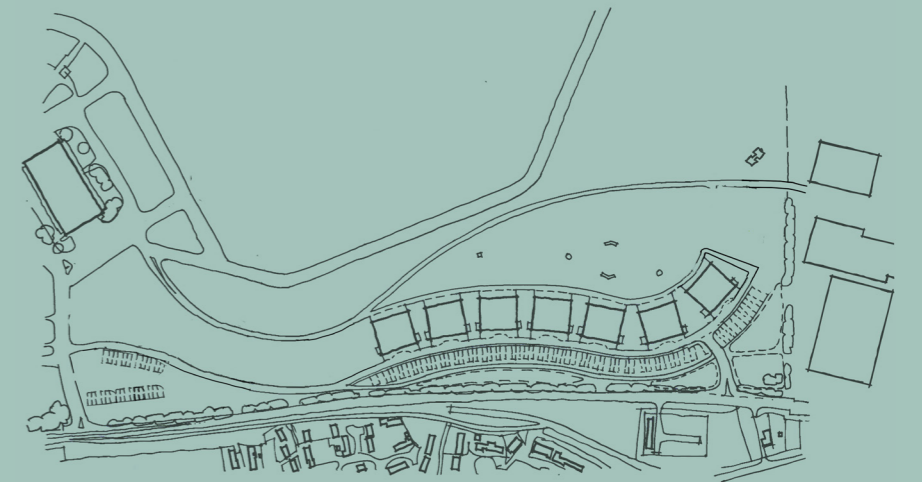


# BICESTER MOTION INNOVATION QUARTER DESIGN & ACCESS STATEMENT - RESERVED MATTERS

Document Number: 220127-3DR-XX-XX-RP-A-09034\_P03

December 2023



BICESTER  
MOTION

3DReid

## DOCUMENT CONTROL SHEET

Issued by	3DREID	Client	Bicester Motion Ltd
	London	Project name	BM_IQ
	1 Hills Place	Title	DAS Reserved Matters
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Bicester Motion\_Innovation Quarter  
 3DReid Project Number 220127  
 Design & Access Statement - Reserved Matters  
 Document number: 220127-3DR-XX-XX-RP-A-09034

### DOCUMENT HISTORY

Revision	Purpose	Status	Date	By	Checked
P01	Planning - Reserved Matters Draft	S2	17/11/2023	NP	NM
P02	Planning - Reserved Matters	S2	24/11/2023	NP	NM
P03	Planning - Minor Amendment	S2	01/12/2023	NP	NM





## CONTENTS

- 01. Introduction
- 02. Evolving the scheme
- 03. Proposed scheme
- 04. Landscape design
- 05. Access & Strategies

## PROJECT TEAM

**3DReid**

Architect

**Hydrock**

M&E Engineering  
Structural Engineering  
BREEAM Consultant  
Fire Consultant  
Civil Engineering

  
**BICESTER  
MOTION**

Client

  
**IKS Consulting**  
COST & PROJECT MANAGEMENT

Project Management  
Quantity Surveying

**Macgregor Smith**

Landscape Architect

**EDGARS**

Planning Consultant





# 1. INTRODUCTION

Following the Section 73 Approval this document is the Design and Access Statement to accompany the Reserved Matters application for 19/02708/OUT for Outline Planning for new employment units B1, B2, B8 and D1 at Bicester Motion, Buckingham Road, Bicester, OX26 5HA prepared by 3DReid.

To be read in conjunction with:

Design & Access Statement by Ridge - June 2019  
Design & Access Statement Addendum by 3DR - June 2023

This report provides details of the design development and highlighting any changes since Stage 2 whilst retaining the agreed principles and characteristics that were set out during Stage 2. The key changes to the scheme are as follows:

- Building elevations design is refined to an elegant look
- The balcony shape is re-designed as a single mass to create a more unified appearance for the buildings
- Materiality is developed further and looked into more detail
- Rooflight is re-designed for an improved interior experience, easier maintenance and minimised visual impact on the buildings while maintaining flexibility to the units.
- Rear facade design is developed to allow for more flexibility in terms of openings thus encouraging flexibility to future tenants to their individual needs.
- Re-design of the car parking in order to provide a more coherent layout that has rich landscape therefore better permeability and is conveniently accessed
- Increased cycle parking provision
- Plant footprint changed for a more slender appearance & to allow better views through the site to the airfield



# BICESTER MOTION - INNOVATION QUARTER

## WIDER SITE PLAN

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The proposed development site is approximately 2.4km (1.5miles) north/north east of the centre of the market town of Bicester at Bicester Motion (formerly known as former RAF Bicester). The total site area is 24.9 acres (10.076HA).





# BICESTER MOTION - INNOVATION QUARTER

## SITE ANALYSIS

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Heritage Buildings

Type C Hanger (113)



Watch Tower (109)



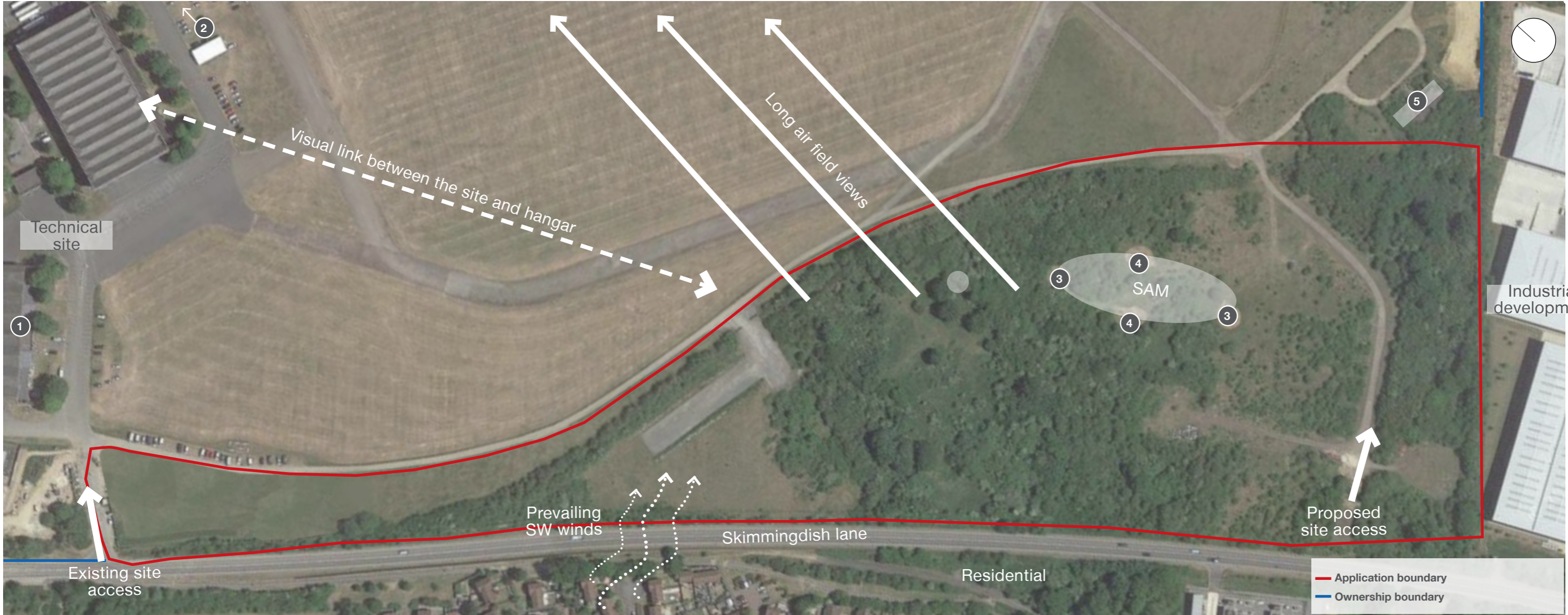
Pill box (SAM)



