

Introduction

Thank you for coming to our exhibition and taking the time to view the proposals for the refurbishment of the Fry Building.

Timeline

October 2013: Planning pre-application submitted to Bristol City Council

February / March 2014: Second stakeholder and public consultation exercise in conjunction with the second pre-application submission.

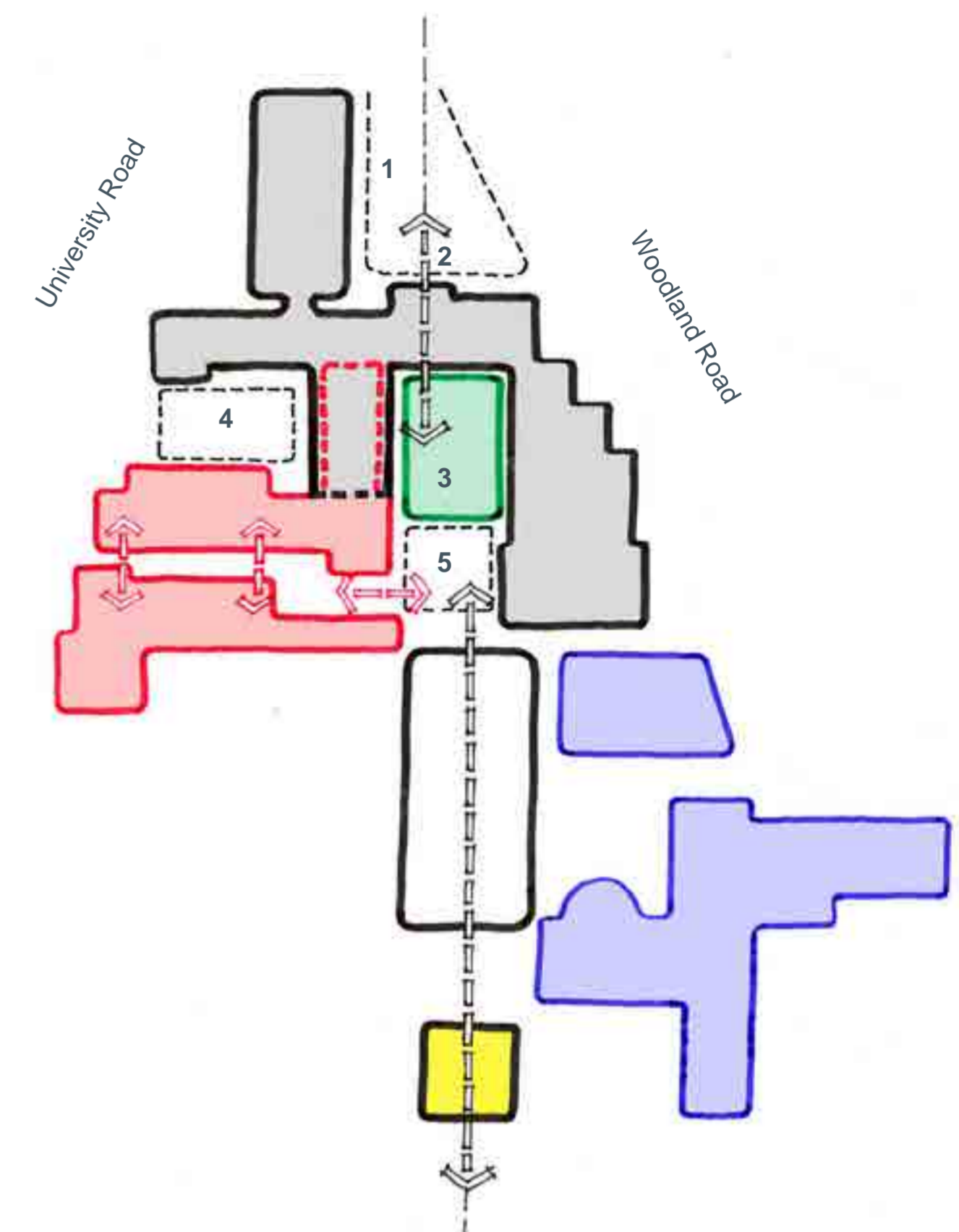
Mid-March 2014: Planning application submitted.

August 2014: Start on initial works on site.

Project Aims

The Fry Building (built 1880 - 1938, Grade II listed) currently houses the School of Biological Sciences, which will move the new Life Sciences Building on Tyndall avenue in 2014. The University has since set-out the following key project aims for the refurbishment of the Fry Building and its site:

1. The University's brief is to refurbish the Fry Building as a world class facility for mathematics research and teaching that will attract and retain staff, undergraduate and postgraduate students;
2. Enhance the building's setting and contribution to the surrounding conservation area through improvements to the public realm;
3. Improve the access and approach to the building for pedestrians (access is currently stepped);
4. Provide a distinctive new entrance and sense of identity for the School of Mathematics;
5. Improve integration between the School of Mathematics and other adjacent departments and faculties;
6. Reinforce linkages within the the University Precinct as identified in the Estates Masterplan;
7. Improve the use of poor quality existing external spaces including the central courtyard;
8. Remove redundant rooftop plant and externally mounted services installations to improve the appearance of the building;
9. Improve access throughout the building;
10. Promote and foster integration and interaction within the School of Mathematics;
11. Develop an exemplar sustainable refurbishment that achieves BREEAM 'Very Good' & EPC 'C.'



KEY		
○ (Red)	Geographical Sciences	1. Northern Open Space / Plaza
○ (Grey)	Mathematics	2. New Entrance
○ (Blue)	Earth Sciences	3. Raised Terrace and Lawn
○ (Green)	Shared Facilities	4. Western Courtyard
○ (Yellow)	Wills Memorial Tower	5. Southern Courtyard

