



# Luton & Dunstable University Hospital Redevelopment

## Public Consultation

25<sup>th</sup> November 2019



CLINICAL EXCELLENCE, QUALITY & SAFETY



# Content

Time	Discussion Topic
6pm	Welcome and Introduction
6.05pm	Scheme overview
6.10pm	Architecture
6.25pm	M&E, Civil and Structural
6.30pm	Planning
6.35pm	Programme
6.40pm	Q&As
7.15pm	Close

# Welcome and Introduction



CLINICAL EXCELLENCE, QUALITY & SAFETY



**David Hartshorne, Programme Director**  
**Melanie Banks, Deputy Programme Director**  
**Charles Frampton, Senior Programme Manager**



CLINICAL EXCELLENCE, QUALITY & SAFETY

















## Scheme Overview



# The L&D

- Catchment 320,000
- Population: Luton, Bedford Borough and parts of Hertfordshire and Buckinghamshire
- Luton and Bedfordshire – one of the fastest growing areas in the UK. Population growth over the next 5 years expected to be around 18%, close to double the national average
- Medium sized District General Hospital
- Circa 800 beds
- Circa 4200 staff
- tertiary services: bariatrics, limb fitting, gynaecology, NICU, Maternity
- Specialist services support c.1m people
- Best performing hospital in the country (financially sound, best ED), with one of the worst hospital estates

# TRUST STRATEGY

## Substantially redevelop the hospital site to...

1. Tackle backlog maintenance and reduce risk in the highest risk areas;
  - a) Critical care
  - b) Maternity
  - c) NICU
  - d) Theatres
2. Enable transformation of elective surgery through colocation of theatres
3. Address national workforce challenges through a modern, flexible design
4. Increase capacity
5. Improve sustainability and efficiency
6. Maintain and improve quality standards - Support patient centred clinical services, with care delivered in modern, uplifting and fit for purpose environments
7. Enable advances in medicine and technology



# The Challenge

- The hospital is land locked and developments have not adhered to a master plan
- Untidy and ageing estate – we cannot support patients and their relative in the way that we want to. This challenge staff to provide the care and level of service that they want to.
- Clinical adjacencies challenged – some patients have to travel outside to get from A-B
- Acute care facilities do not meet necessary standards
- Patient and staff satisfaction is negatively impacted
- Backlog maintenance c. £80m
  - buildings difficult to maintain
  - presents daily risks
  - stifles service development and innovation
- Patients are ageing and getting more acute
- Medicine and technology is advancing at a rate we cannot always keep up with
- Patient expectations are growing

# The Journey so far...

2015 / 2016

Mar - Oct 2015  
Hospital  
redevelopment  
Design completed

Apr 2016  
Planning  
Permission  
Granted by LBC

2016  
Engaged market

2016  
No funding



2017 / 2018

Asked to resubmit  
Capital  
requirements

2018  
No funding



2019

Aug 2019  
Funding approved





# SCHEME OBJECTIVES

Delivery of:

1. Acute services block
  - a) Maternity services – delivery suite, 3 operating theatres, midwifery led birthing unit, triage, bereavement
  - b) NICU – intensive care, high dependency care, special care, transitional care, parental accommodation
  - c) Maternity wards – antenatal and postnatal wards with pre-operative lounge
  - d) Surgical arrivals and recovery
  - e) Operating theatres – 8 new operating theatres, including hybrid and interventional theatres, first stage recovery
2. Critical care block
  - a) A 22 bedded critical care unit for intensive care patients and high dependency care patients
  - b) Offices for circa 150 staff to allow the old office block to be decanted and demolished
3. Multi-storey car park on Lewsey Road providing a total number of 1,600 parking spaces across the site
4. Energy Centre (CHP, centralisation of boilers and standby power generation)
5. Helipad with fast access lift shaft

Supported by:

1. Programme of electrical infrastructure upgrades
2. Transfer of Obesity outpatient services to Travelodge
3. A number of time critical enabling schemes across the site e.g. roadways, demolition, offices