Seagull trenches (SAM)



Bomb shelters (229)







## 2. EVOLVING THE SCHEME

- Analysis of consented scheme
- Design drivers
- Design concept development
- Initial sketch studies
- Initial massing studies
- Form finding
- Elevation design development
- Balcony development
- Proposed massing visual

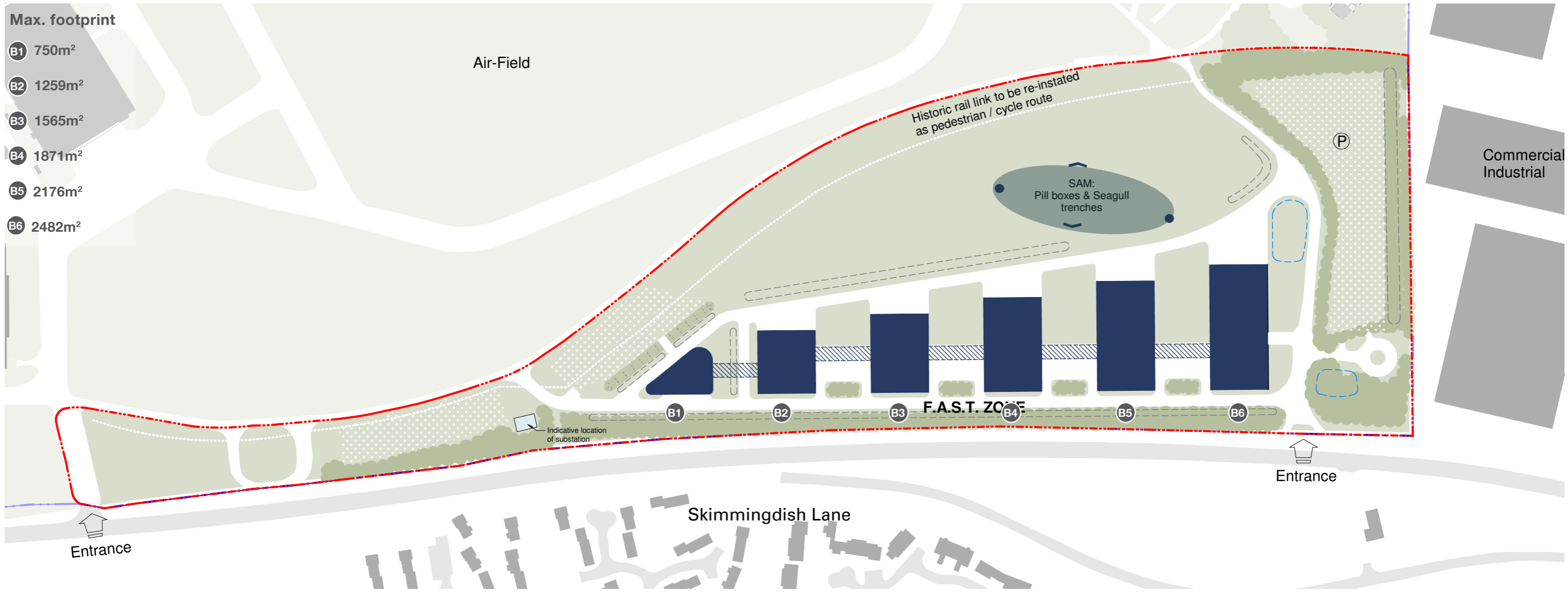


# BICESTER MOTION - INNOVATION QUARTER

## ANALYSIS OF CONSENTED SCHEME

KEY

- - - Application Boundary
- - - Ownership Boundary
- Open Space and Landscape Buffer Areas
- Existing Built Form
- Indicative Built Form
- Indicative Building Links
- Indicative Infiltration Swale
- Indicative Locations of Infiltration Basins
- Indicative Carparks



Max. footprint






B1	750m <sup>2</sup>
B2	1259m <sup>2</sup>
B3	1565m <sup>2</sup>
B4	1871m <sup>2</sup>
B5	2176m <sup>2</sup>
B6	2482m <sup>2</sup>

