

## 2.5 Area of Search - West Cambridge | Institute of Manufacturing | Schlumberger Research Institute

### THE AREA

The Area of Search encompasses the West Cambridge site, which spans 66 hectares of University land. The site is bounded by Madingley Road to the north, Clerk Maxwell Road to the east, the Coton Footpath to the south, and the M11 to the west.

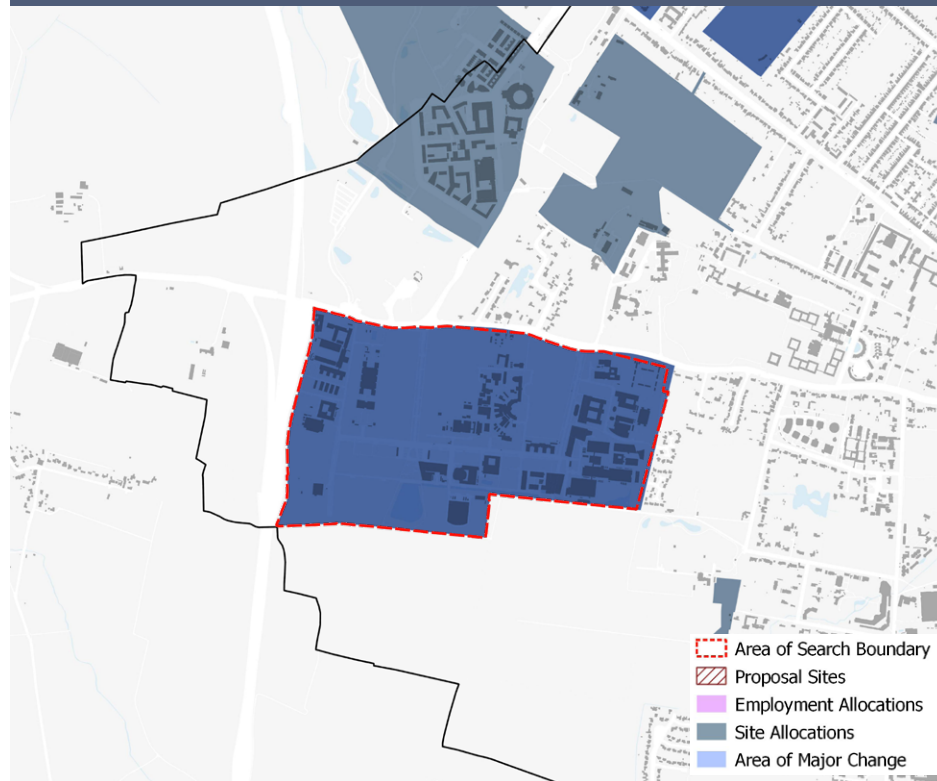
Currently, the West Cambridge site hosts a number of prominent academic research facilities, including the Cavendish Laboratory, the Whittle Laboratory, and the Department of Veterinary Medicine. Additionally, the western portion of the site is home to a variety of commercial research organisations and research institutes, such as Schlumberger, Aveva, and the British Antarctic Survey.

The area is proposed to be allocated within the emerging Greater Cambridge Local Plan. In July 2021, outline planning permission was granted, for a long-term vision and strategy for the comprehensive development of the site and the establishment of the West Cambridge Innovation District. This initiative presents substantial opportunities for both academic and commercial research, alongside various other supporting facilities.



Birds eye View of the Area © Google Earth

## Site Allocation and Growth Areas

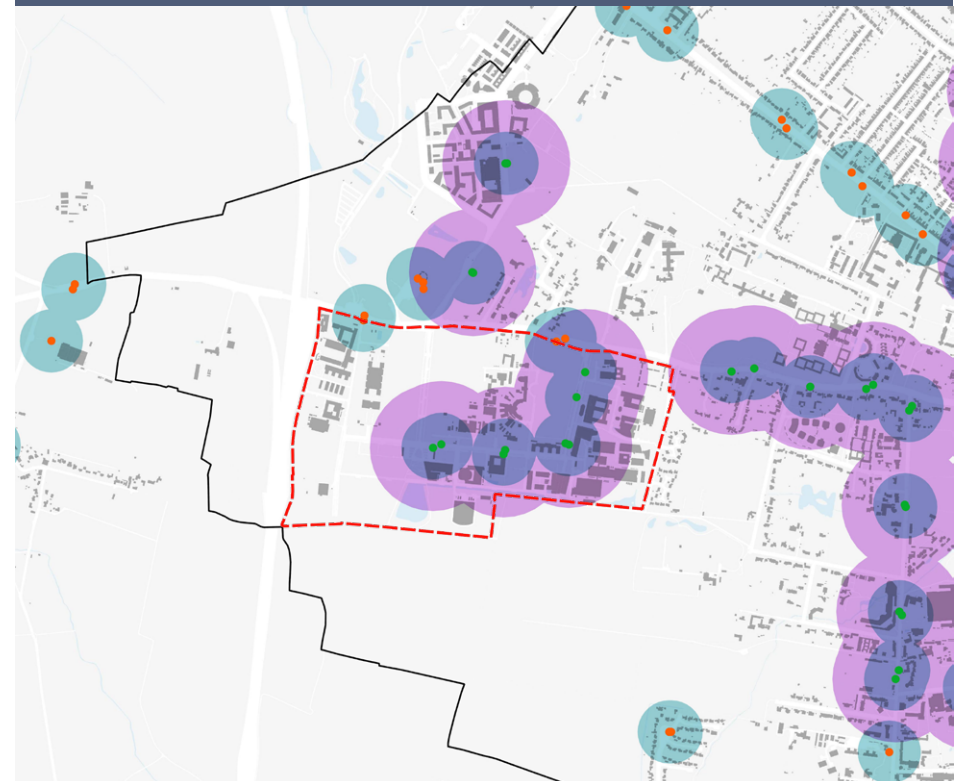


### Site Allocations and Growth Areas

The site is located within the West Cambridge Area of Major Change (S/AMC/Policy 19) as outlined in the Local Plan 2018. Additionally, it is proposed for allocation under Policy S/WC, which supports the site's development to meet the University's needs. This includes uses related to education,

academic research, commercial research, and the development of products or processes. The planned development aims to facilitate knowledge transfer and/or open innovation, contributing to the broader Cambridgeshire and UK economy.