L&D 2019



CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS





L&D 2024



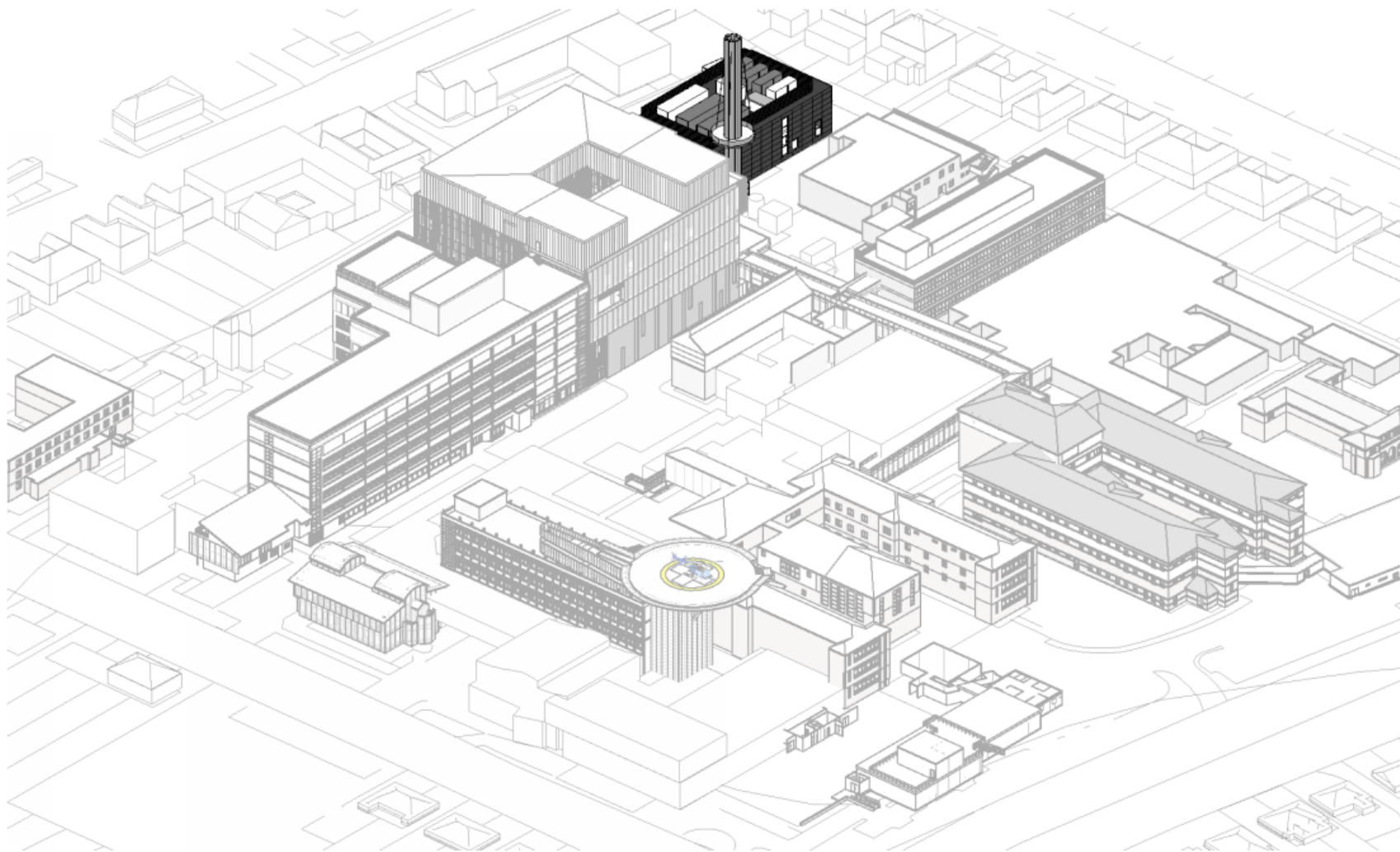
CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS