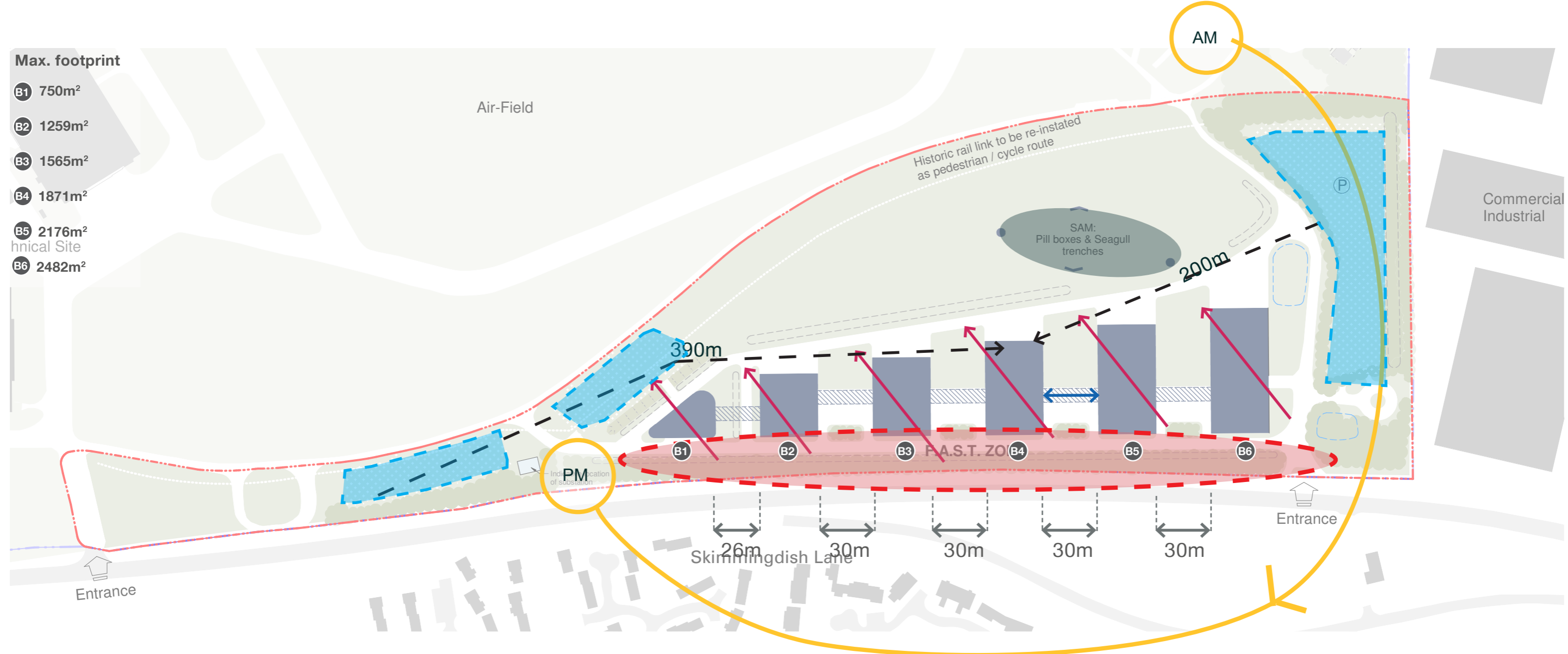


# BICESTER MOTION - INNOVATION QUARTER

## ANALYSIS OF CONSENTED SCHEME

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-  Proposed customer parking
-  Servicing Zone Depth
-  Building Aspect & Orientation
-  Walking distance from car parking
-  Distance between buildings



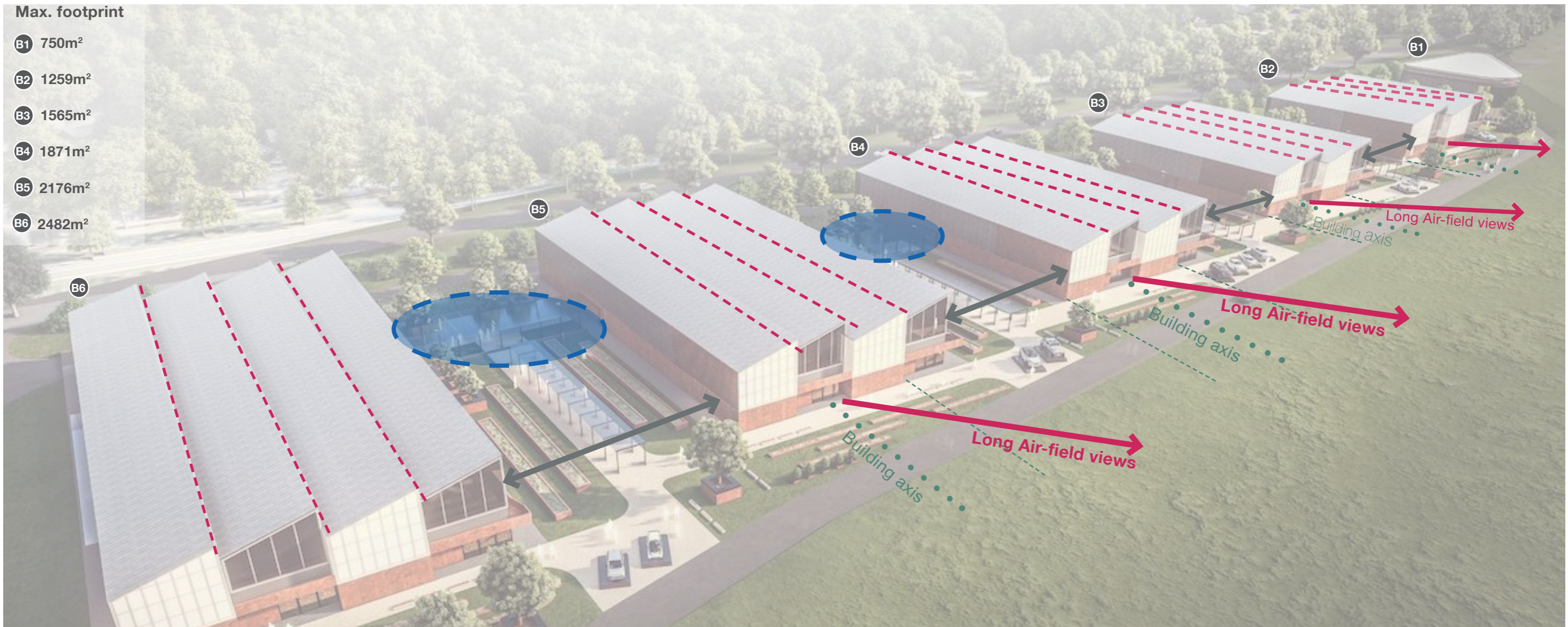


# BICESTER MOTION - INNOVATION QUARTER

## ANALYSIS OF CONSENTED SCHEME

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-  Glazed links
-  Roof gutters - potential maintenance issues
-  Distance between buildings
-  Long views
-  Building axis