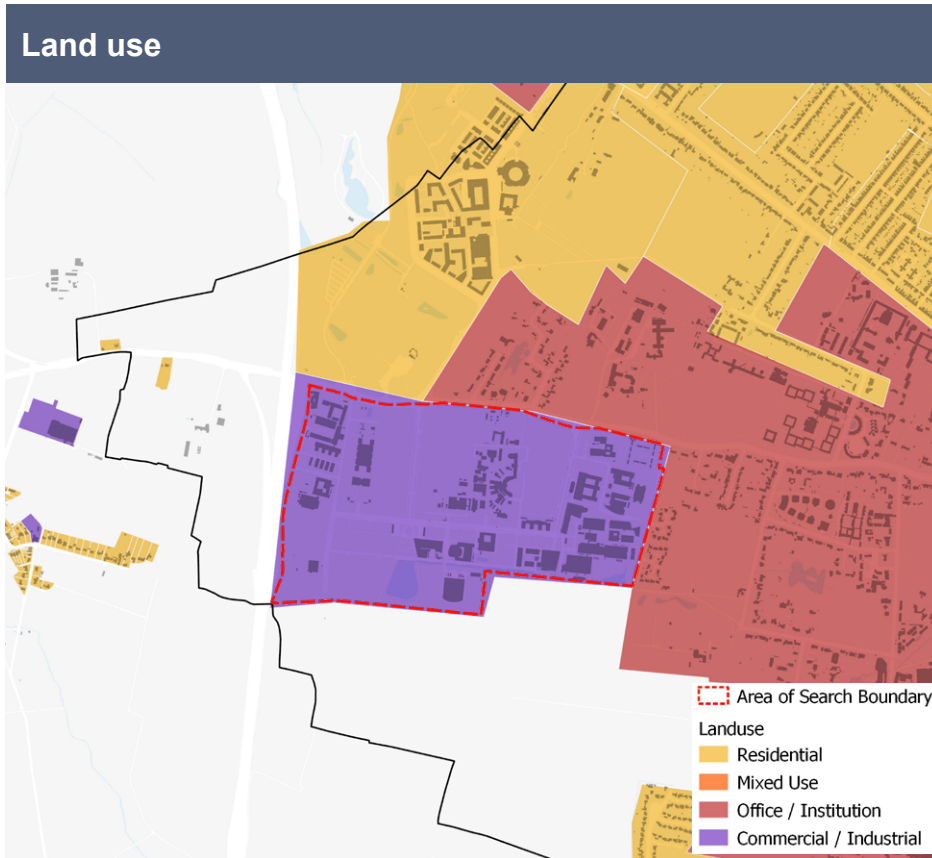
## Public Transport Access



### Existing Public Transport Accessibility

The Area of Search located at the western edge of the current city boundary, however offers good public transport accessibility with local bus services, and access to the guided bus service along the northern edge of the area.

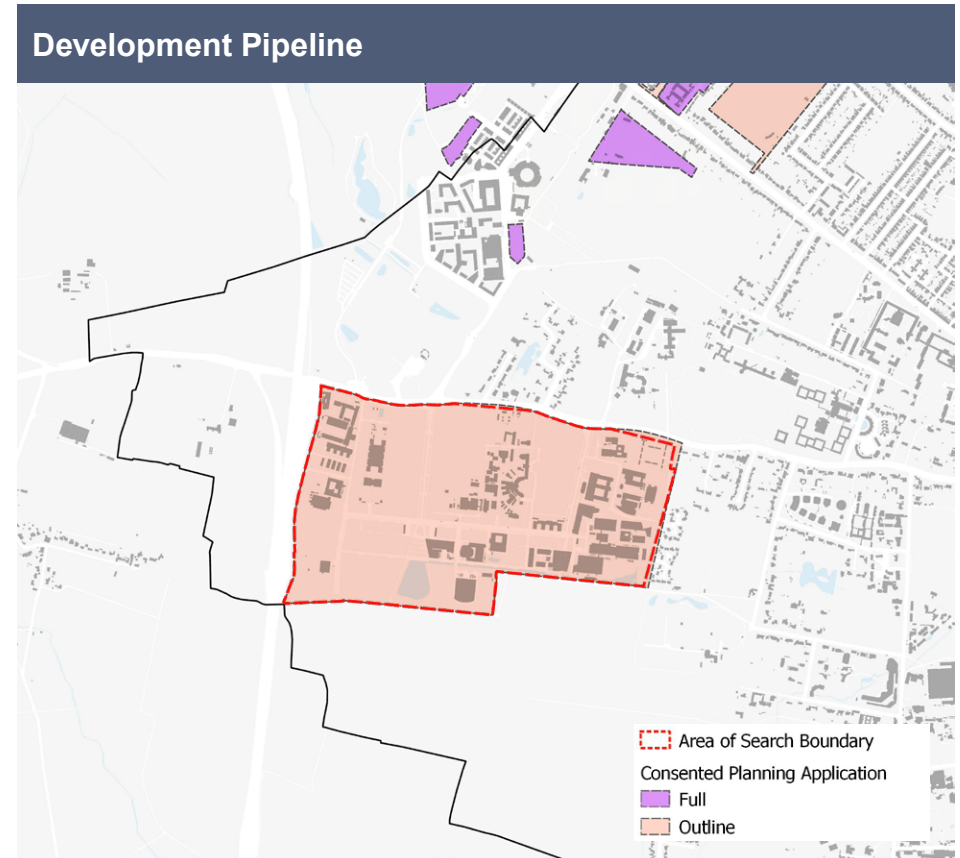
- Area of Search Boundary
- National Rail Station
- Guided Busway Line Bus stop
- Bus stop
- Railway Line
- Guided Busway Line
- Proximity from Railway Station - 800m radius
- Proximity from Guided Bus stops - 400m radius
- Proximity from Bus stops - 200m radius



**Land use**

The Area of Search lies within the West Cambridge site, a part of the University of Cambridge, situated to the west of the city centre. At present, the West Cambridge site hosts a number of distinguished academic research facilities with industrial applications, including the Cavendish Laboratory, the

Whittle Laboratory, and the Department of Veterinary Medicine.



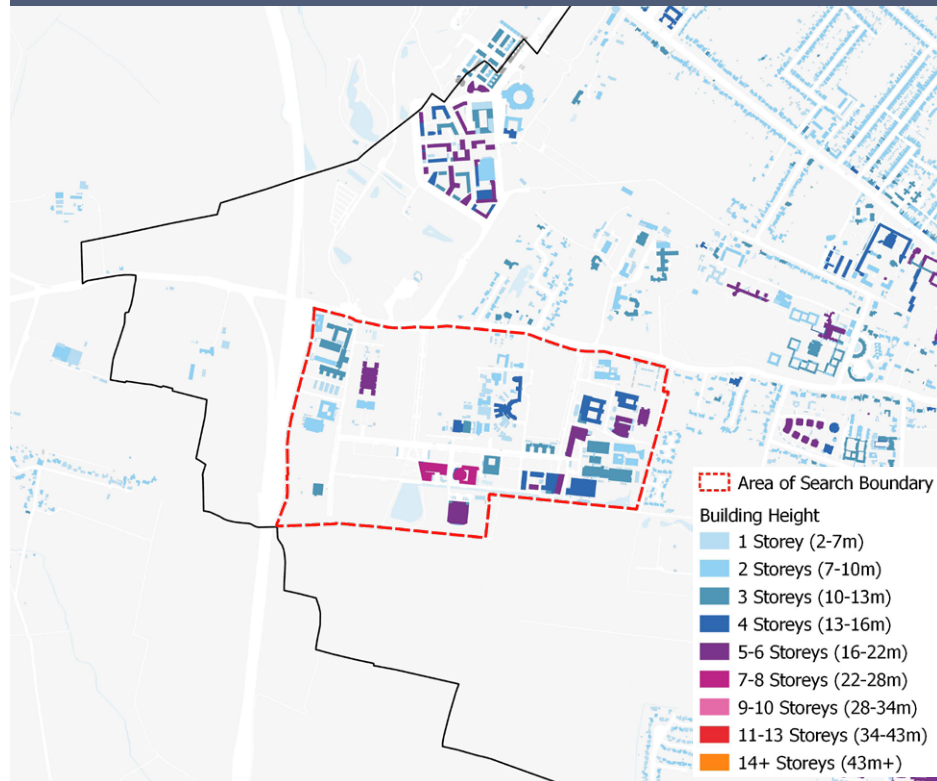
**Relevant Planning Permissions**

Emerging - Consented:

- Outline planning permission for 383,300 sq.m of development comprising upto 370,000 sq.m of academic floorspace including 170,000 sq.m of commercial floorspace. up to 2,500sq.m nursery floorspace, up to 4,000

sq.m of retail/food and drink floorspace, up to 4,100sq.m assembly and leisure floorspace, up to 5,700sq.m of sui generis uses, including Energy Centre and Data Centre, and other associated infrastructure (16/1134/OUT).