## Scheme 1: Energy Centre



### Aerial View Future

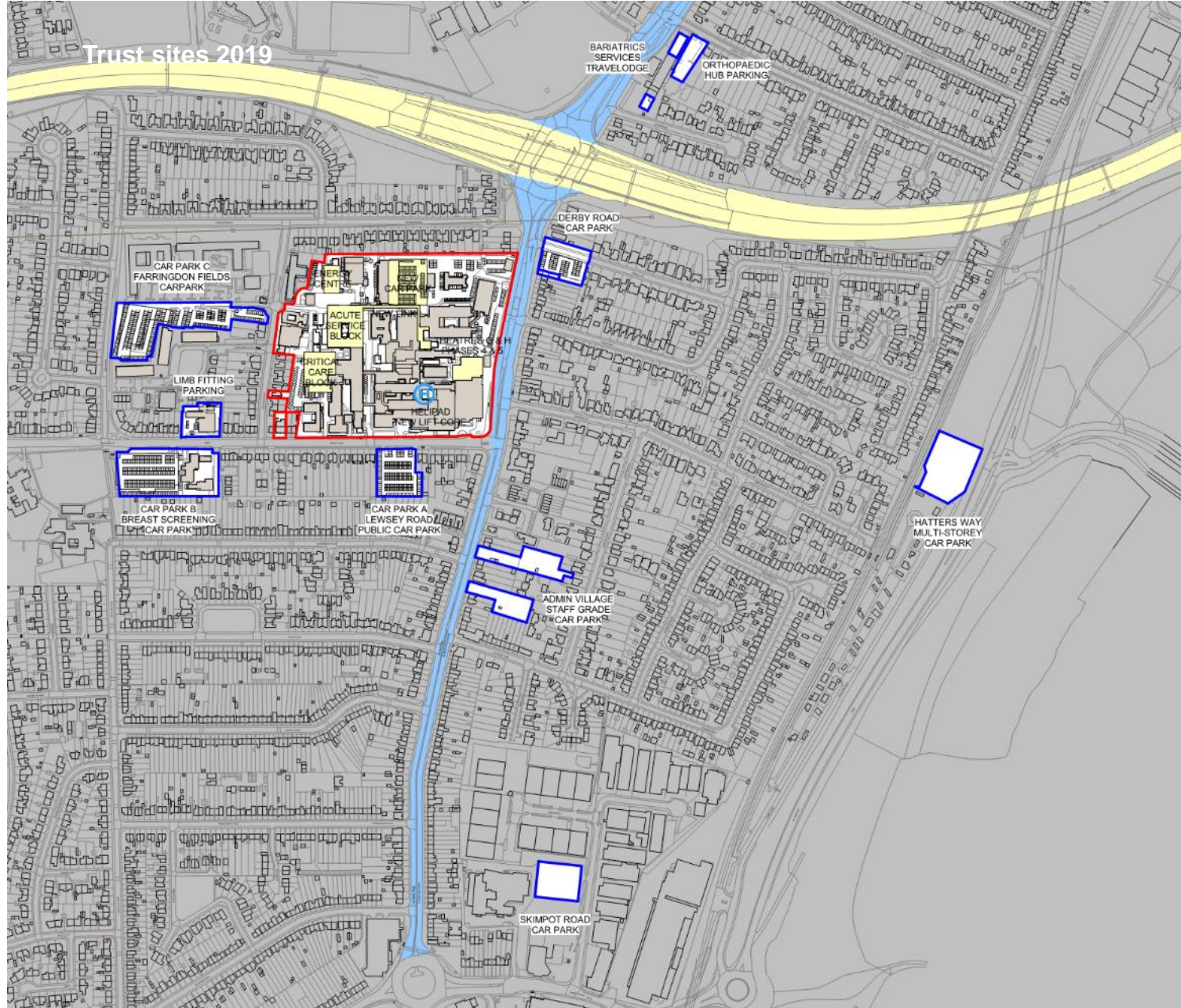


CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS



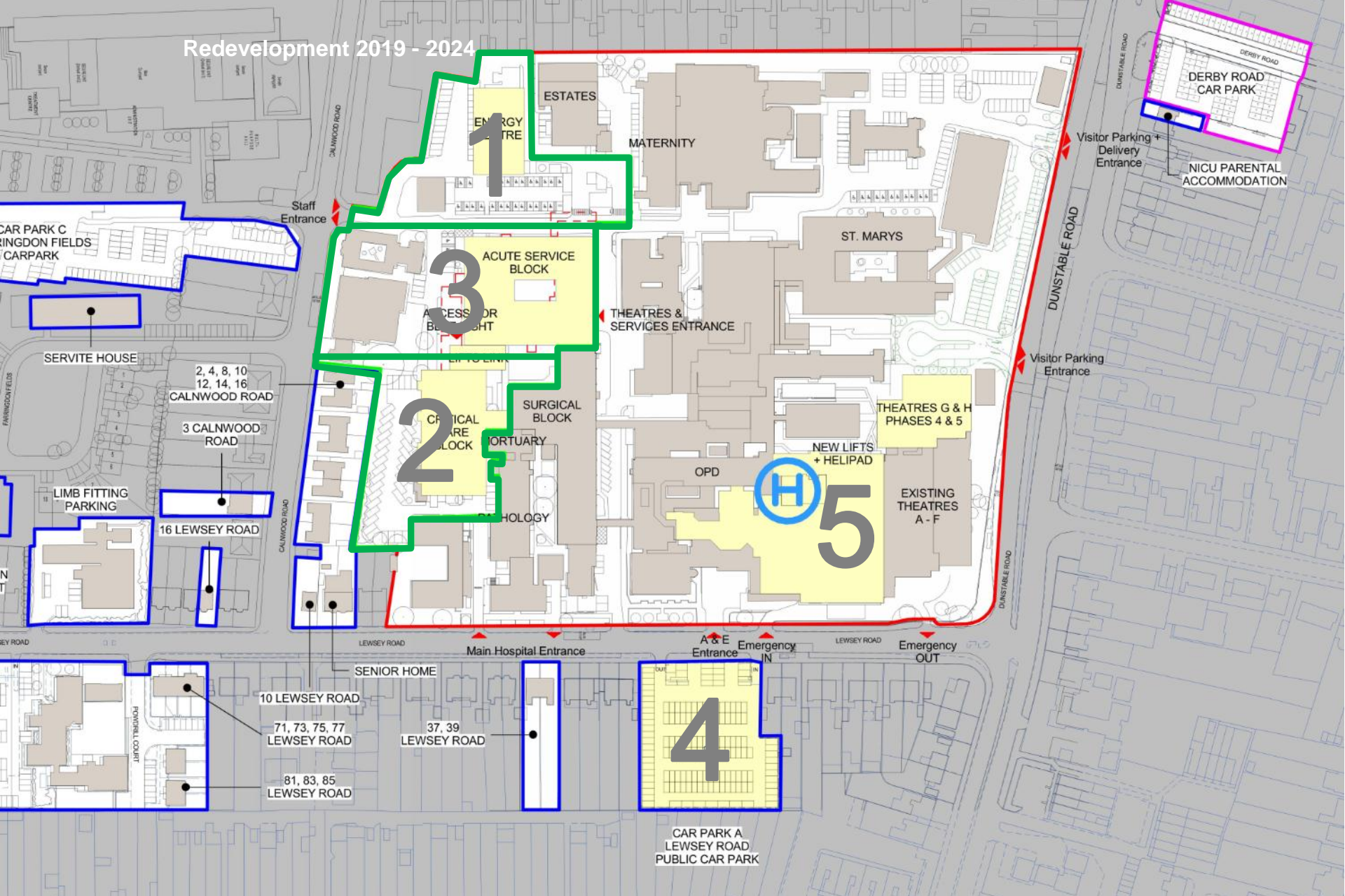
# Trust sites 2019



© Crown copyright  
and database rights  
2019 OS Licence  
100035409

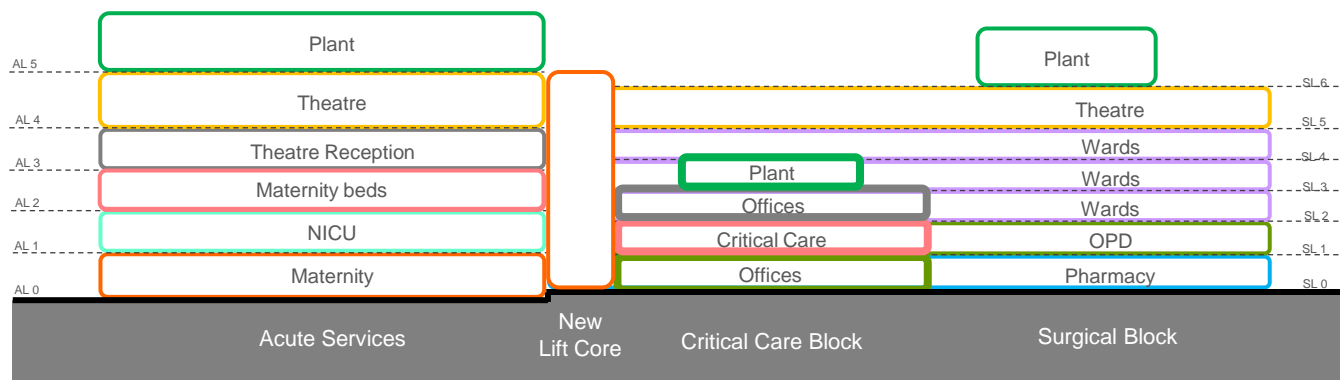


# Redevelopment 2019 - 2024





## Schemes 2&3: Acute Services and Critical Care Blocks - schematic section



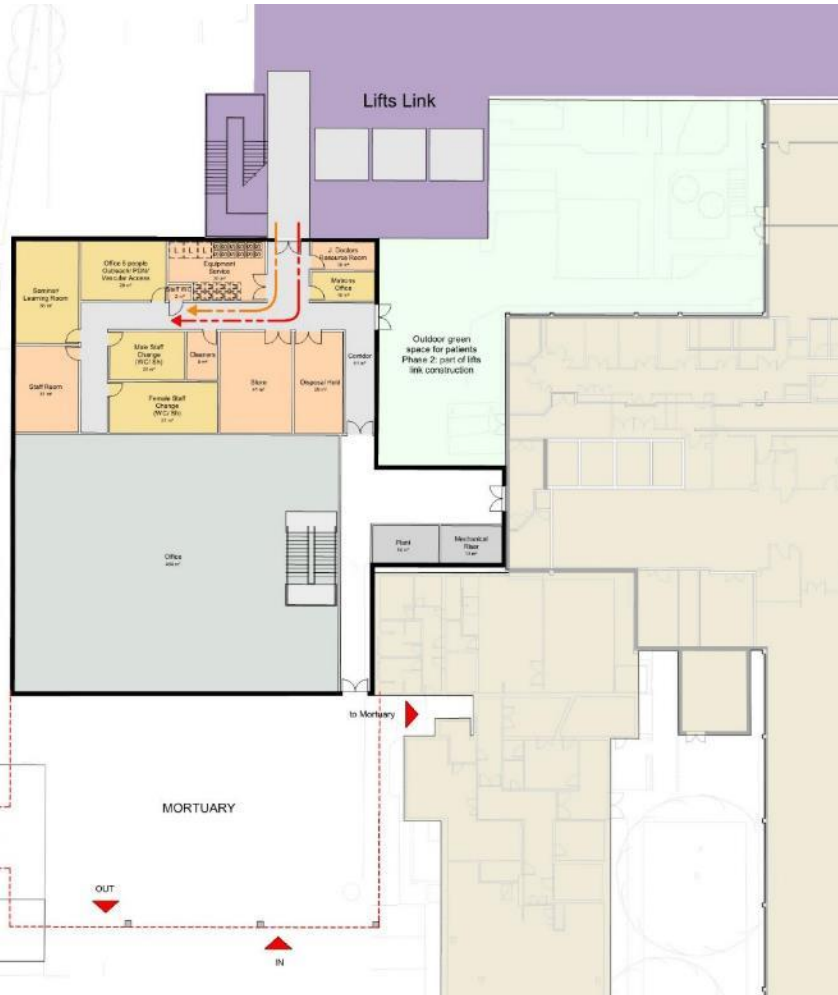