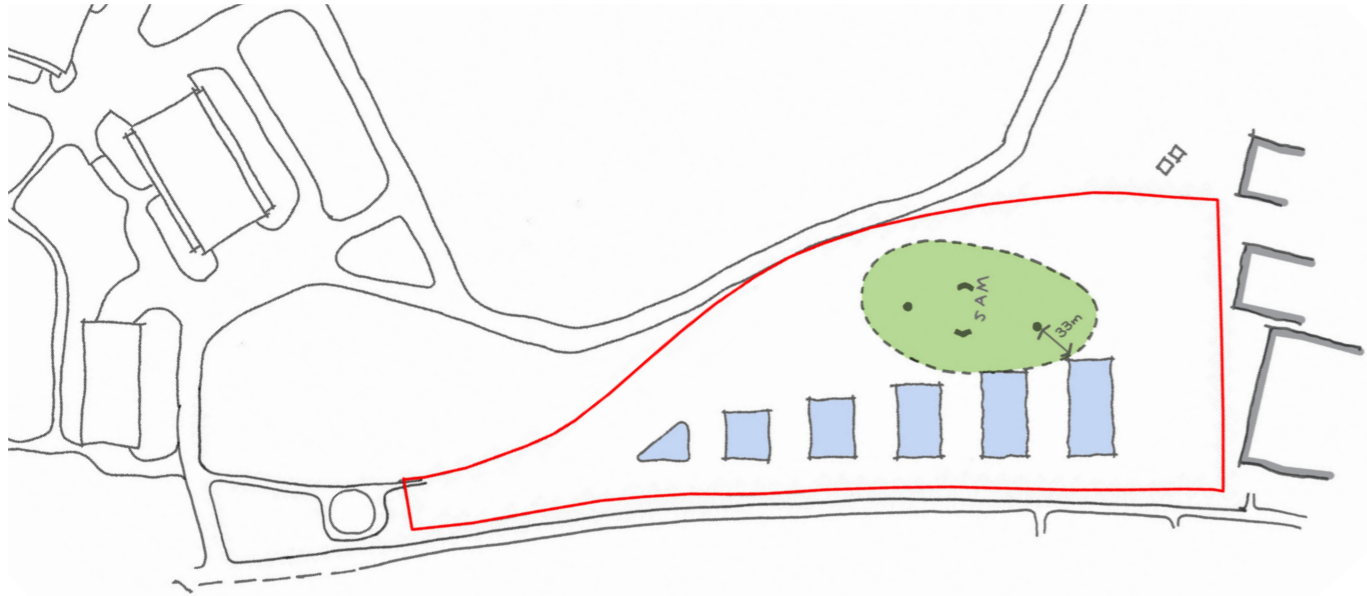
technology innovation  
brand flexibility views  
expand collaboration  
adaptability community  
sustainability net carbon zero  
future-proofing



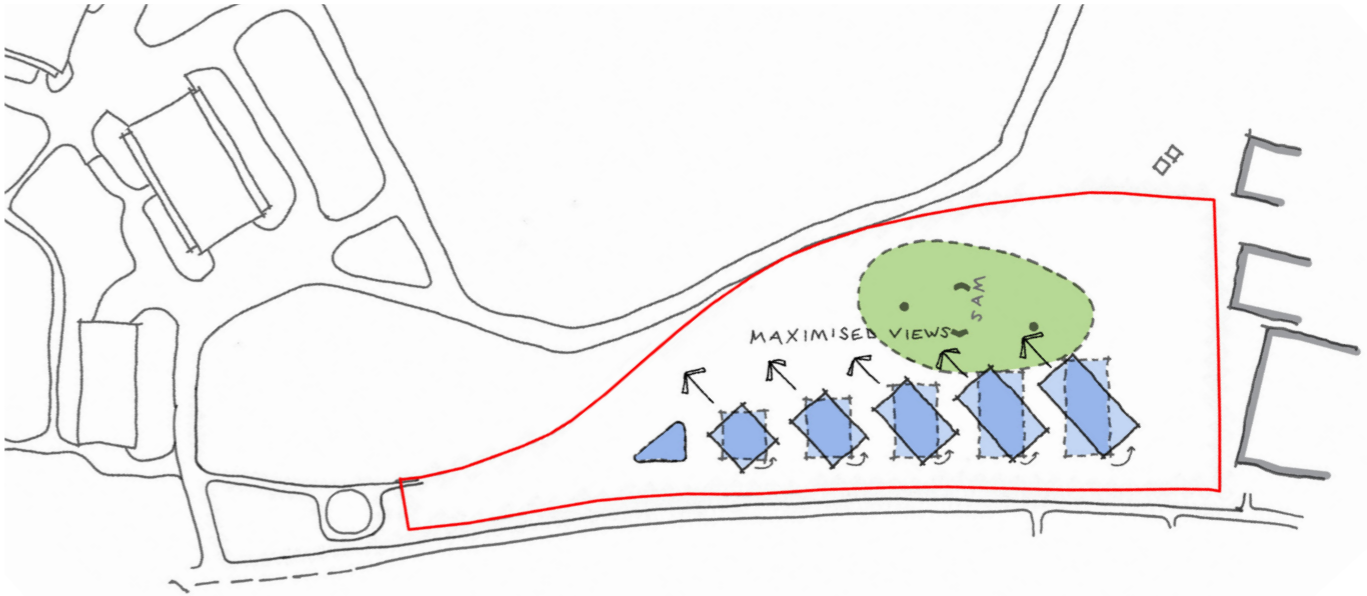
# BICESTER MOTION - INNOVATION QUARTER

## DESIGN CONCEPT DEVELOPMENT

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1. Consented scheme (by RIDGE)