## Building Height



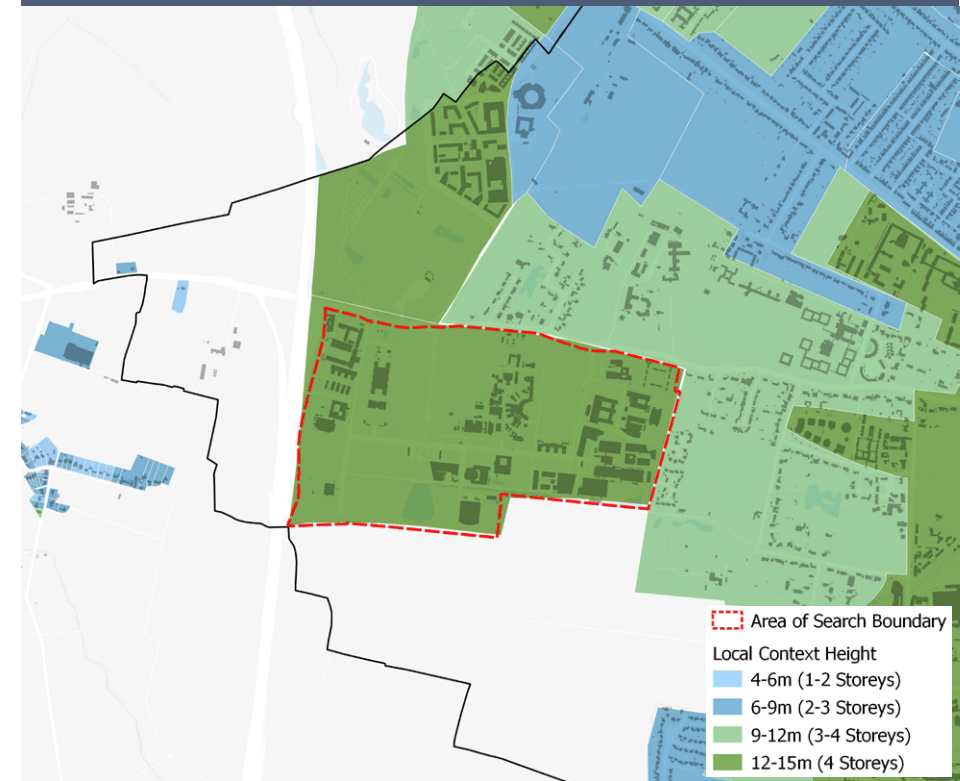
### Existing Building Heights

The area features a range of building heights, with heights varying from 1 storey (2-7m) to 7-8 storeys (22-28m).

The immediate surrounding of the site is characterised by low-rise residential areas, with buildings generally ranging between 2-3 storeys (7-13m).

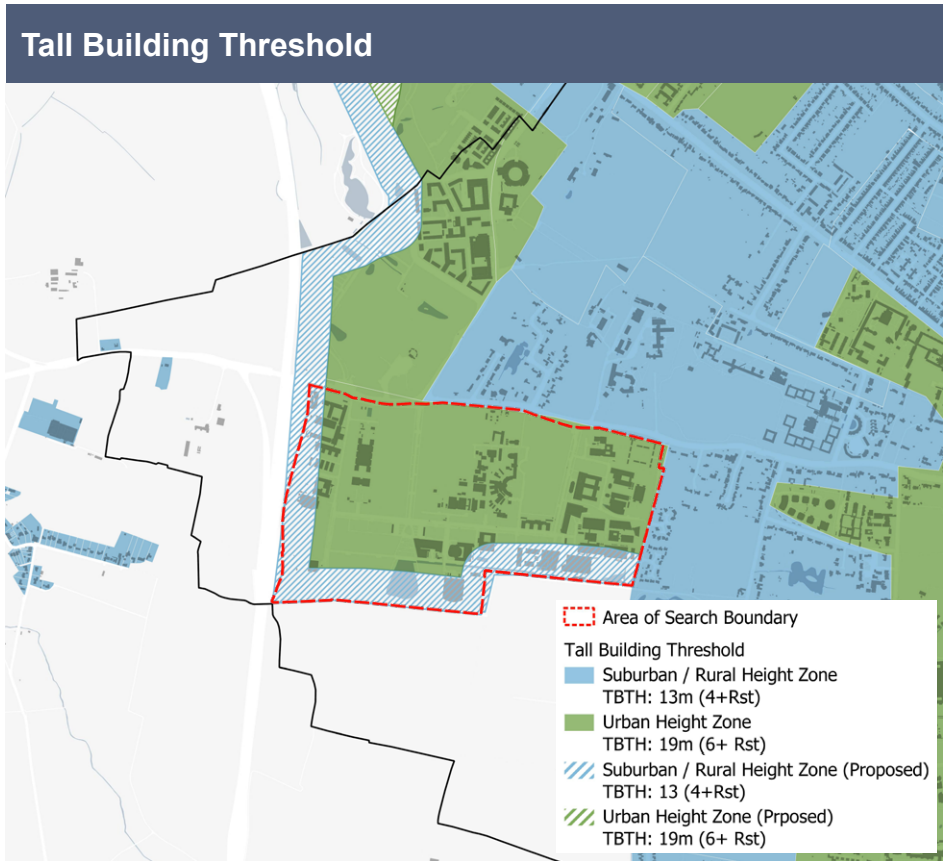
The emerging new urban district at Eddington to the north of the area comprises heights ranging from 2 storeys to 6 storeys (2m-22m).

## Context Height



### Existing Local Context height

The area is characterised by local context heights, with the majority of buildings ranging between 12 and 15 meters (4 storeys). To the east of the area of interest, building heights are lower, ranging between 9 and 12 meters (3-4 storeys).

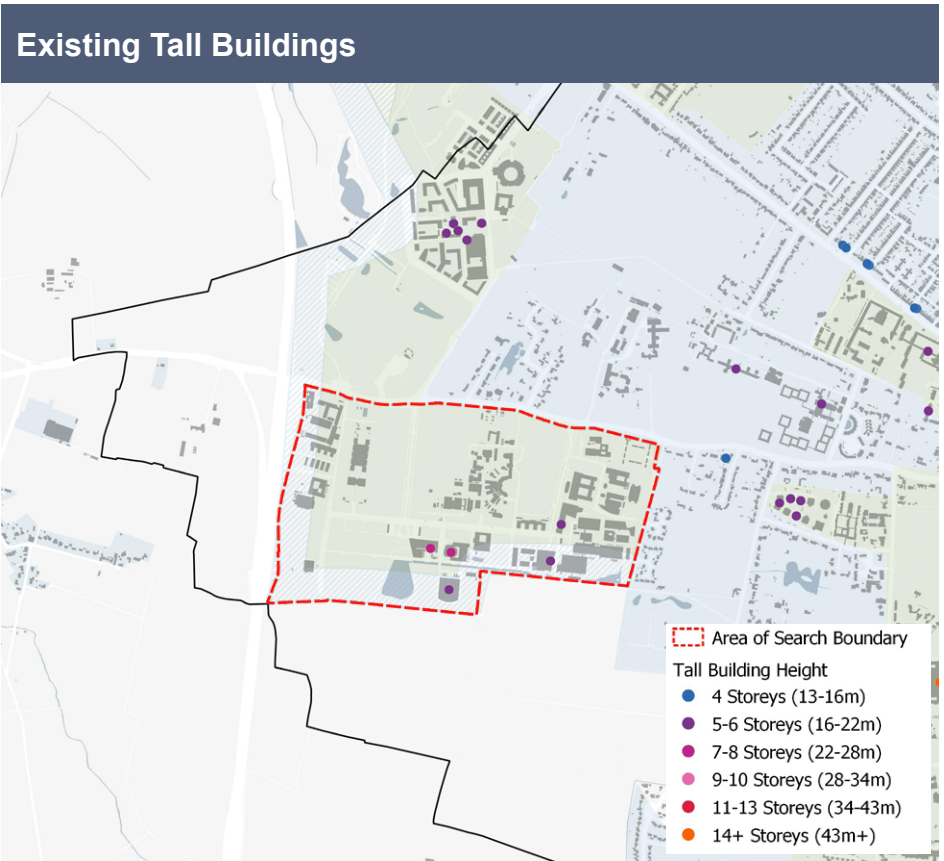


**Tall Building Threshold**

The Area of Search has been majorly identified as part of the Urban Height Zone. The tall building threshold for which is 19m.