# Critical Care Block



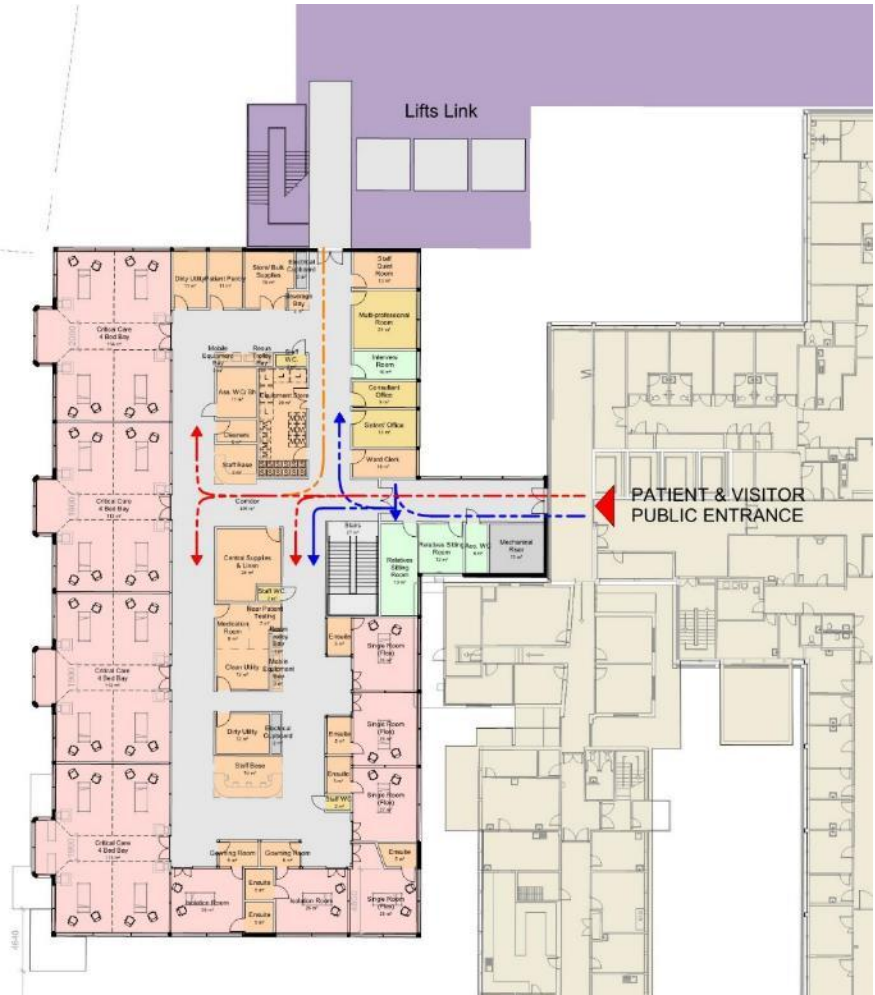
CLINICAL EXCELLENCE, QUALITY & SAFETY



## Scheme 2: Critical Care Block or CCB – ground & first floor plans Critical Care



Ground floor



First floor

Critical Care;

22 beds in total - all level 3  
4 x four bed bay  
4 x ensuite bedroom  
2 x ensuite isolation bedroom

# Acute Service Block



CLINICAL EXCELLENCE, QUALITY & SAFETY





### Scheme 3: Acute Services Block or ASB – ground floor plan Maternity



Blue Light  
Entrance

Entrance;  
MLBU;  
CLBU;  
Theatres;

Bereavement suite;

7 triage inc 2 side rooms  
8 ensuite delivery rooms inc 3 pools  
8 ensuite delivery rooms inc 1 high risk & 1 pool  
2 maternity theatres inc baby resus  
1 theatre  
7 close monitor & recovery bays  
2 ensuite rooms