2. Rotated buildings to maximise views



3. Creating routes and visual connections



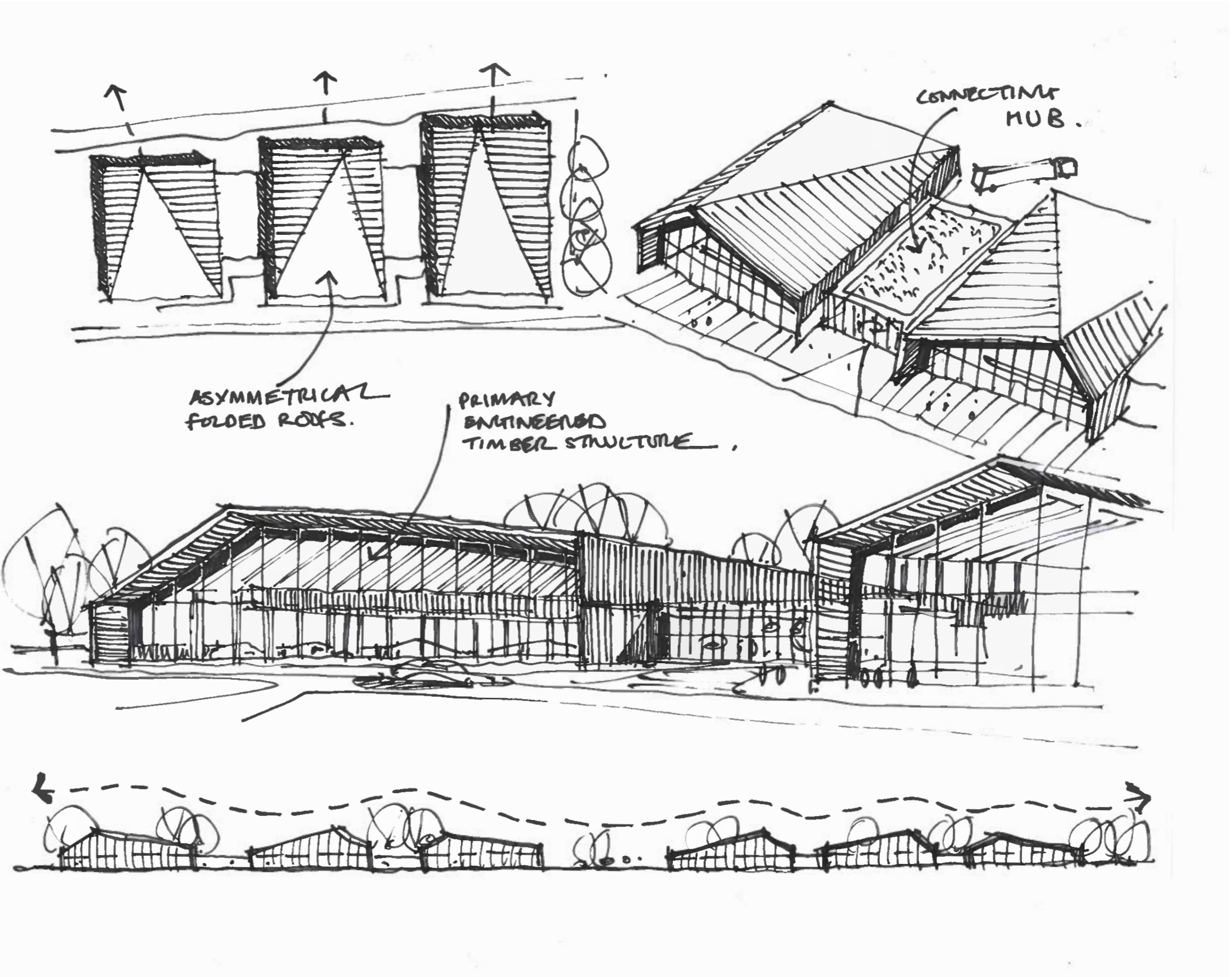
4. Expanded ecology zone & organic building arrangement



# BICESTER MOTION - INNOVATION QUARTER

## INITIAL SKETCH STUDIES - FOLDED ROOF

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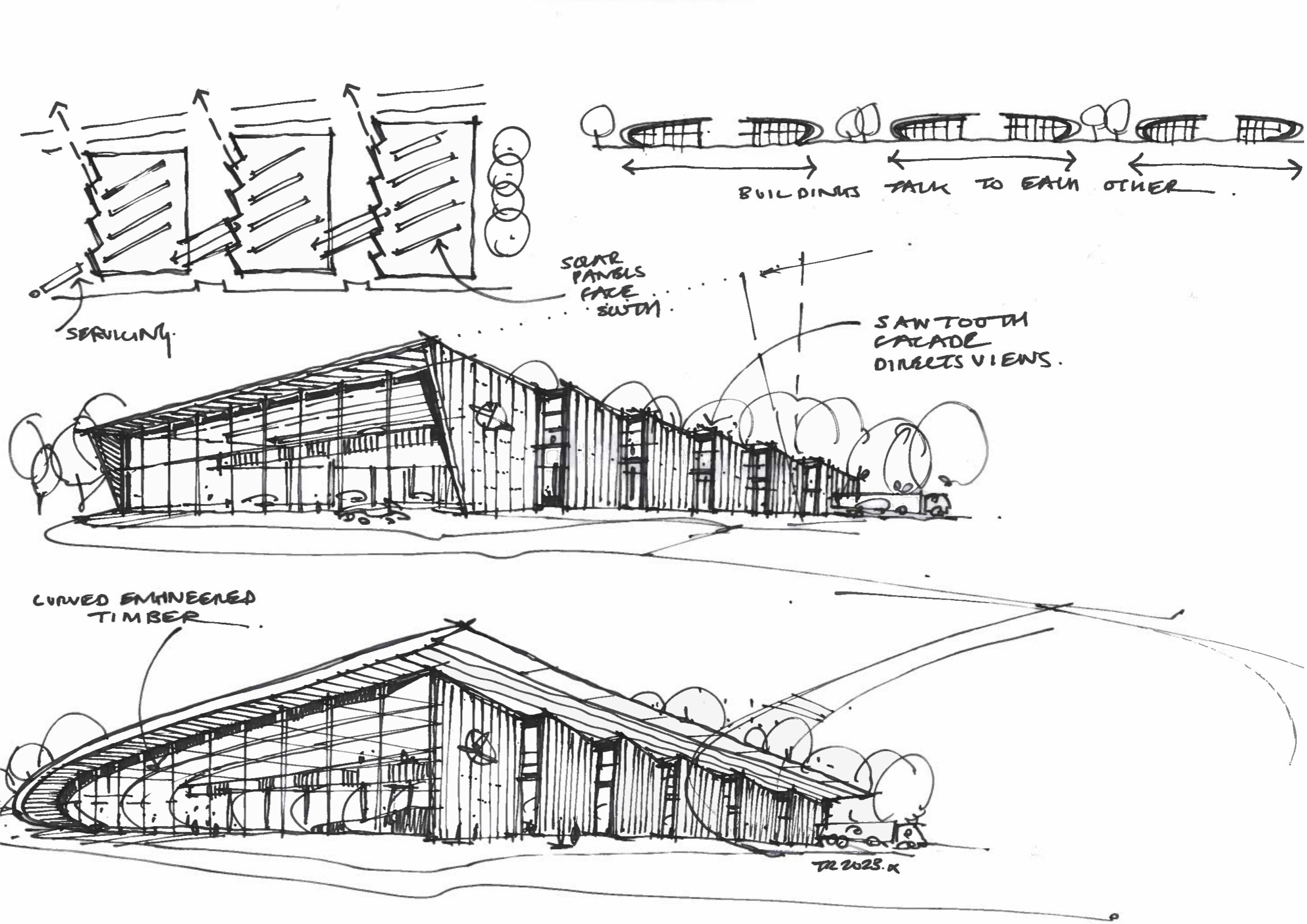