Concept masterplan for the Fry Building refurbishment



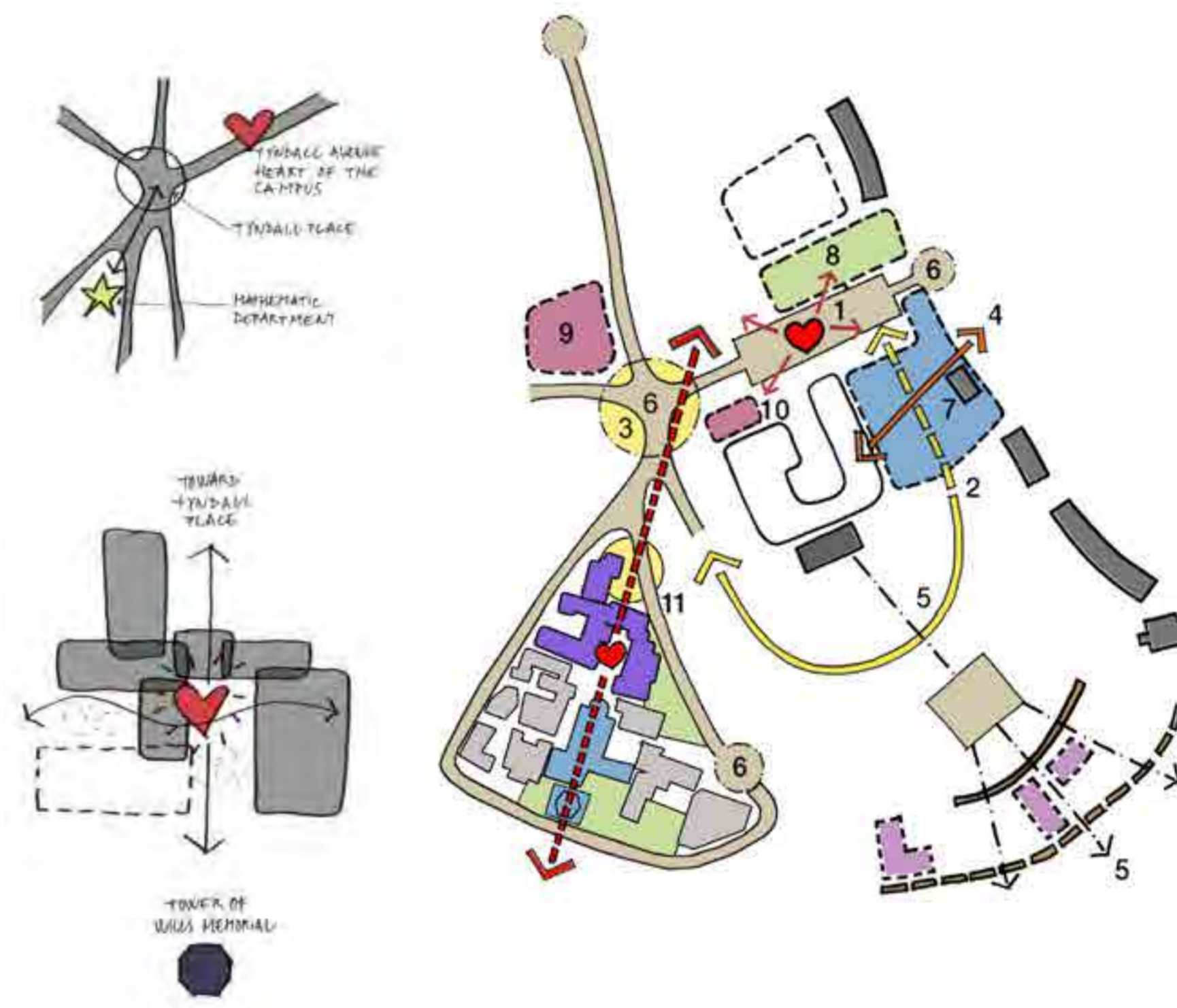
Northern Facade from Woodland Road



Arrowsmith Tower

Ten Strategic Moves are identified in Bristol City Council's Supplementary Planning Guidance (SPG) No.11 Strategic Masterplan (July 2006):

1. To make Tyndall Avenue the social heart of the University
2. To continue and 'complete' University Walk on the east side of the Precinct
3. To create a new, identifiable entrance to the University at 'Tyndall Place'
4. To create new routes, views and vistas from St Michael's Hill to Royal Fort Gardens
5. To create new links between the University and the City
6. To improve the public realm in order to strengthen the identity of the Precinct
7. To provide a new department of Life Sciences on the east side of the Precinct
8. To create facilities for a New Learning Centre on the site of the existing Arts Library and IT Centre
9. To re-develop the Hawthorns site
10. To provide a new building adjacent to the Lodge site
11. Refurbish and improve the Fry Building, and remodel the surrounding external spaces to emphasise integration within the Precinct.



Concept diagrams extracted from the adopted SPG and adapted to include the Fry Building as an 'eleventh strategic move'



View of the Fry Building from the north with the Wills Memorial Tower beyond



Western Courtyard on University Road

THE SITE

The Fry Building, parts of which date from 1880, is one of many historic buildings that are located within the University of Bristol's main academic precinct, to the north of Bristol's city centre. The Fry building occupies a prime site at the intersection of University Road and Woodland Road and lies within the Tyndall's Park Conservation Area.

The building is situated on a steeply sloping site, orientated north-south with accommodation arranged across four main floors. A number of wings are arranged around two courtyards, to the west and south, and an area of open space (currently a car park) to the north. These wings were built in phases from 1880 with the final northern wing completed in 1938.



Aerial view

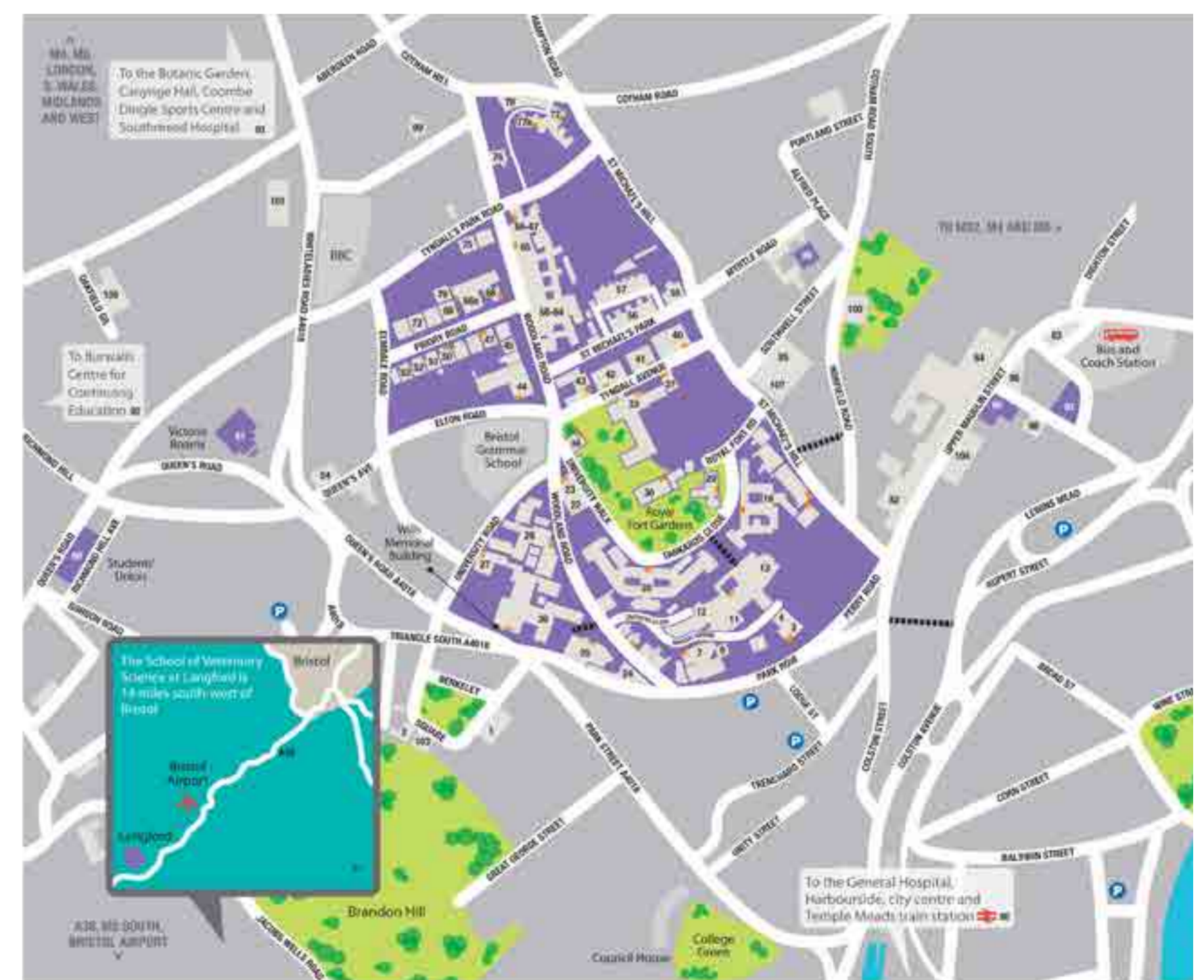
- KEY
- University of Bristol Precinct
 - The Fry Building Site



View to Wills Memorial Tower with southern courtyard infill buildings in the foreground



Unightly External Services



University Precinct Plan

- KEY
- Fry Building

HERITAGE

The majority of the Fry Building is Grade II listed and comprised of two separate entries: one for the western u-shaped section and one for the eastern and southern wings.

A separate Grade II listing is also made for the gates, piers and attached walls forming the entrance to the western courtyard from University Road.