As a main growth area that extends towards the surrounding open space to the west and south of the area of

search, safe of a 100m buffer along the open landscape edge is designated as a Suburban / Rural Height Zone, with a Tall Building Threshold of 13m.

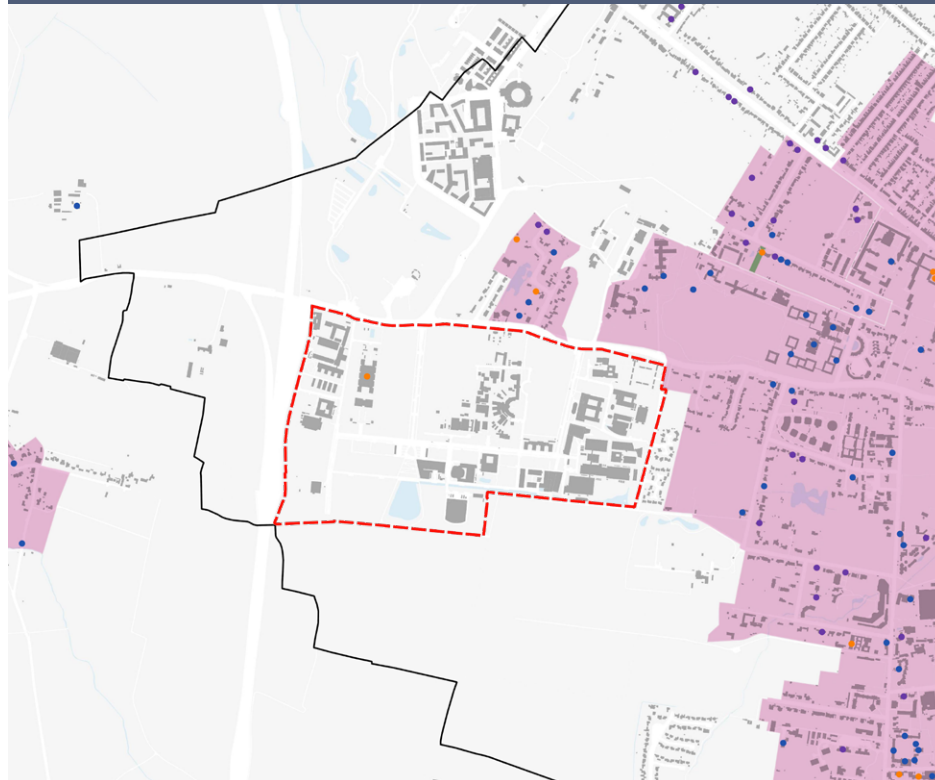



**Existing Tall Building**

Currently, there are five tall structures in the area exceeding the designated tall building threshold. The tallest of these is the Department of Chemical Engineering and Biotechnology building, standing at 25m. Other tall buildings within the area include Department

of Materials Science and Metallurgy(24.4m), Sports Centre(19.3m), Broers Building (21.4m) and Maxwell Centre (19.6m). A small concentration of taller buildings is situated central to Eddington and to the east at the Department of Applied Mathematics and Theoretical Physics (up to 22m).

## Heritage Designations



-  Area of Search Boundary
-  Historic Core
- Listed Buildings
  -  Grade I
  -  Grade II\*
  -  Grade II
  -  Ancient Monument
  -  Buildings of Local Interest
-  Conservation areas
-  Historic parks and gardens

### Heritage Designations

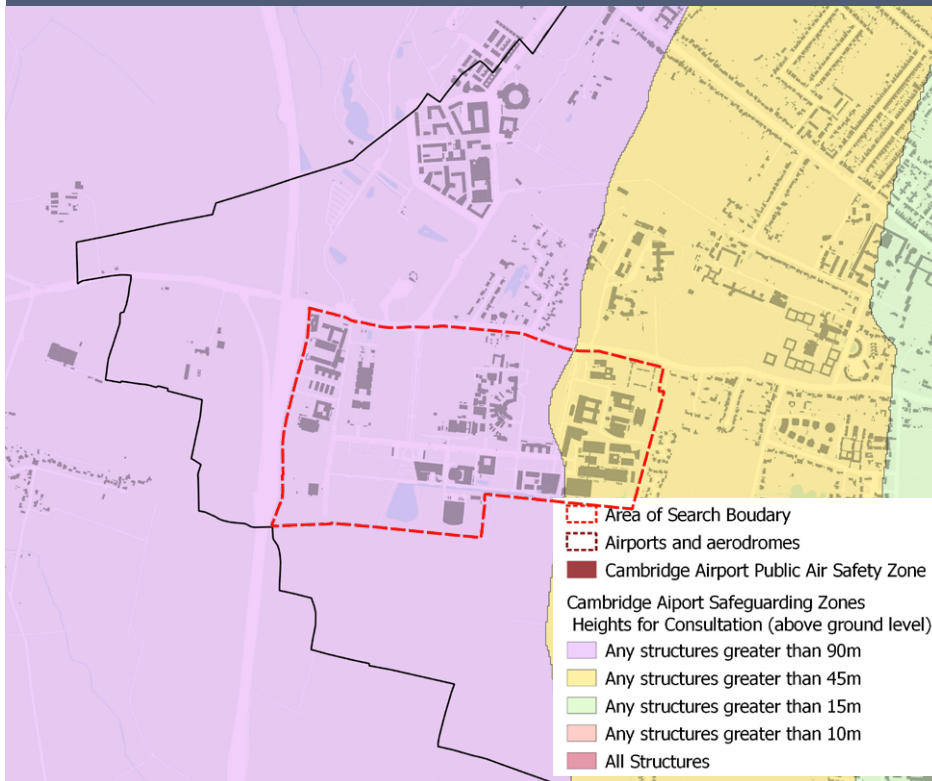
The site does not contain any conservation areas or registered parks and garden within the Area of Search. However, the area borders or is in close proximity to several conservation areas, including West Cambridge, Conduit Head Road, and Storey's Way conservation area. It is also in

close proximity to one Grade II Registered Park and Garden, the Garden of 48 Storey's Way.

Heritage assets include one Grade II\* Listed Building present within the west of the site, the 1985 Schlumberger Gould Research Centre.

Additionally, there are 3 Grade II\* listed buildings, 18 Grade II\* listed buildings and approximately 16 locally listed buildings in close proximity to the area focussed in the east and north.