# BICESTER MOTION - INNOVATION QUARTER

## INITIAL SKETCH STUDIES - SAWTOOTH FACADE

3DReid

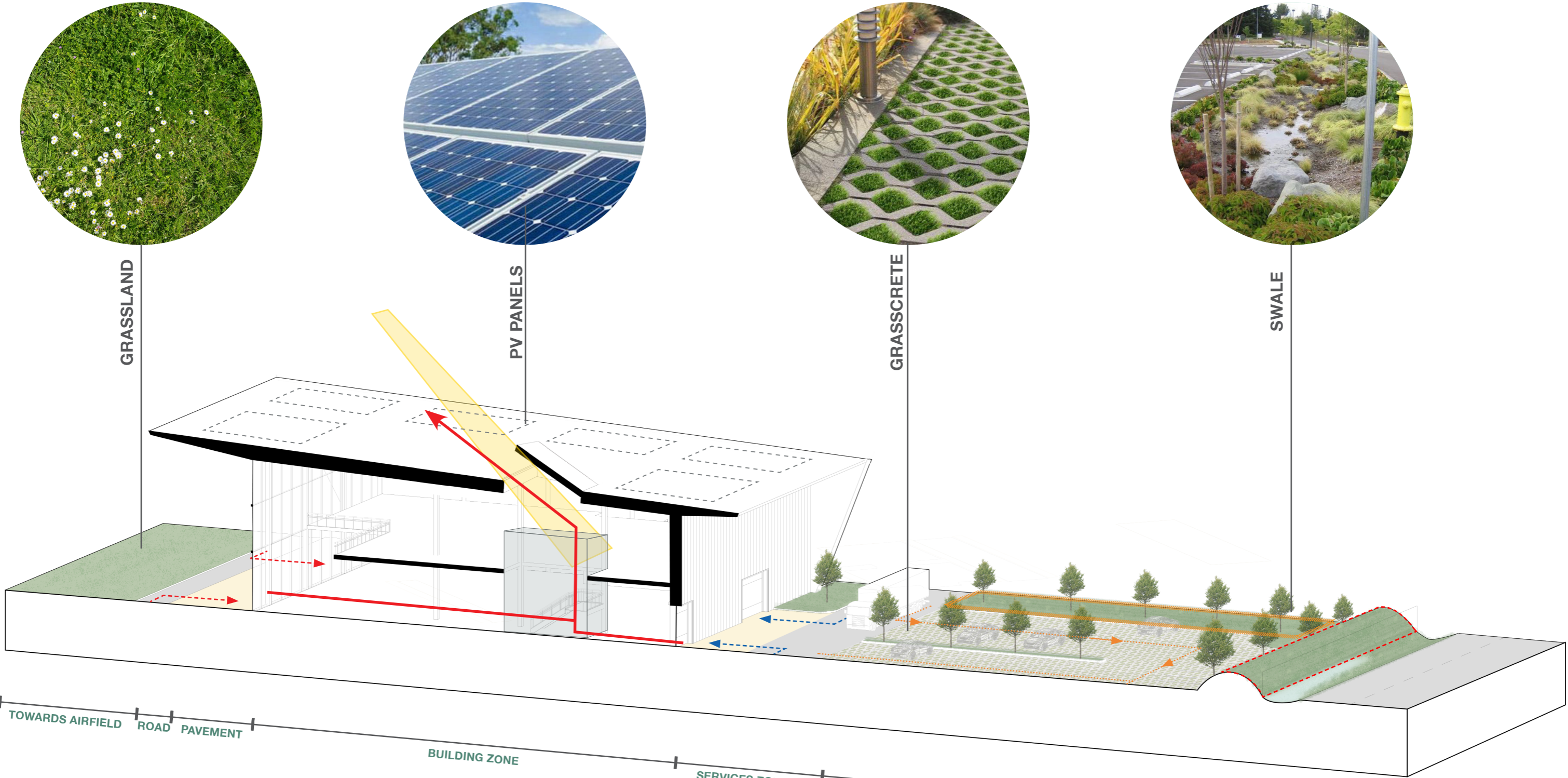




# BICESTER MOTION - INNOVATION QUARTER

## INITIAL MASSING STUDIES

3DReid



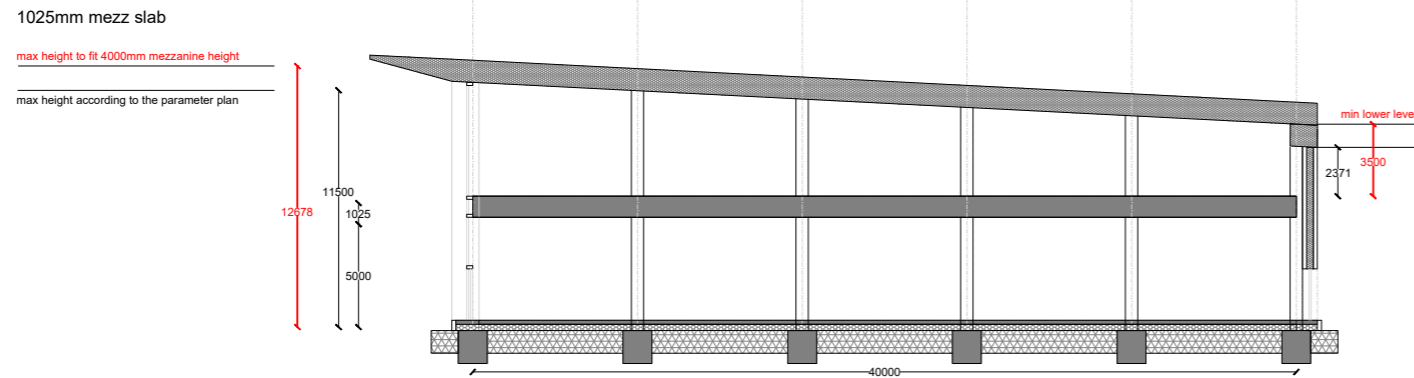
- Key**
- Natural light
  - PVs on the roof
  - Swales
  - Acoustic bund
  - Circulation
  - Plant
  - Entrance to the builing zone
  - Entrance to service zone
  - Parking circulation and access
  - Natural ventilation