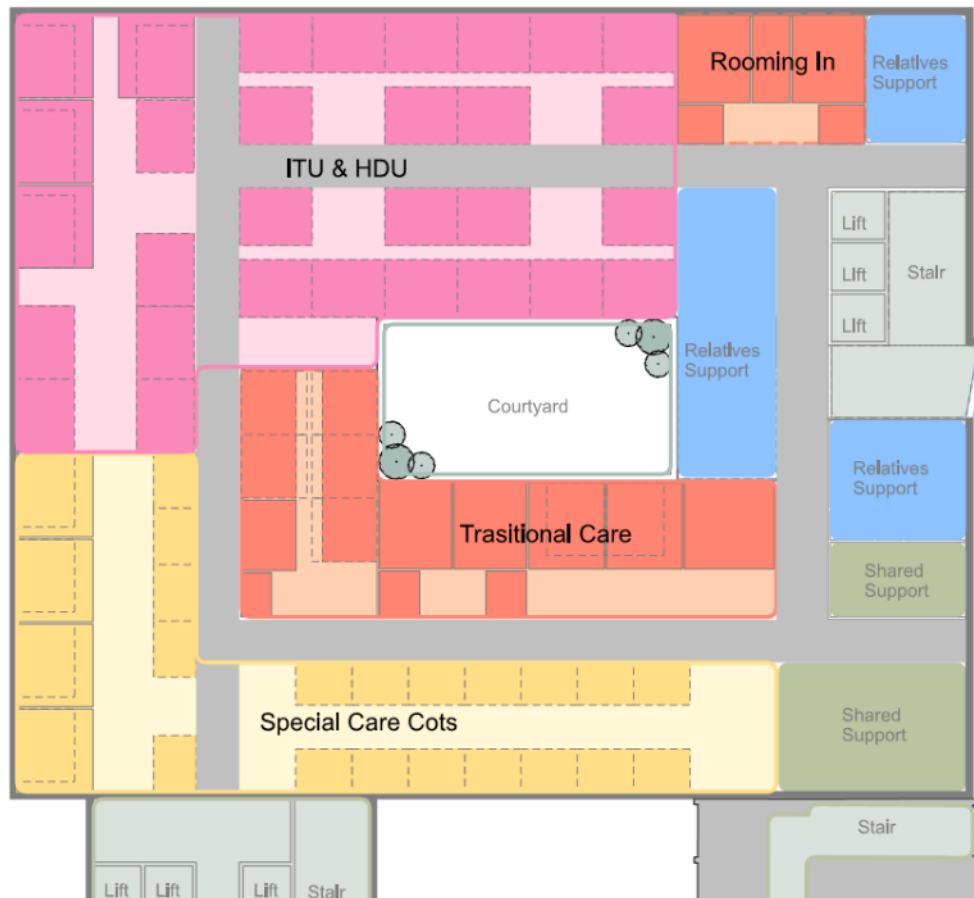


CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS



### Scheme 3: Acute Services Block or ASB – first floor plan NICU



Entrance;

Critical care;  
SCBU;  
Transitional care;

Relatives support  
2 ensuite rooming in rooms  
25 critical care cots - all level 3  
19 cots, 3 side rooms & 1 isolation room  
8 bays, 1 side & 2 ensuite rooms

### Scheme 3: Acute Services Block or ASB – second floor plan Maternity beds



Maternity beds;

48 beds in total  
 24 ensuite bedrooms & 4 four bed bays  
 inc 1 isolation & 1 separation room  
 4 high risk induction beds (1 four bed room)  
 1 treatment room (laser)  
 1 neo-natal treatment room



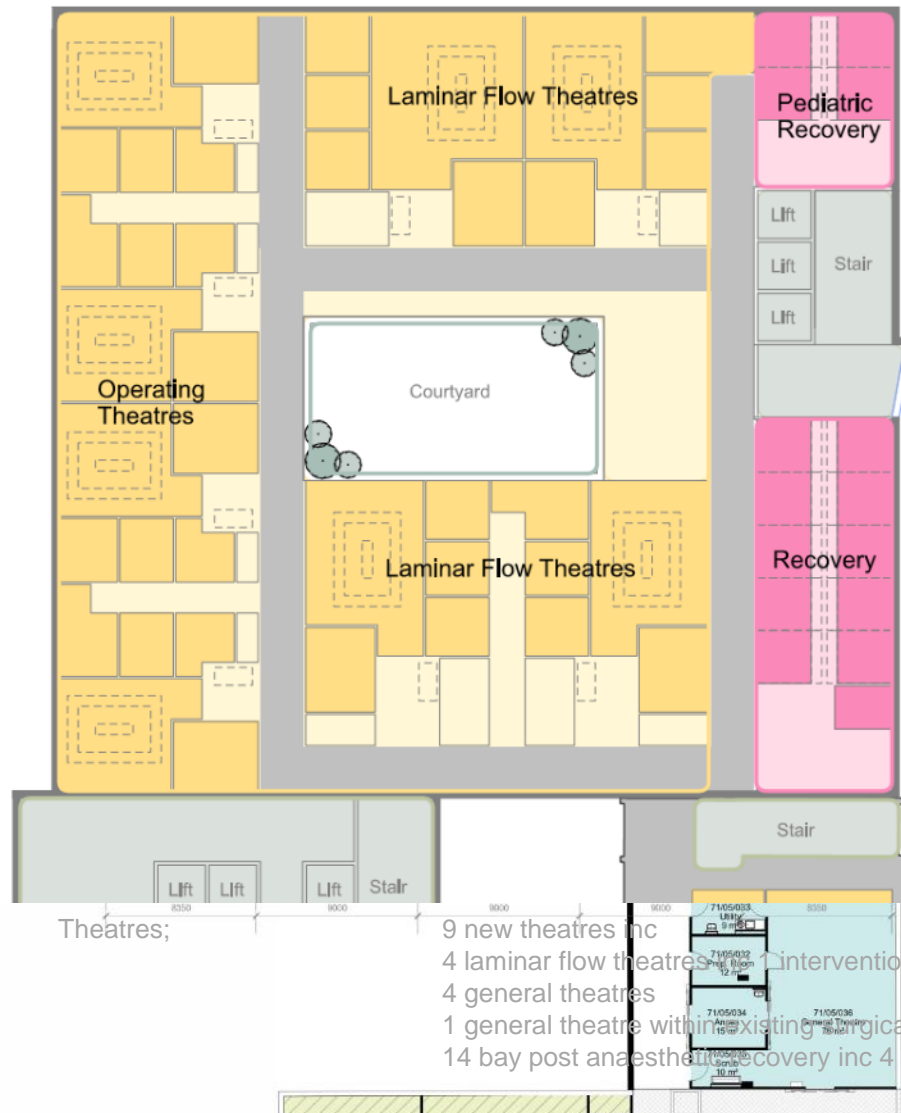
### Scheme 3: Acute Services Block or ASB – fourth floor plan Theatres reception