### Airport Safeguarding Zones

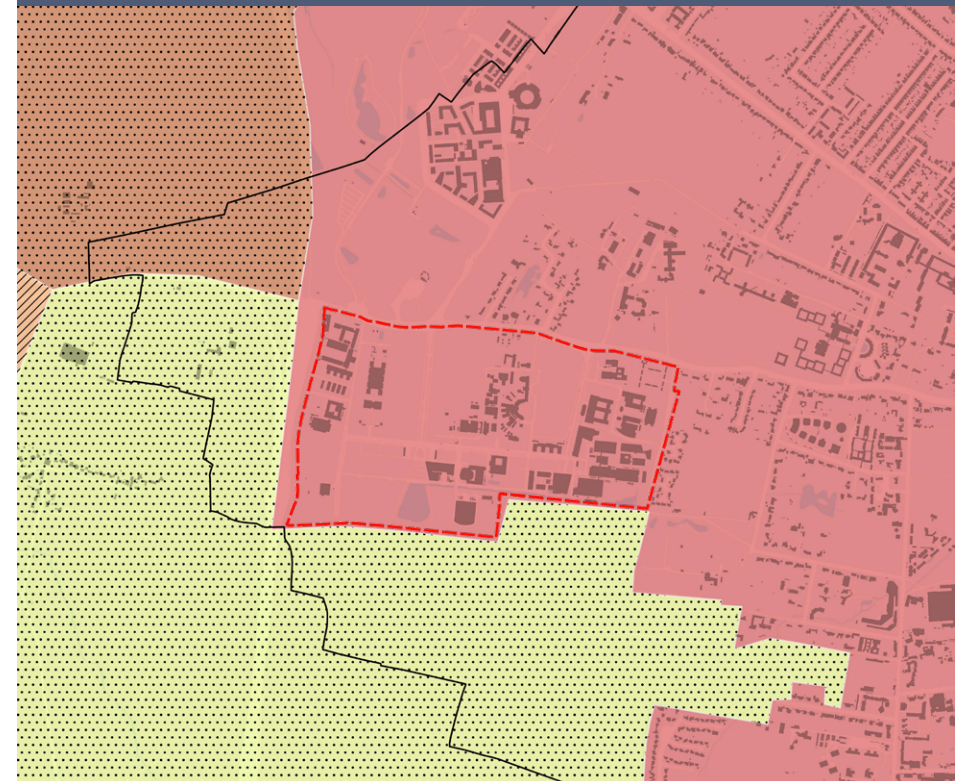


#### Airport Public Safety and Air Safeguarding Zones

The area is located at a considerable distance from the current Cambridge Airport but falls within a safeguarding zone. In this zone, any development exceeding 45 meters in height across the eastern section of the site must be consulted with both the airport operator and the

Ministry of Defence. However, for majority of the area, any development surpassing 90 meters in height only requires consultation. The airport is expected to relocate to Cranfield Airport before 2030, which is likely to render this requirement obsolete in the future.

### Landscape Character Types

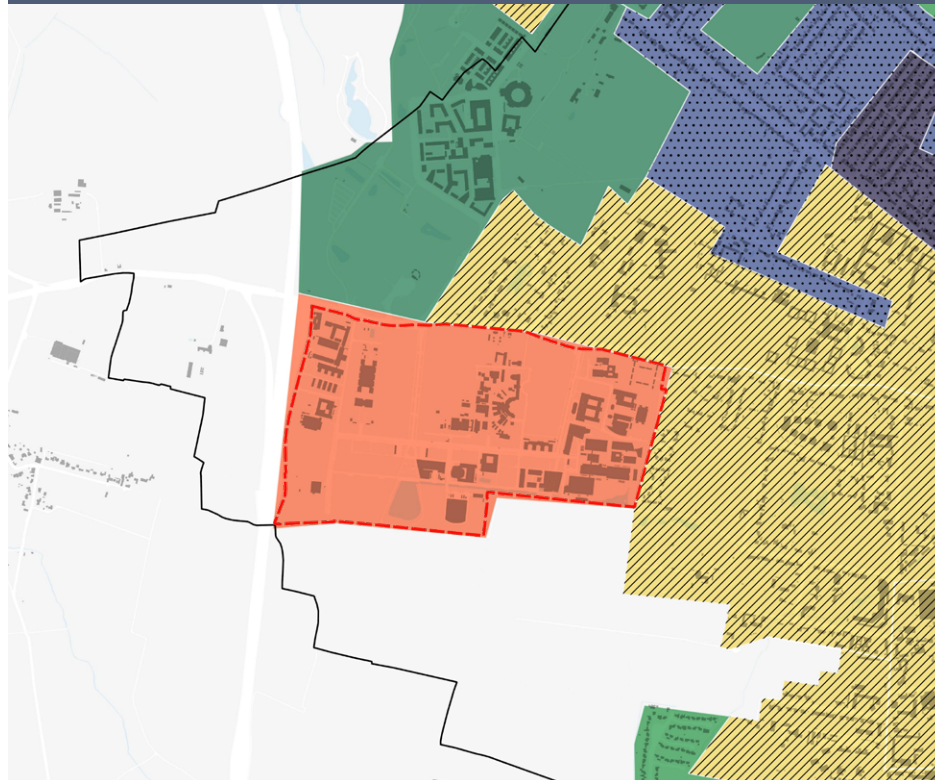


#### Landscape Character and Sensitivity

The Area of Search lies within the Cambridge Urban Area, however to the west and south the area is in close proximity to the Lowland Farmlands and Fen Edge Claylands landscape character area, which are recognised for its sensitive landscape character.

- Area of Search Boundary
- Landscape Sensitivity
- Highly Sensitive
- Sensitive
- Landscape Character
- Cambridge Urban Area
- Fen Edge Claylands
- Wooded Claylands
- Lowland Farmlands

## Townscape Character Types



### Townscape Character and Sensitivity

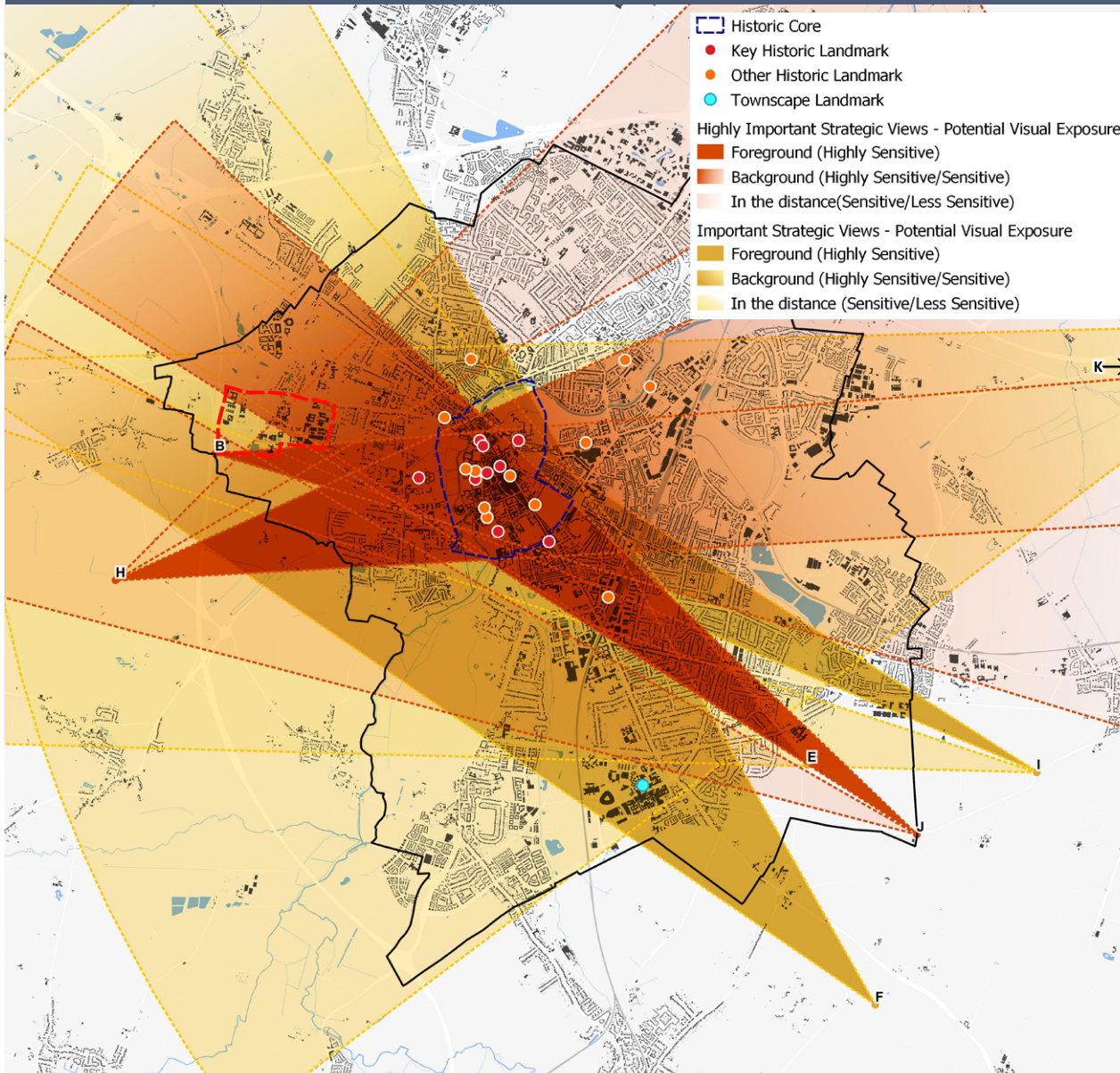
The Area of Search contains and adjoins the following townscape character areas which are not sensitive change:

- Modern commercial/ industrial/service development
- 21st century growth

However, to the east and north of the area, it borders bespoke

houses and university colleges, areas that are characterised as highly sensitive to change.

### Strategic View Cones to historic city centre core landmarks



Affected Strategic View Cones

The site is in the *foreground* of the following strategic view cones to the historic city centre:

#### Highly Sensitive Views

- View B: Mid-range glimpsed views from Cotton Footpath over the M11.
- View H: Long range panoramic view from Redmeadow Hill.

The site is in the *backdrop* of strategic view cones to historic city centre:

#### Highly Sensitive Views

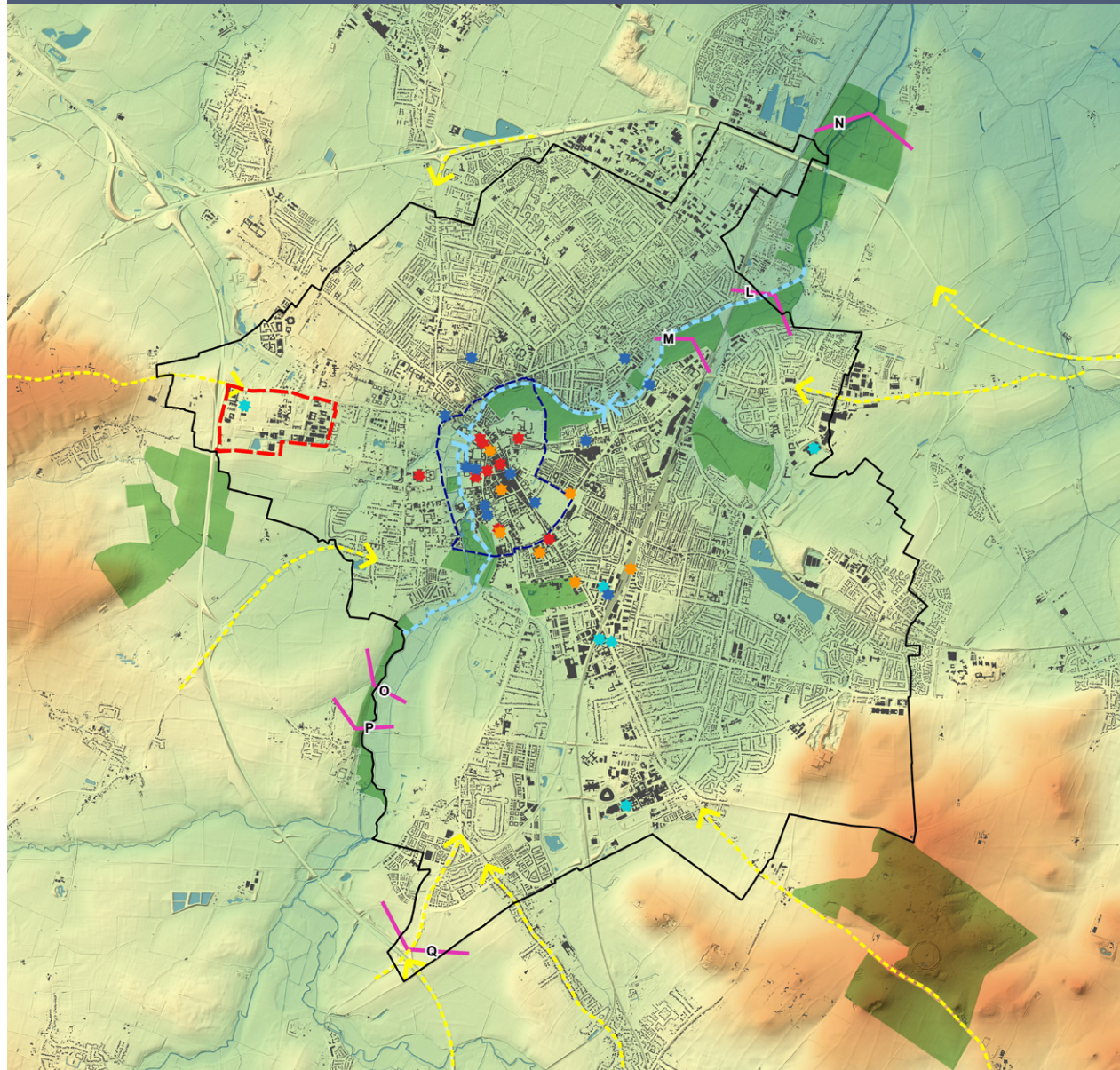
- View J: Mid-range panoramic view from Worts' Causeway / Shelford Road.

The Area of Search is located west of the historic core which has a concentration of significant historical landmarks.

#### Sensitive Views

- View E: Very long range panoramic view from Limekiln Road.
- View F: Very long range panoramic view from Little Trees Hill, Magog Down.
- View I: Very long range panoramic view from Shelford Road below Limepit Hill.
- View K: Very long range glimpsed view from Little Wilbraham Road over A14.