# BICESTER MOTION - INNOVATION QUARTER

## INDICATIVE BUILDING SECTION - MEZZANINE FLOOR BUILD UP

ALL TIMBER FLOOR  
CONSTRUCTION  
1,025MM



**CO<sub>2</sub>e**

Embodied Carbon Comparison

Material Type	kgCO <sub>2</sub> e/m <sup>2</sup>
All Timber	~900
Hybrid	~1100
Composite Metal Deck	~1200

**A1 - A5: 1,189 kgCO<sub>2</sub>e/m<sup>2</sup>**  
Biogenic Carbon: -227 kgCO<sub>2</sub>e/m<sup>2</sup>

Best for embodied carbon

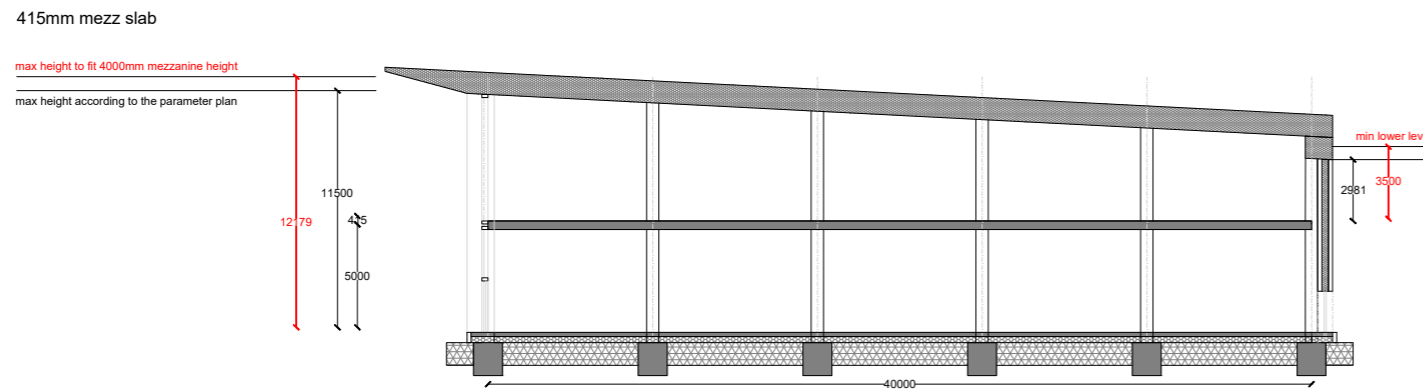
Aesthetic appeal of CLT soffit

Would work well with glulam column option

Cantilevers up to 2m simple to form and detail

PREVIOUS OPTION

HYBRID FLOOR  
CONSTRUCTION  
415MM



Embodied Carbon Comparison

Material Type	kgCO <sub>2</sub> e/m <sup>2</sup>
All Timber	~900
Hybrid	~1100
Composite Metal Deck	~1200

**A1 - A5: 1,289 kgCO<sub>2</sub>e/m<sup>2</sup>**  
Biogenic Carbon: -133 kgCO<sub>2</sub>e/m<sup>2</sup>

Smallest overall structural depth achieved

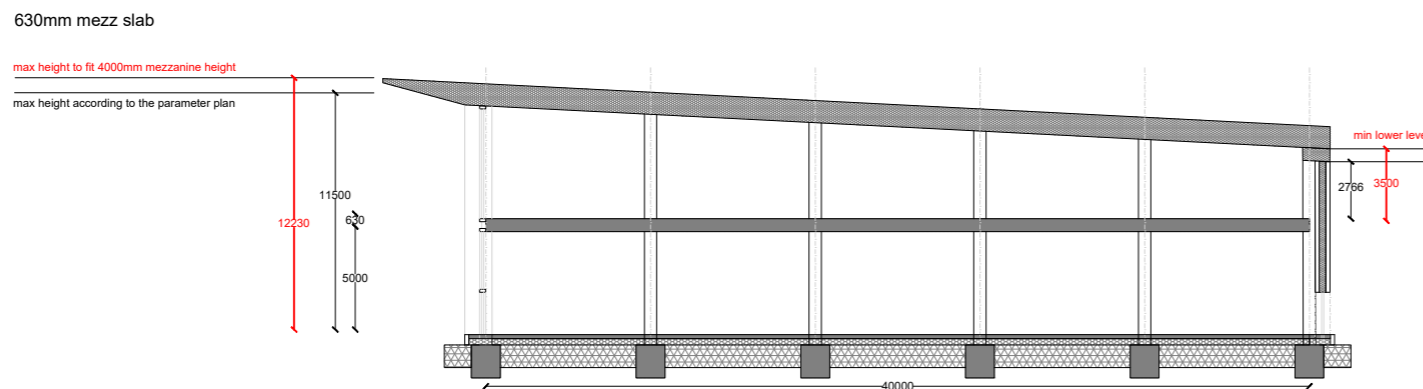
Aesthetic appeal of CLT soffit

Flush soffit

Arrangement works well with an above floor-plate services void

DISCOUNTED DUE TO COST

ALL STEEL WITH COMPOSITE  
METAL DECK  
630MM



Embodied Carbon Comparison

Material Type	kgCO <sub>2</sub> e/m <sup>2</sup>
All Timber	~900
Hybrid	~1100
Composite Metal Deck	~1200