The greater part of the Fry Building currently accommodates the University's School of Biological Sciences and this area forms the core of the refurbishment project. The south western wing houses part of the School of Geographical Sciences and limited works are proposed to this part of the building.

The building exterior is architecturally ornate and much of the character of the original design remains in good order including distinctive lead light windows, two prominent towers and a decorative castellated parapet. Intensive use of the building over the last few decades has however resulted in numerous built accretions, which impact upon the overall character of the existing building. The proposed refurbishment works will offer the opportunity to demolish the temporary outbuildings and remove the redundant services additions.

A detailed Heritage Statement, including an Internal Heritage Audit, is currently informing how the proposals for the building are being developed in order to ensure that the heritage significance of the building is enhanced by the refurbishment works.



Above: Charles Francis Hansom's winning design for the Department of Botany

Right: A contemporary view of the same elevation showing what was actually constructed.

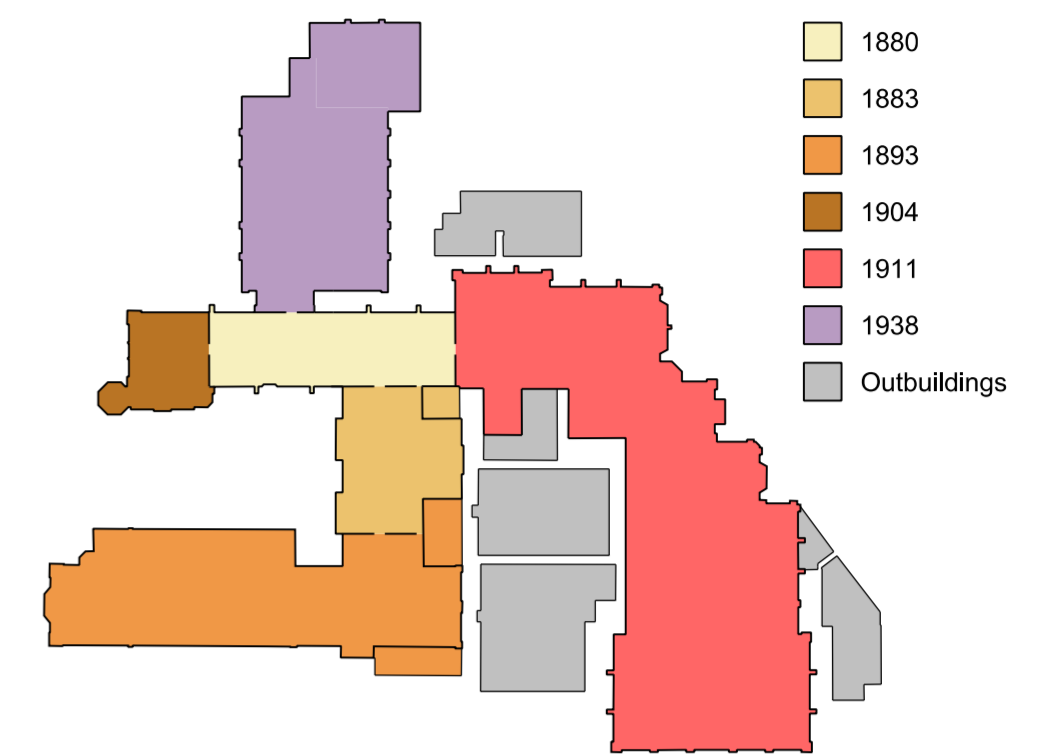
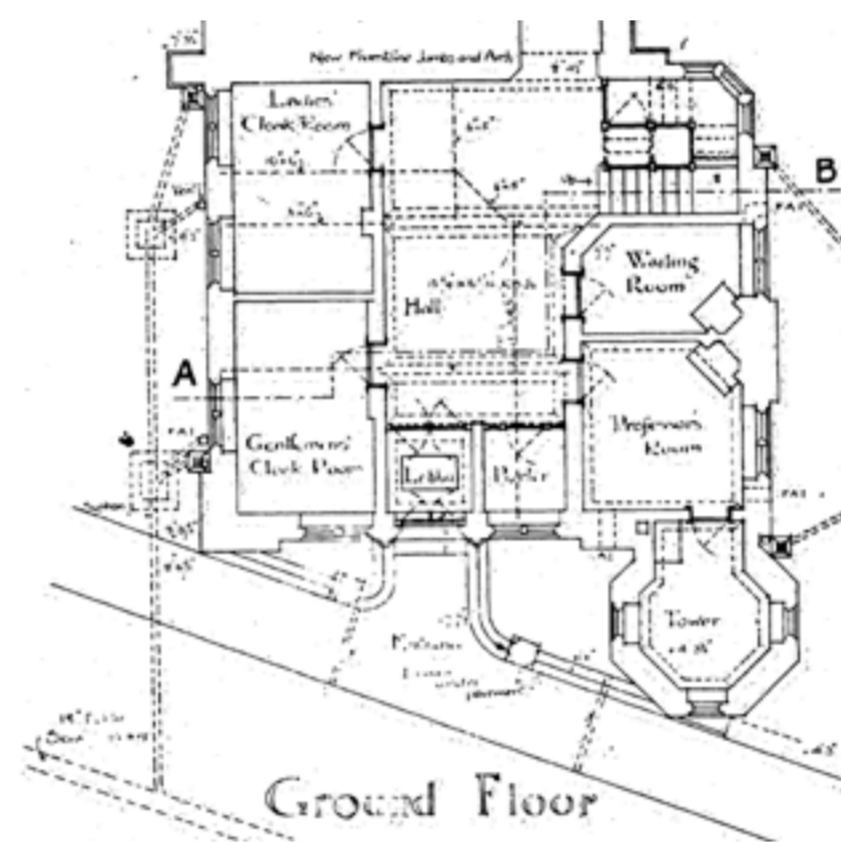
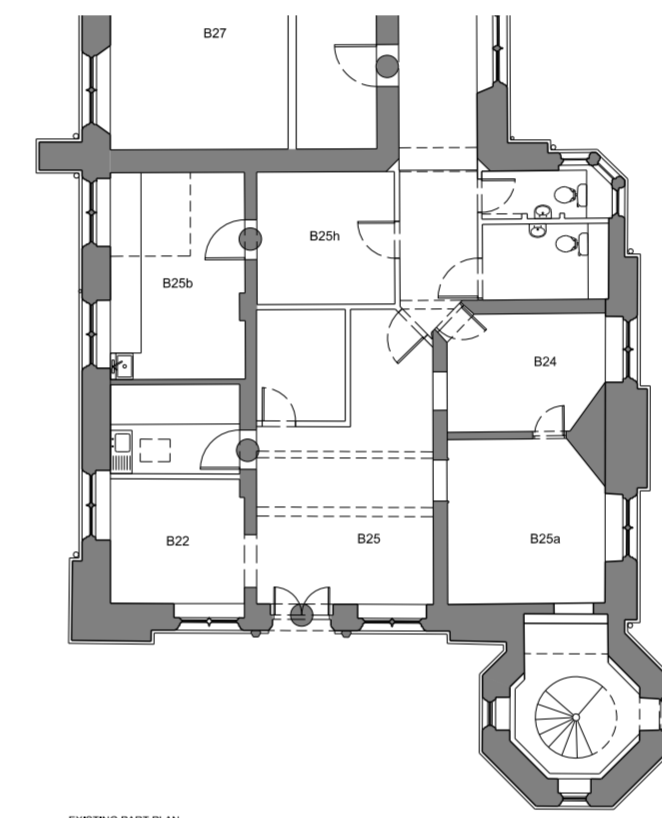


Diagram depicting the key phases of the construction of 'The Fry Building' from 1880 to 1938.