## Dynamic open space and approach views



Dynamic Open Space & Approach Views

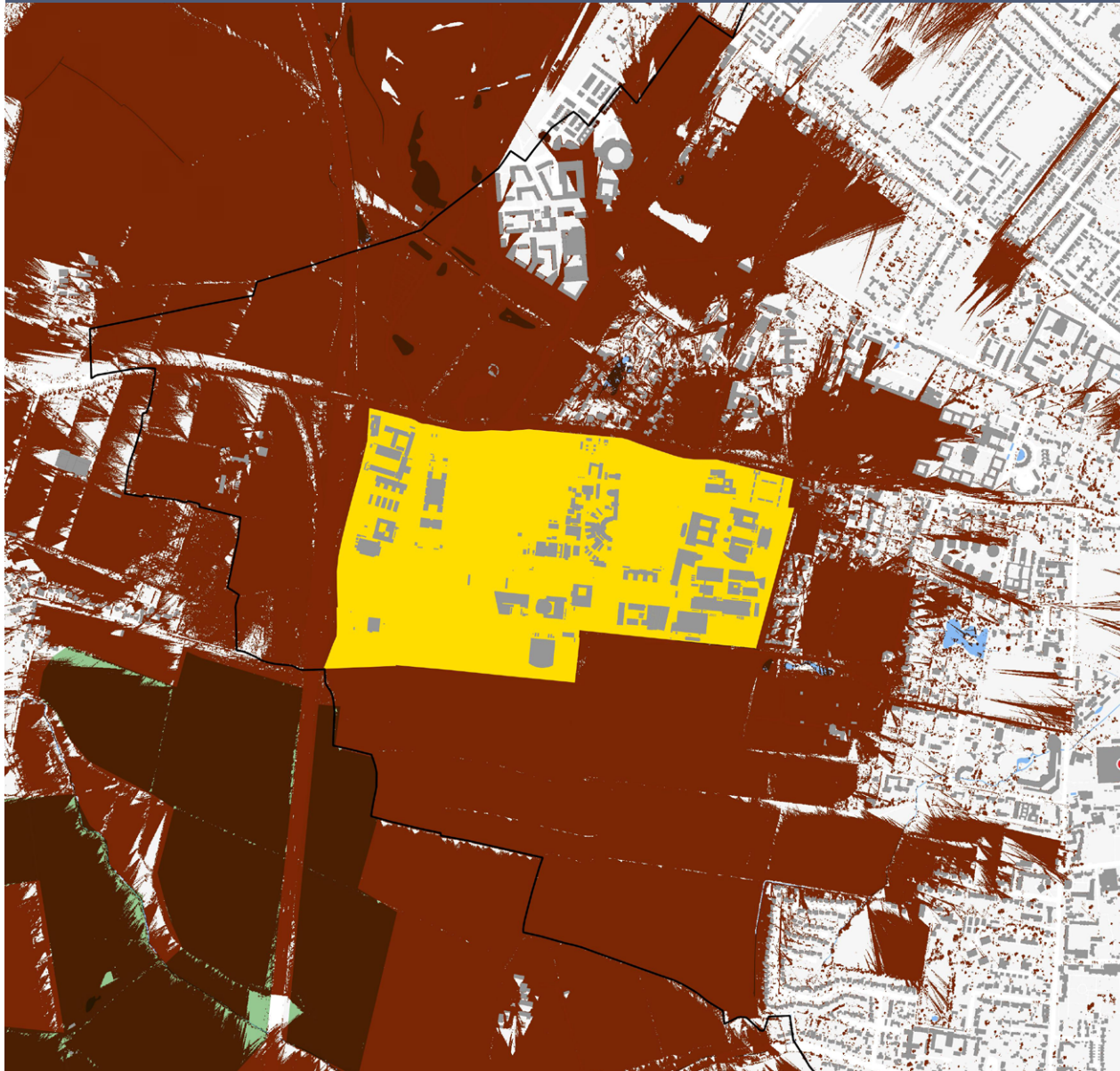
The open space, likely the Coton Countryside Reserve, located to the southeast of the area, may offer views to the Area of Search.

Approach views looking towards the area include the Saint Neot's Road (A1303), Barton Road (A603), Hauxton Road (A1309), Shelford Road (A1301), Newmarket Road (A1303), and Cambridge Road (B1049).

The Areas of Search includes the Schlumberger Cambridge Research Centre by Hopkins Architects, which is an intrusive landmark.

- Cambridge District
- ▭ Area of Search Boundary
- ▭ Historic Core
- Dynamic and Open Space Views
- River Approach Views
- Road Approach Views
- Open Spaces
- Landmark Buildings
- ★ Key Historic Landmark
- ★ Other Historic Landmark
- ★ Modern Landmark
- ★ Intrusive Landmark
- Topography (in metre)
- -10
- 0
- 10
- 20
- 40
- 80
- 160 +

### Zone of Theoretical Visibility - Tall Building Threshold



#### VIEWSHED ANALYSIS

The View shed analysis above shows potential visibility of buildings of 25.5m (8 Storeys) in Area of Search from surrounding local context.

This can be used to establish local view points to test the visual impact of potential tall buildings in the area.

- Area of Search
- Zone of Theoretical Visibility
- Open Spaces

Viewshed Analysis for Area of Search with development height of 25.5m (Tall building threshold + 6.5m (2 Storeys))

## **STRATEGIC VIEW TESTING - WEST CAMBRIDGE**

## STRATEGIC VIEW B - COTON FOOTPATH OVER THE M111

### Mid-range glimpsed view - Highly Sensitive

#### Relation to the historic core:

Southern part of Area of Search is situated in the foreground of the view to the historic core and its landmarks

#### Description of visual sensitivity:

Kings College Chapel, The Church of Our Lady and the English Martyrs, and University Library are the prominent silhouettes in the view.

There are limited views of the Cambridge University Library Tower, and, to a lesser extent, Kings College Chapel. The view showcases a largely obscured rural expanse, characterised by an agricultural landscape and undulating terrain. It only allows for a view of the spire of the Church of Our Lady and the English Martyrs.

#### Impact assessment:

- **Scenario A (19m):**

significant impact in parts of the area - development in close proximity to the southern area boundary may be visible between or above the tree belt and have a strongly urbanising effect on the rural character of this view.

- **Scenario B (25.5m):**

significant impact in parts of the area - development in close proximity to the southern area boundary may be visible between or above the tree belt and have a strongly urbanising effect on the rural character of this view. Tall buildings remain below the horizon line but, with their massing and due to close proximity, may compete and detract from the modest-scale historic landmarks in the city centre.

- **Scenario C (32m):**

significant impact in parts of the area - development in close proximity to the southern area boundary will appear over the screening trees, urbanise the view, contrast with the rural environment, and detract from the setting of the historic landmarks in the city centre. Tall buildings rise above the horizon line and compete and detract from the modest-scale historic landmarks in the city centre.

# Strategic View B - Coton Footpath over the M11

# Mid-range glimpsed view - Highly Sensitive

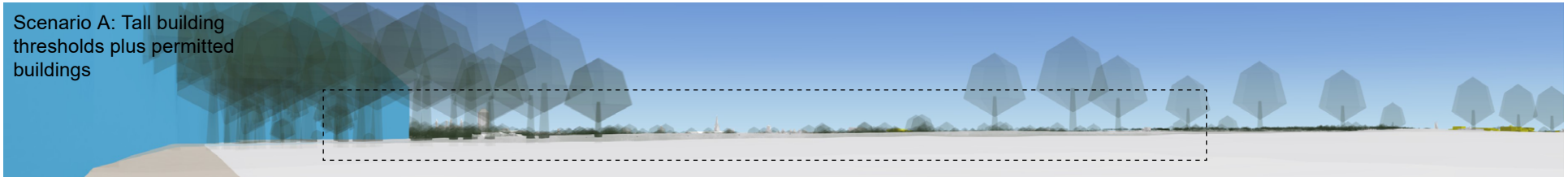
Existing context



Existing context plus permitted buildings



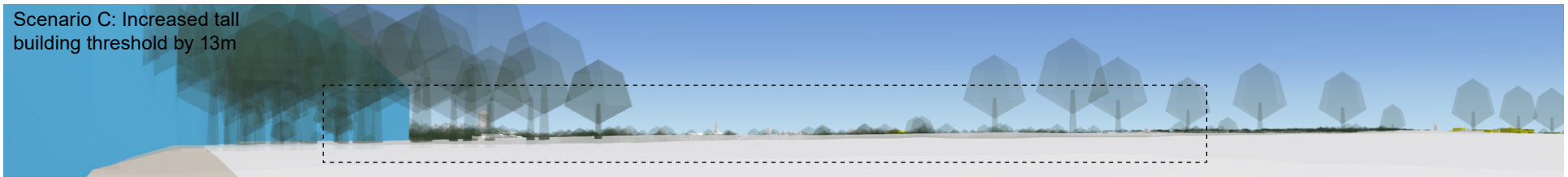
Scenario A: Tall building thresholds plus permitted buildings