Theatre reception;

Pre & post gowning areas  
3 clean rooms (gynae)  
32 second stage recovery  
Discharge lounge

### Scheme 3: Acute Services Block or ASB – fifth floor plan Theatres



# Helipad



CLINICAL EXCELLENCE, QUALITY & SAFETY





L&D 2024



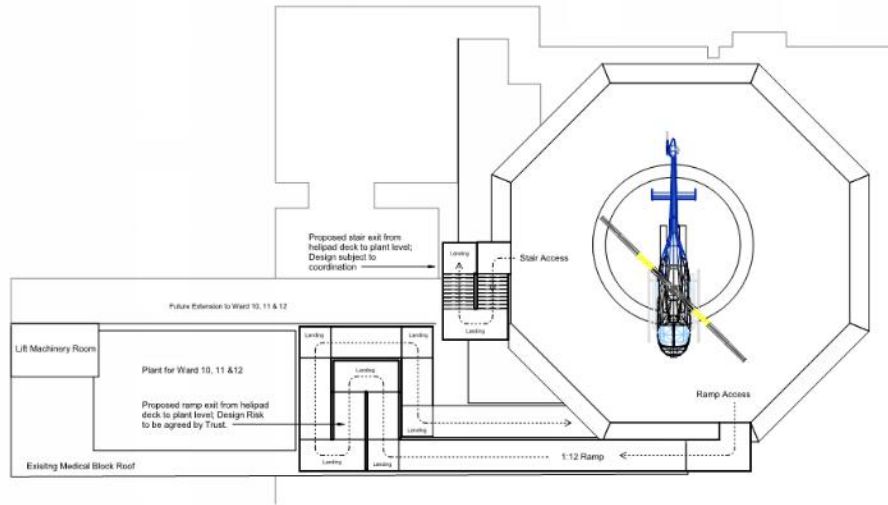
CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS

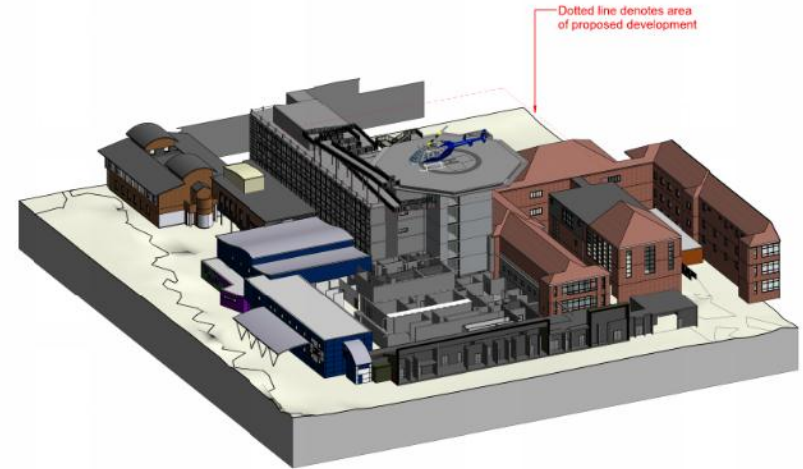




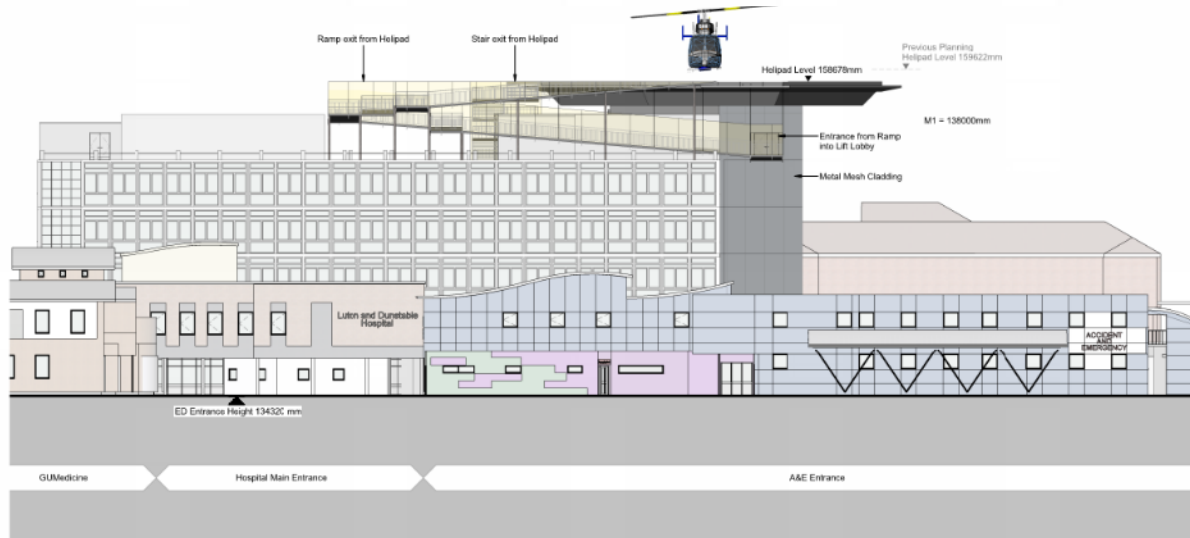
## Scheme 5: Medical Block Rapid Lifts & Helipad