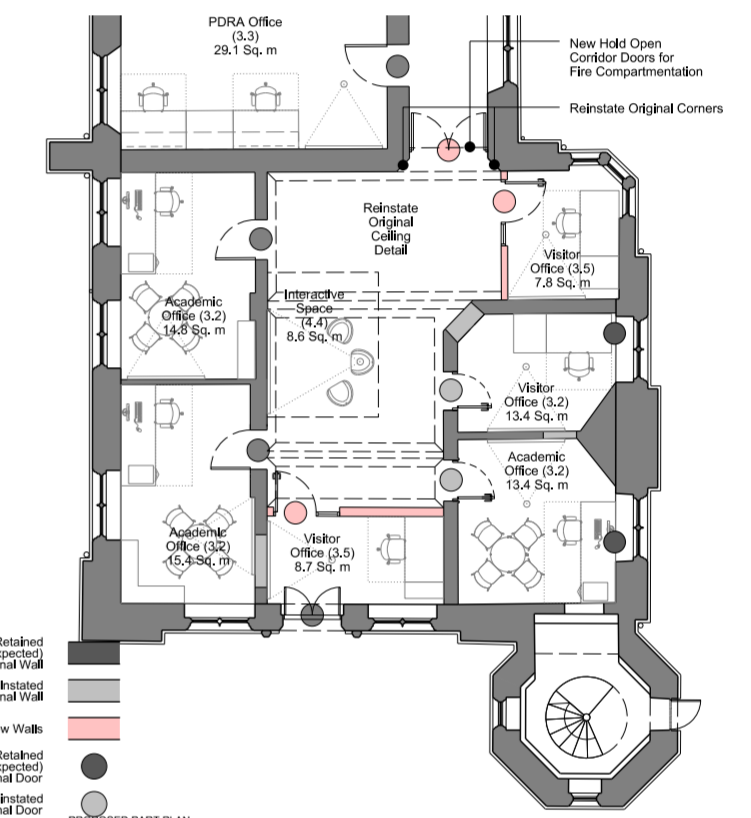


Study for alterations and reinstatement of the 1904 Fry Tower Extension:

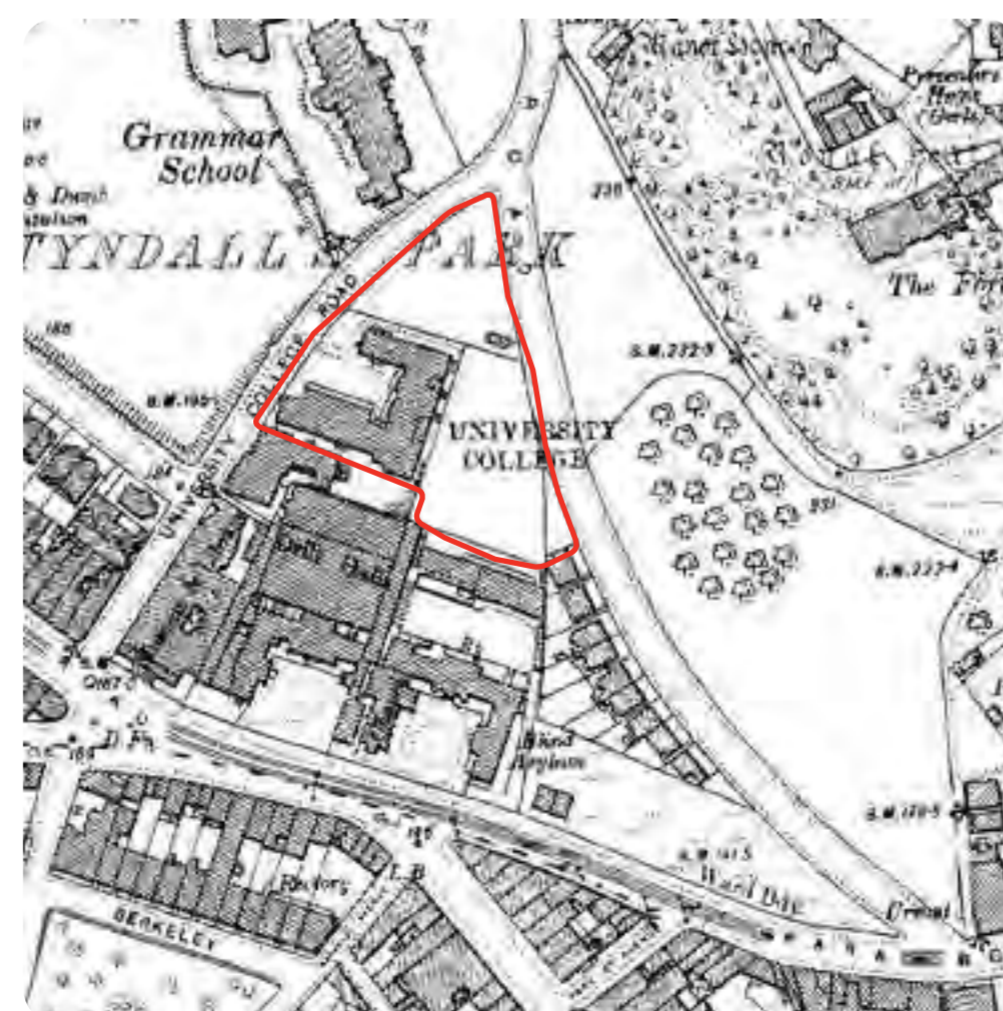
Original F. B. Bond ground floor plan for the wing



Existing ground floor plan showing subdivision by later partitions



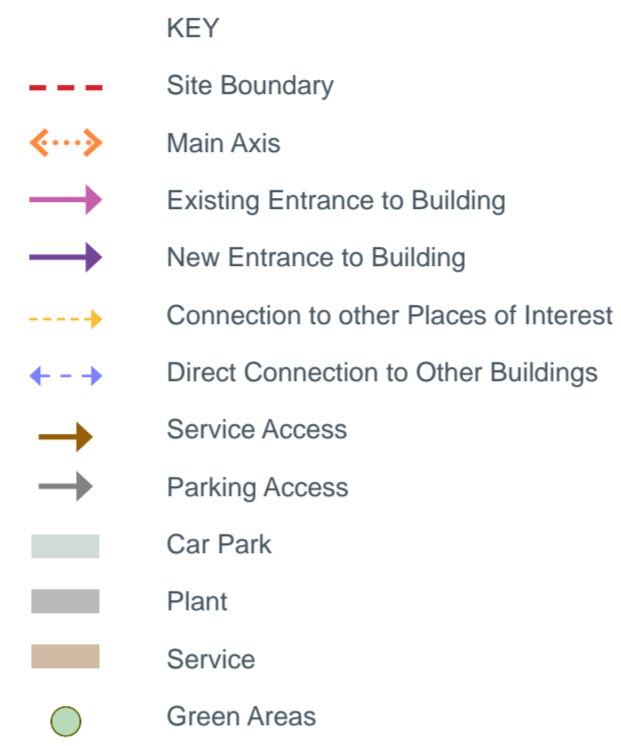
Proposed ground floor plan reinstating original room layout