**A1 - A5: 1,238 kgCO<sub>2</sub>e/m<sup>2</sup>**  
Biogenic Carbon: 0 kgCO<sub>2</sub>e/m<sup>2</sup>

**Rolled Steel Tonnage: 36kg/m<sup>2</sup> (beams only)**

Possibly lowest cost

Services permissible within down-stand region

Down-stands have been matched to provide uniform struct. depth

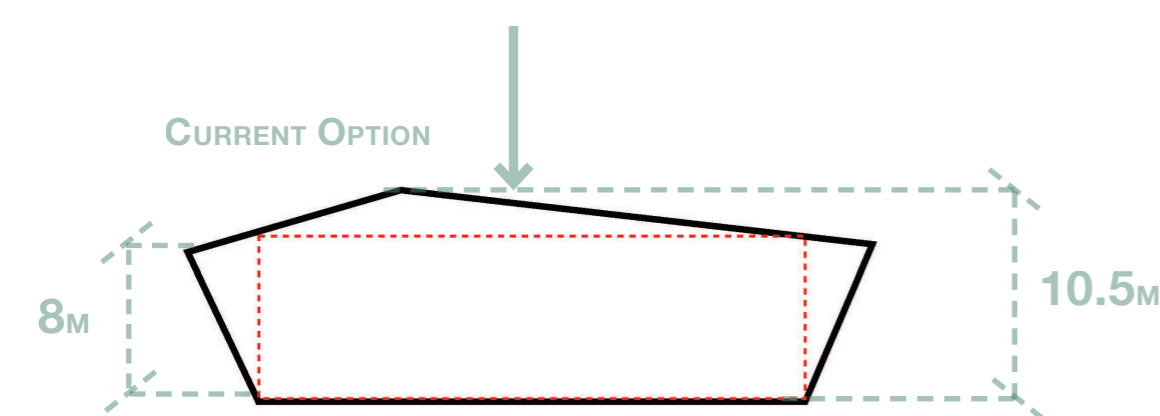
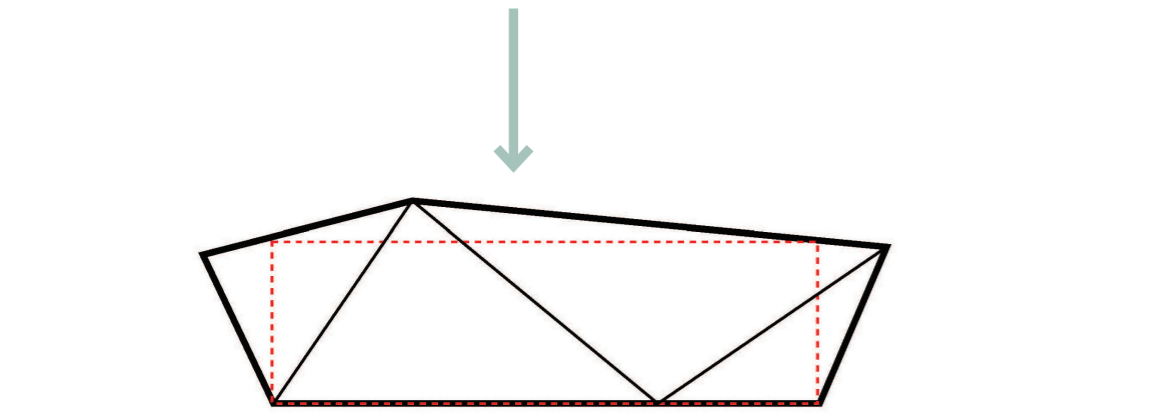
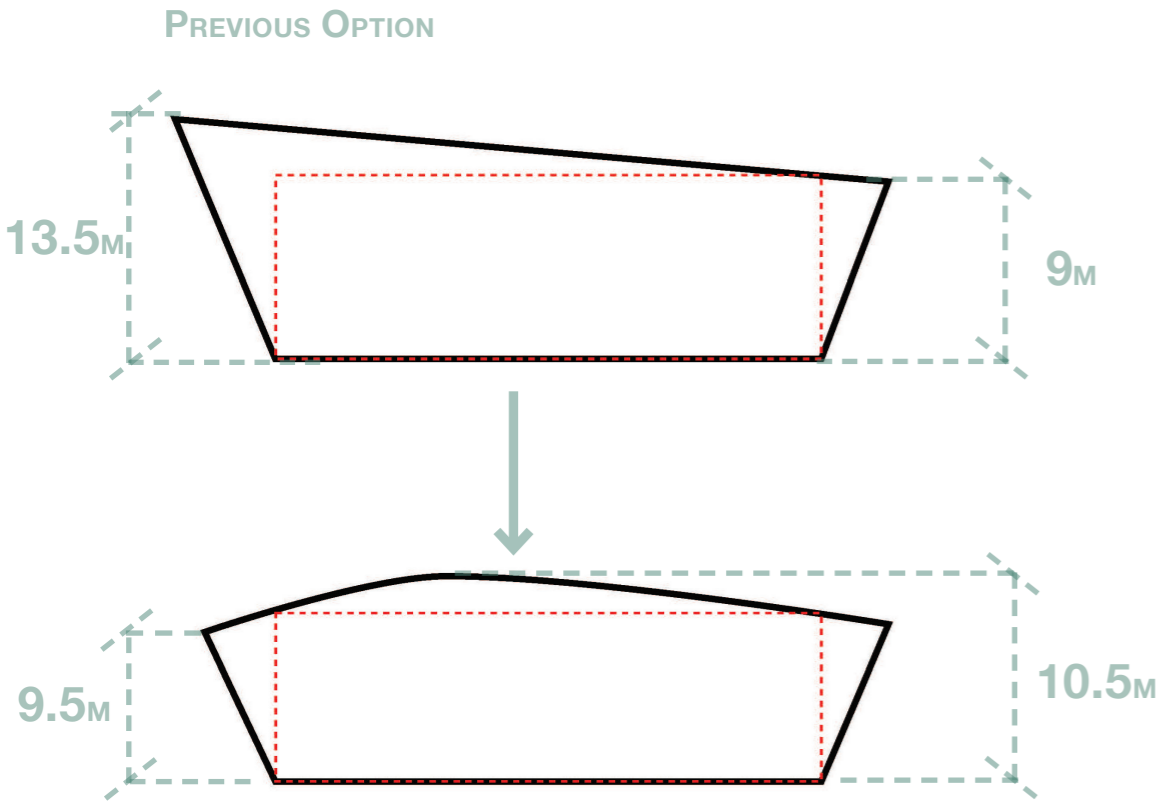
PREFERRED OPTION



# BICESTER MOTION - INNOVATION QUARTER

## MASSING DESIGN DEVELOPMENT

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- Suitable north window orientation
- Dynamic silhouette.
- Less dominating over the landscape

