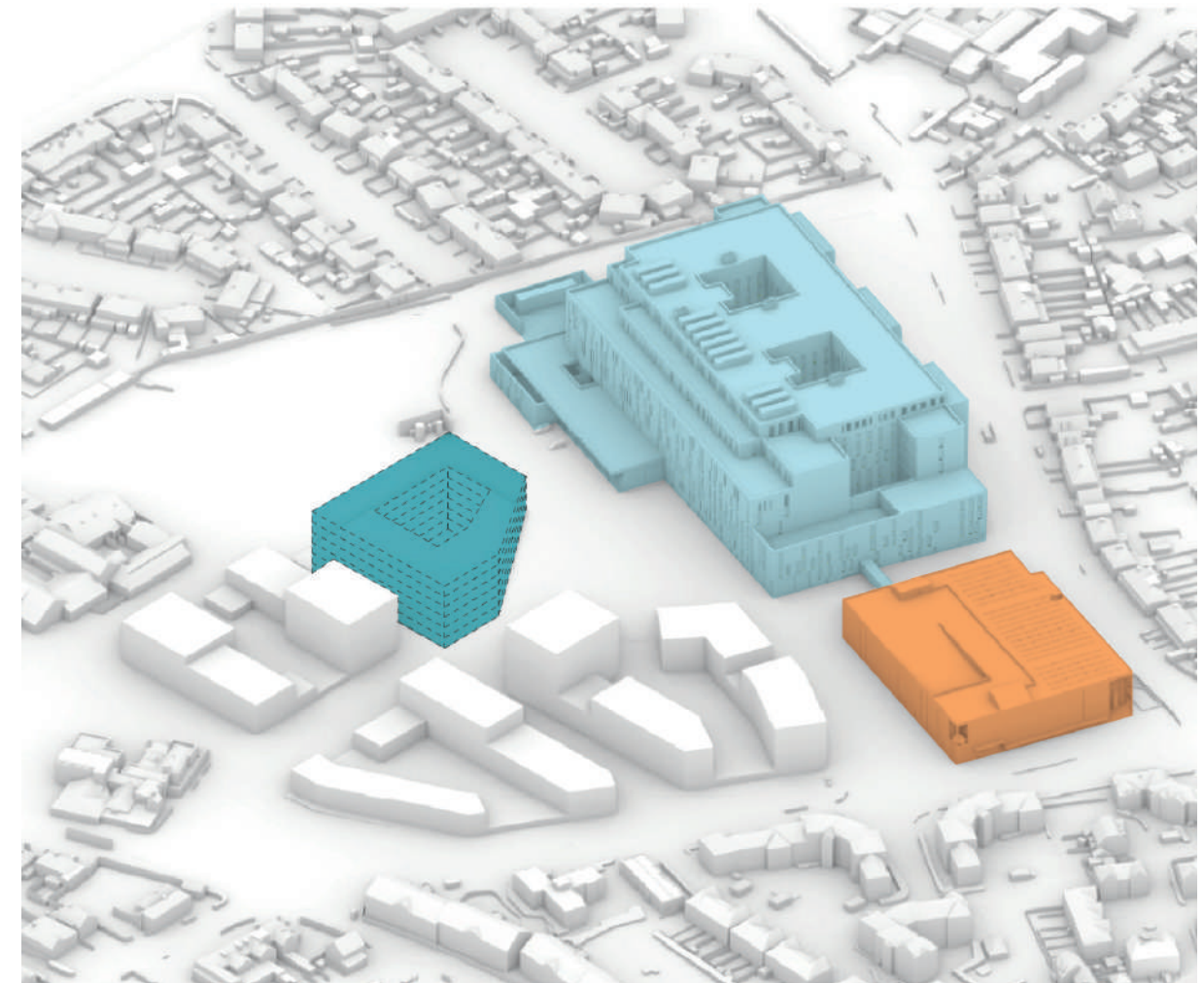
161
Surface

781
MSCP

No Expansion.

- 781 parking spaces on MSCP on Pield Heath Road / Royal Lane
- 161 surface parking spaces on Plot P04

Expansion on Plot P04



161
MSCP

781
MSCP

Expansion on Plot P04

- Area for hospital expansion is reserved to the east of the proposed hospital, on Plot P04
- 781 parking spaces on MSCP on Pield Heath Road / Royal Lane
- 161 parking spaces on Plot P04 integrated on the design of the hospital expansion

4.17 Frontages