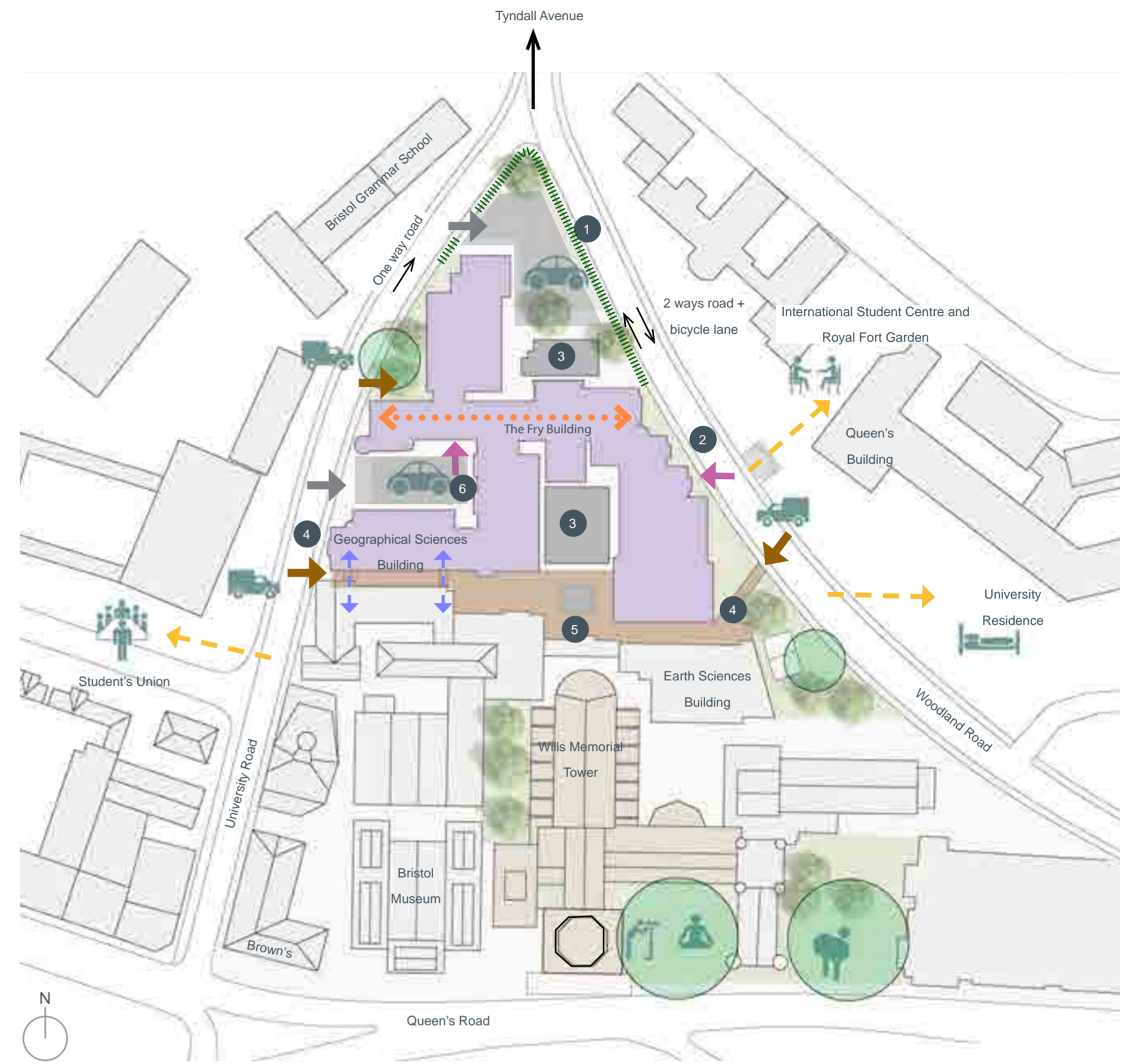
Historical Site Maps illustrating the development of the site and the Fry Building from 1882 (top left) to 1953 (bottom right). Approximate site boundary shown in red.



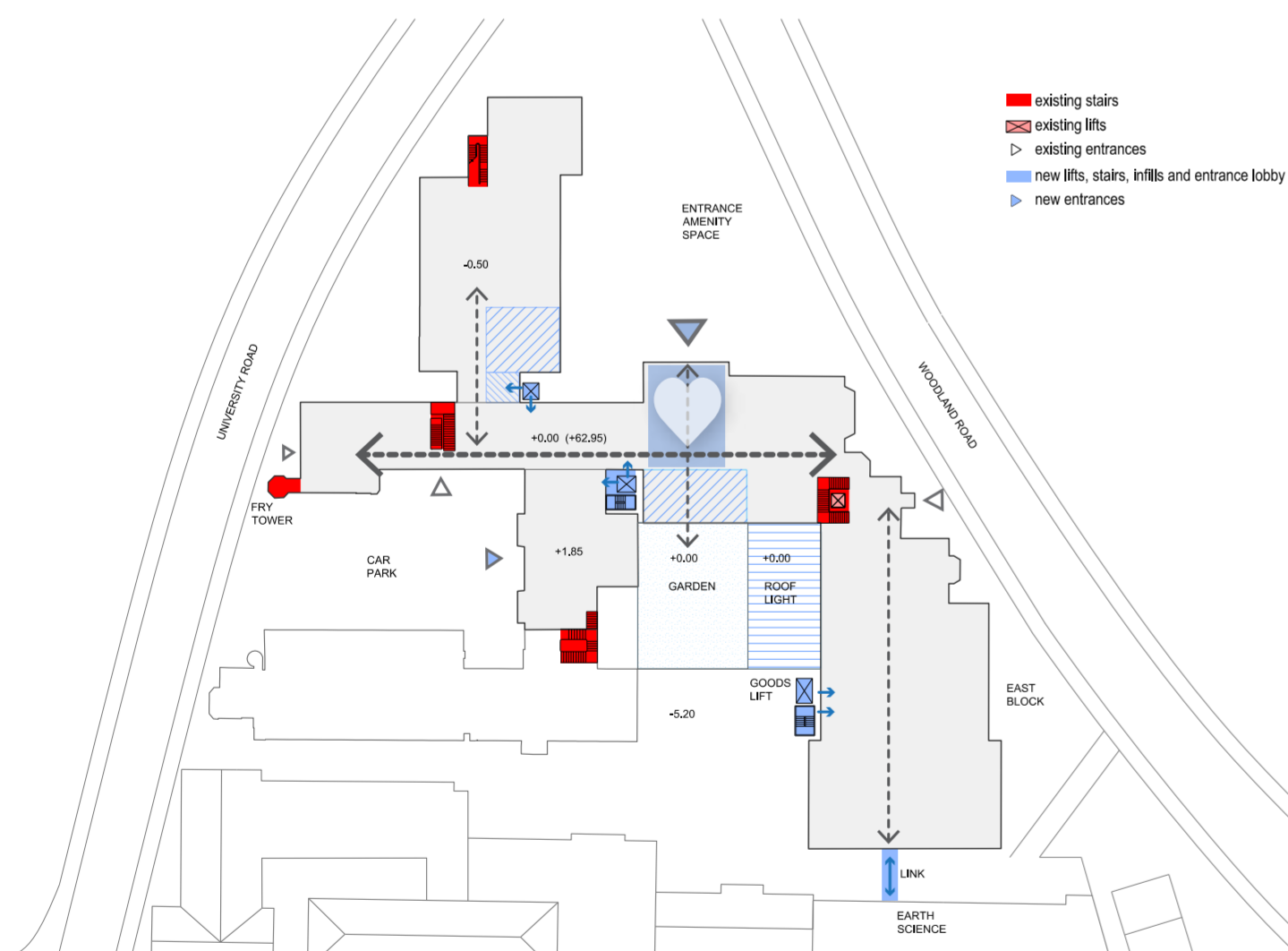
Existing Building:
Circulation and Building Levels Study