Scenario B: Increased tall building threshold by 6.5m

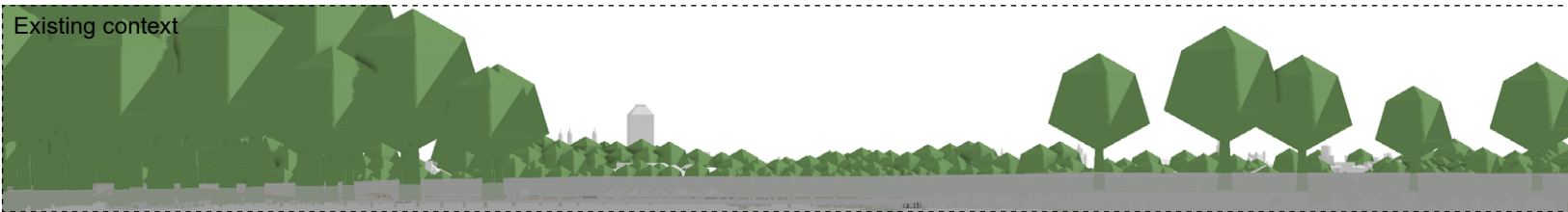


Scenario C: Increased tall building threshold by 13m



### Magnified view onto the historic core

Existing context



Existing context plus permitted buildings



Scenario A: Tall building thresholds plus permitted buildings



Scenario B: Increased tall building threshold by 6.5m



Scenario C: Increased tall building threshold by 13m



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**STRATEGIC VIEW H - REDMEADOW HILL****Long range glimpsed view - Highly Sensitive****Relation to the historic core:**

The eastern half of the Area of Search is situated in the foreground of the view separated by vegetation, however it is minimally visible in relation to the major historic landmarks of the city centre.

**Description of visual sensitivity:**

A valuable panoramic view of Cambridge in its rural environment, with meadows in the foreground. The spires of All Saints Church, St. John's Chapel, The Church of St. Mary the Great, Our Lady and the English Martyrs, and Kings College Chapel stand out against the horizon. The foliage frames the view of the Historic Core, especially between King's and St John's Colleges. Due to its relative remoteness and capacity to offer stunning highland views of the historic core, the perspective is highly vulnerable to alteration.

**Impact assessment:**

- **Scenario A (19m):**

significant impact in parts of the area - developments in the southeastern part of the area may appear over the screening trees, urbanise the view, contrast with the rural environment, and detract from the setting of the historic landmarks in the city centre.

- **Scenario B (25.5m):**

significant impact in parts of the area - developments in the southeastern part of the area may appear over the screening trees, urbanise the view, contrast with the rural environment, and detract from the setting of the historic landmarks in the city centre. Tall buildings remain below the horizon line but, with their massing and due to close proximity, may compete and detract from the modest-scale historic landmarks in the city centre.

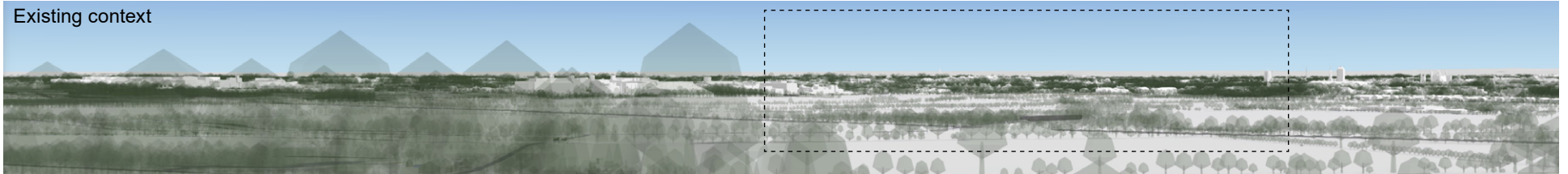
- **Scenario C (32m):**

significant impact in parts of the area - developments in the southeastern part of the area will appear over the screening trees, urbanise the view, contrast with the rural environment, and detract from the setting of the historic landmarks in the city centre. Tall buildings rise above the horizon line and compete and detract from the modest-scale historic landmarks in the city centre.

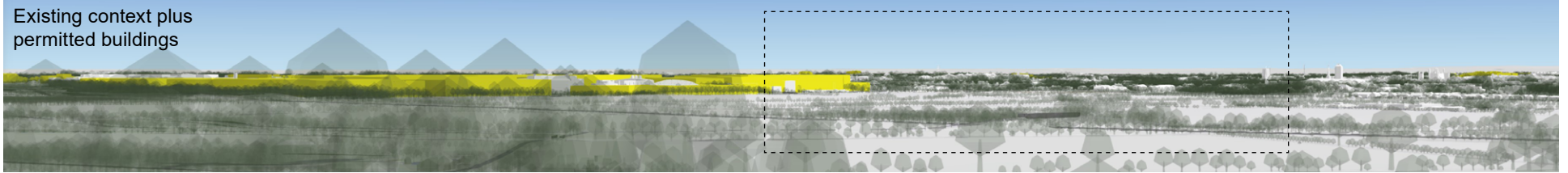
# Strategic View H - Redmeadow Hill

# Long range panoramic view - Highly Sensitive

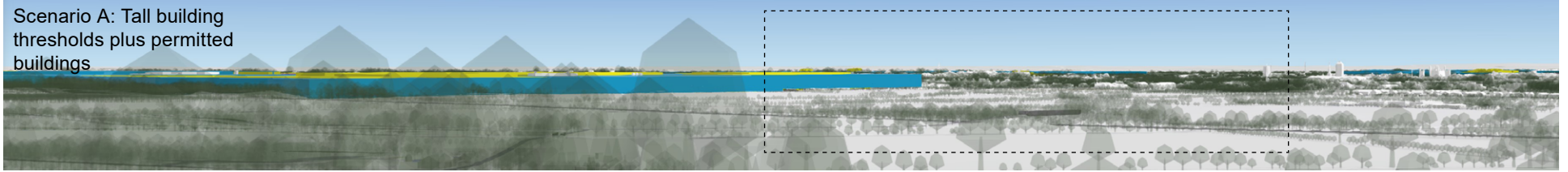
Existing context



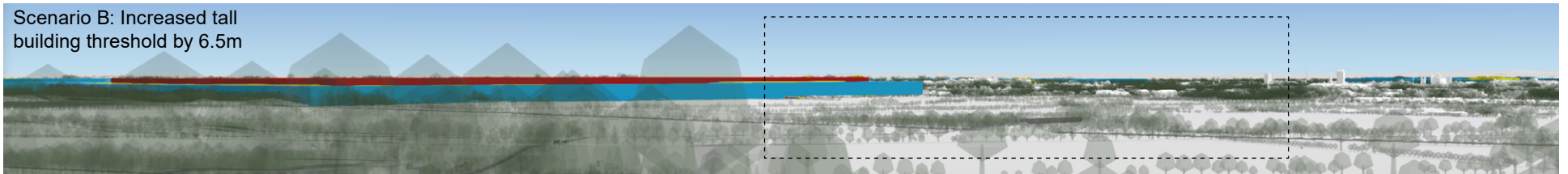
Existing context plus permitted buildings



Scenario A: Tall building thresholds plus permitted buildings



Scenario B: Increased tall building threshold by 6.5m



Scenario C: Increased tall building threshold by 13m