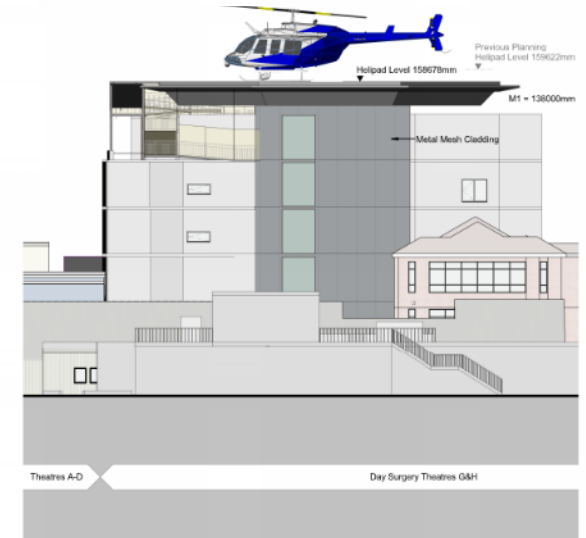
Proposed Helipad General Arrangement



Proposed Helipad Axonometric View



Proposed Helipad Elevation- Lewsey Road



Proposed Helipad Elevation- Dunstable Road



CLINICAL EXCELLENCE, QUALITY & SAFETY

MURPHYPHILIPPS



# **Mechanical and Engineering Civil and Structural**



CLINICAL EXCELLENCE, QUALITY & SAFETY



# Mechanical and Electrical Site Wide Infra Structure Upgrade Case for change

- Removal of backlog maintenance
- Replacement of ageing equipment
- Increase electrical capacity
- Compliance with HTM
- Improve resilience
- Support future capital projects
- Centralization of heat generation plant
- Income generation
- Reduction in energy usage



# Civil and Structural

## Where we are to date

- Good ground
- Foundations generally expected to be pads bearing into fractured rock chalk. Ground water 10m+ down. Little significant contamination.
- Working up site wide drainage strategy and starting to agree design parameters with Water Boards
- Structures generally steel framed
- Energy centre – steel frame, 170 thick concrete / metal deck upper slabs. Ground bearing RC floor. Pad foundations other than the chimney. High loadings.
- Helipad – steel structure on a braced steel frame. Piled foundations because of uplift.
- New CCU and ASB – likely RC frame to address vibration responses required by HTM 0801 and flat slab type where possible to keep floor plates shallow and for ease of services distribution and future flexibility.
- Lewsey Road Multi-Storey Car Park – Steel framed, concrete / metal deck. Long span column free space to facilitate easy circulation and parking.

## Car Parking



CLINICAL EXCELLENCE, QUALITY & SAFETY





Wire mesh

Perforated metal



or planting, self-seeded

Architectural section drawing of the proposed car park and surrounding residential housing. The drawing shows a cross-section of the site with various levels and structures. Key features include:

- Residential Housing:** Located on the left and right sides of the section.
- Proposed Car Park:** The central area, featuring a planter with a low-level pool and rail perimeter.
- Levels and Elevation:**
  - Roof Plan: 142268
  - Level 2: 140520
  - Level 1: 137870
  - Level 0: 195220
- Structural and Material Details:**
  - Green wall cladding
  - Vertical timber cladding
  - Wire mesh cladding
  - Metal handrail and flashing
  - Wayfinding and corporate signage
  - Solid timber vertical board perimeter boundary fencing to 1.8m high
  - Detail Section A
  - Material A, Material B, Material C (indicated in red dashed lines)
  - first floor balcony
  - removable cladding
  - ground floor balcony
  - brick bay
- Other Features:**
  - Wayfinding and corporate signage
  - Red dashed line indicating a boundary or section line
  - Red arrow pointing to a "Red OUT" sign
  - Planter with low-level pool and rail perimeter
  - Planter interspersed with trees in self-seeded arrangement

2. Front Elevation  
1 : 100



LUTON &  
DUNSTABLE  
UNIVERSITY  
HOSPITAL



## Lewsey Road MSCP – Clear open spaces to enhance user experience



# Programme



CLINICAL EXCELLENCE, QUALITY & SAFETY





# Programme

## **Critical Care Block programme:**

25<sup>th</sup> November 2020 – public consultation

17<sup>th</sup> January 2020 – planning submission

Mid April 2020 – planning determination expected

May 2020- Discharge of conditions

June 2020– commence works on site

## **Acute Service Block:**

Works to commence 2021

## **Enabling works:**

Feb 2020 – temporary accommodation installed on site

Feb 2020 – works commence on temporary car parking

April 2020 – demolition works commence

## **Lewsey Road Car Park:**

June 2020 – works to start

## How to find out more

Visit the hospital site redevelopment pages on our website:

[www.ldh.nhs.uk](http://www.ldh.nhs.uk)

Stay informed via our Ambassadors magazine for members

Get live updates on twitter and facebook