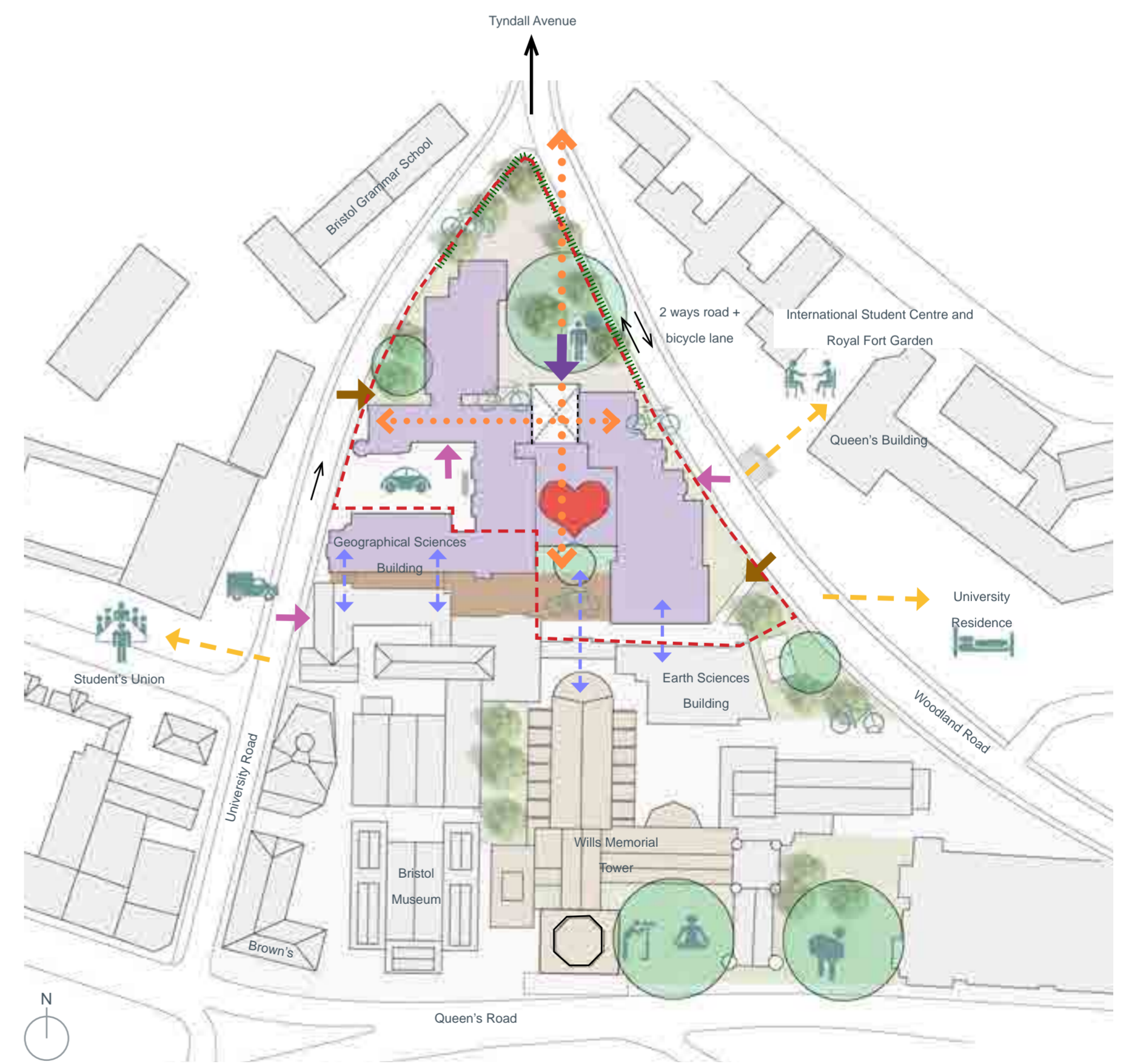
- KEY ISSUES**
1. Hedge and wall boundary
 2. Narrow path with tight entrance
 3. Low quality in-fill buildings / sheds
 4. Conflict of service route and pedestrians
 5. No connection to adjacent academic building
 6. Low quality infill to lightwell



Existing Site Analysis

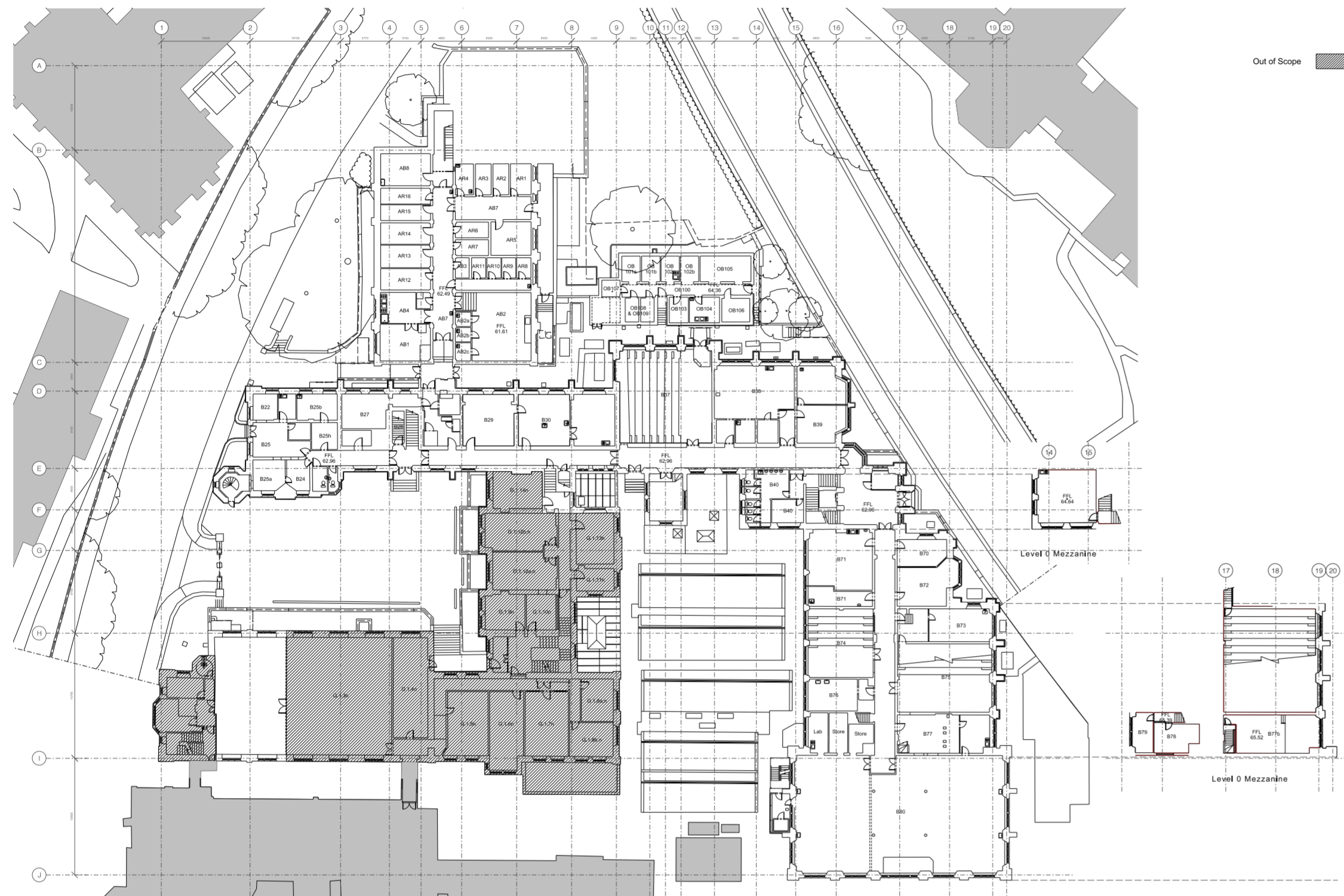


Refurbished Building:
Initial Circulation and Interventions Study

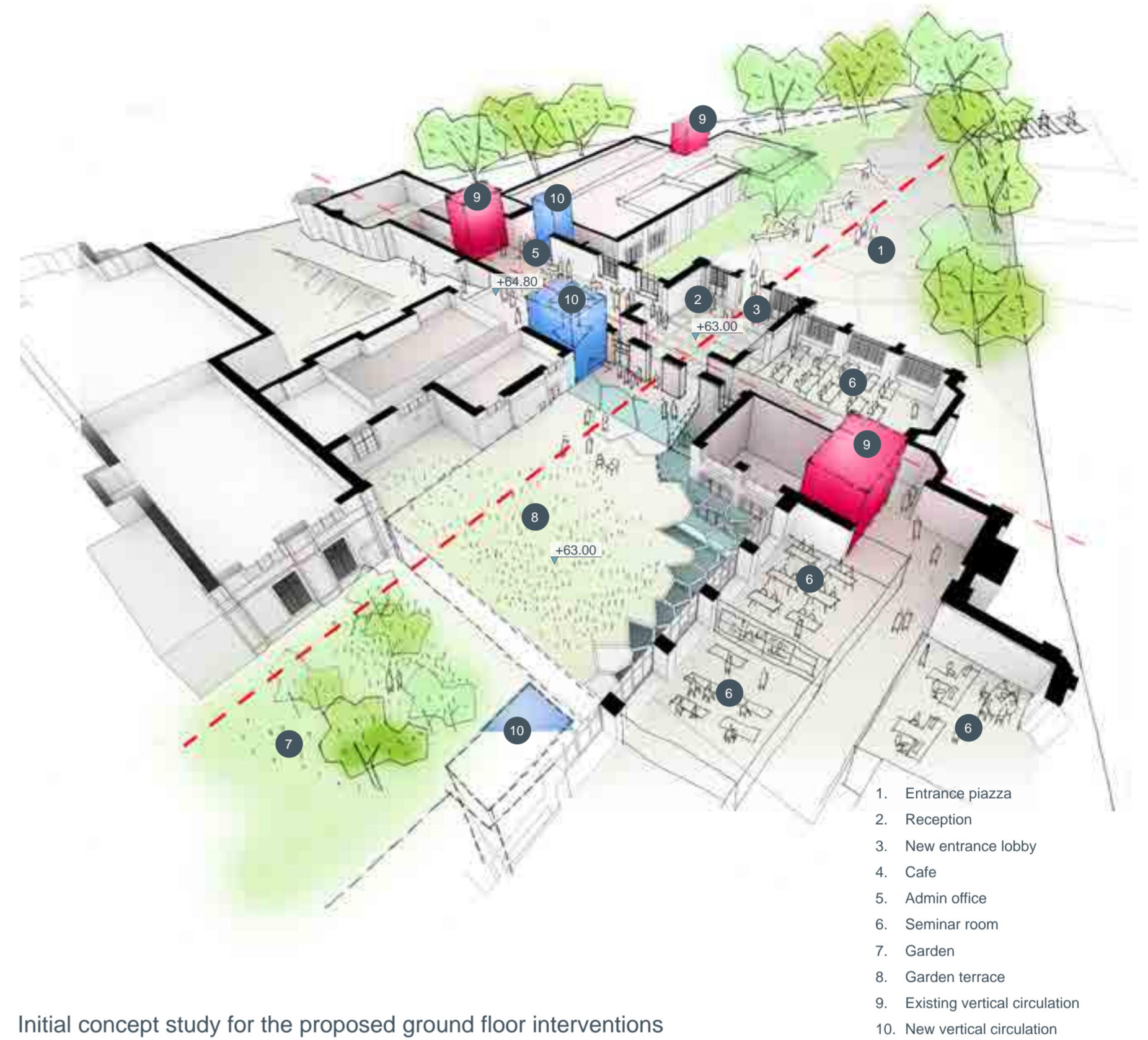


Proposed Site Analysis

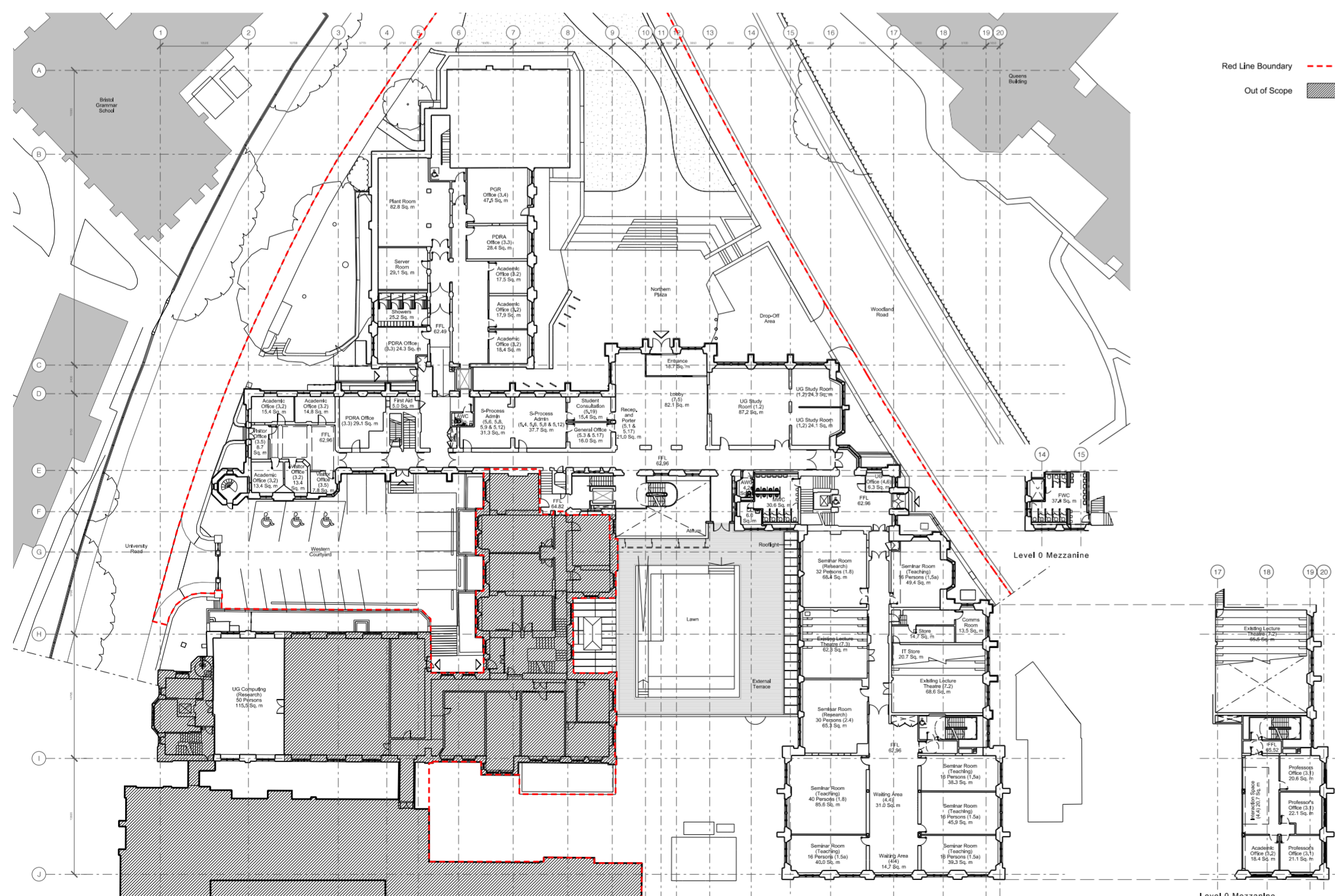
GROUND FLOOR



Existing Ground Floor Plan



Initial concept study for the proposed ground floor interventions



Proposed Ground Floor Plan



Existing view from the north

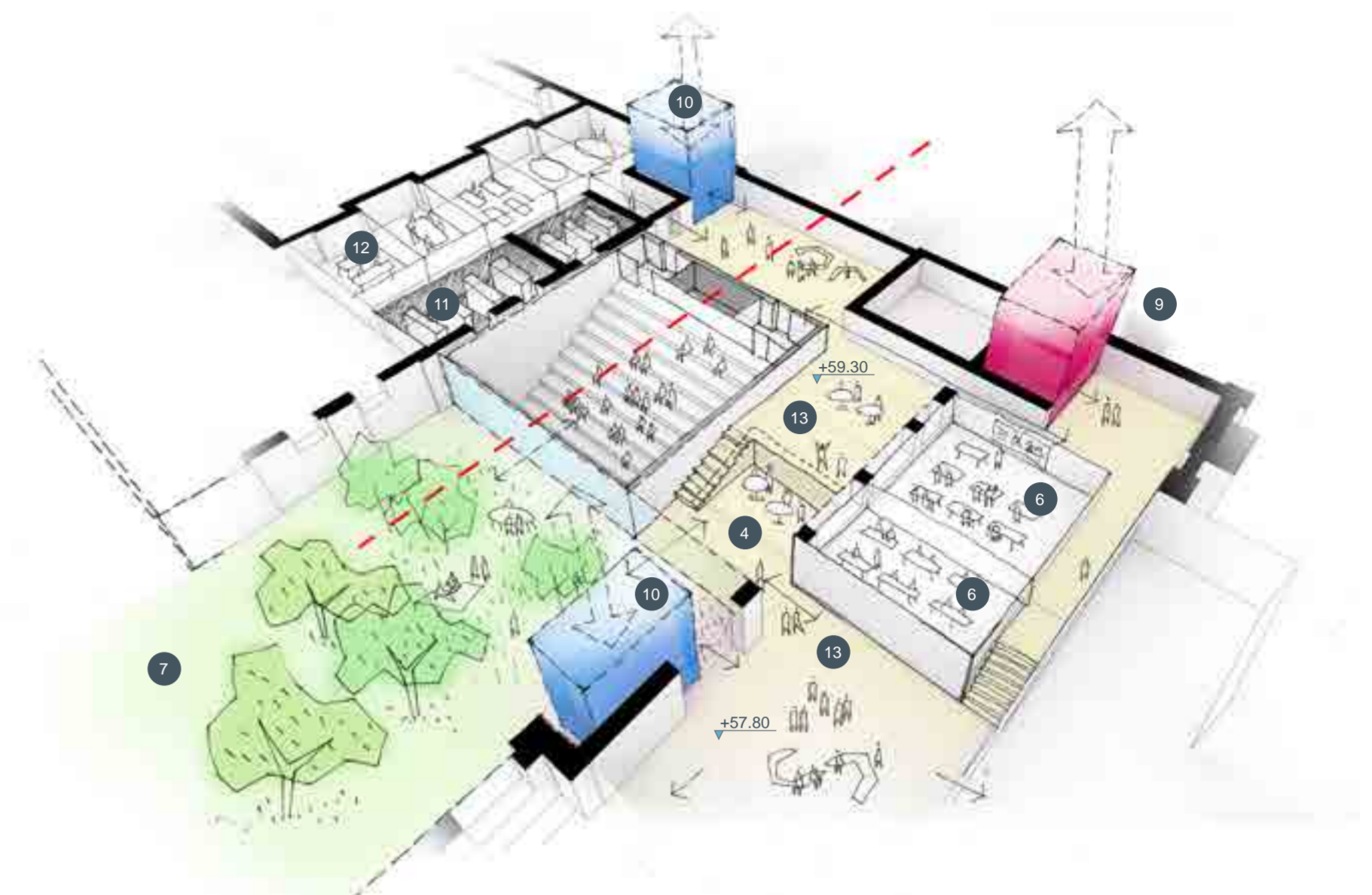


Sketch showing initial proposal for a new entrance and landscape to the Fry Building

LOWER GROUND FLOOR

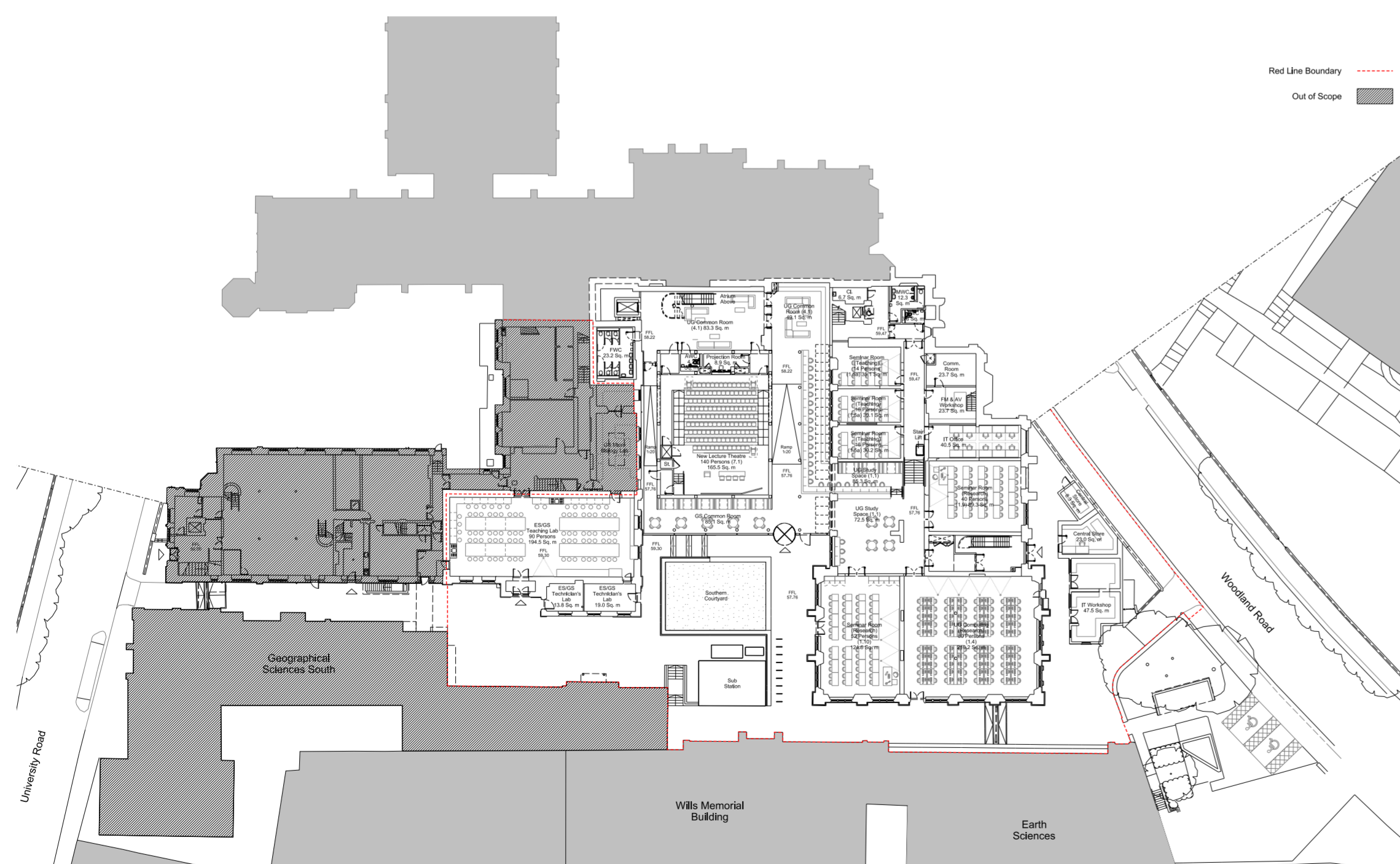


Existing Lower Ground Floor Plan

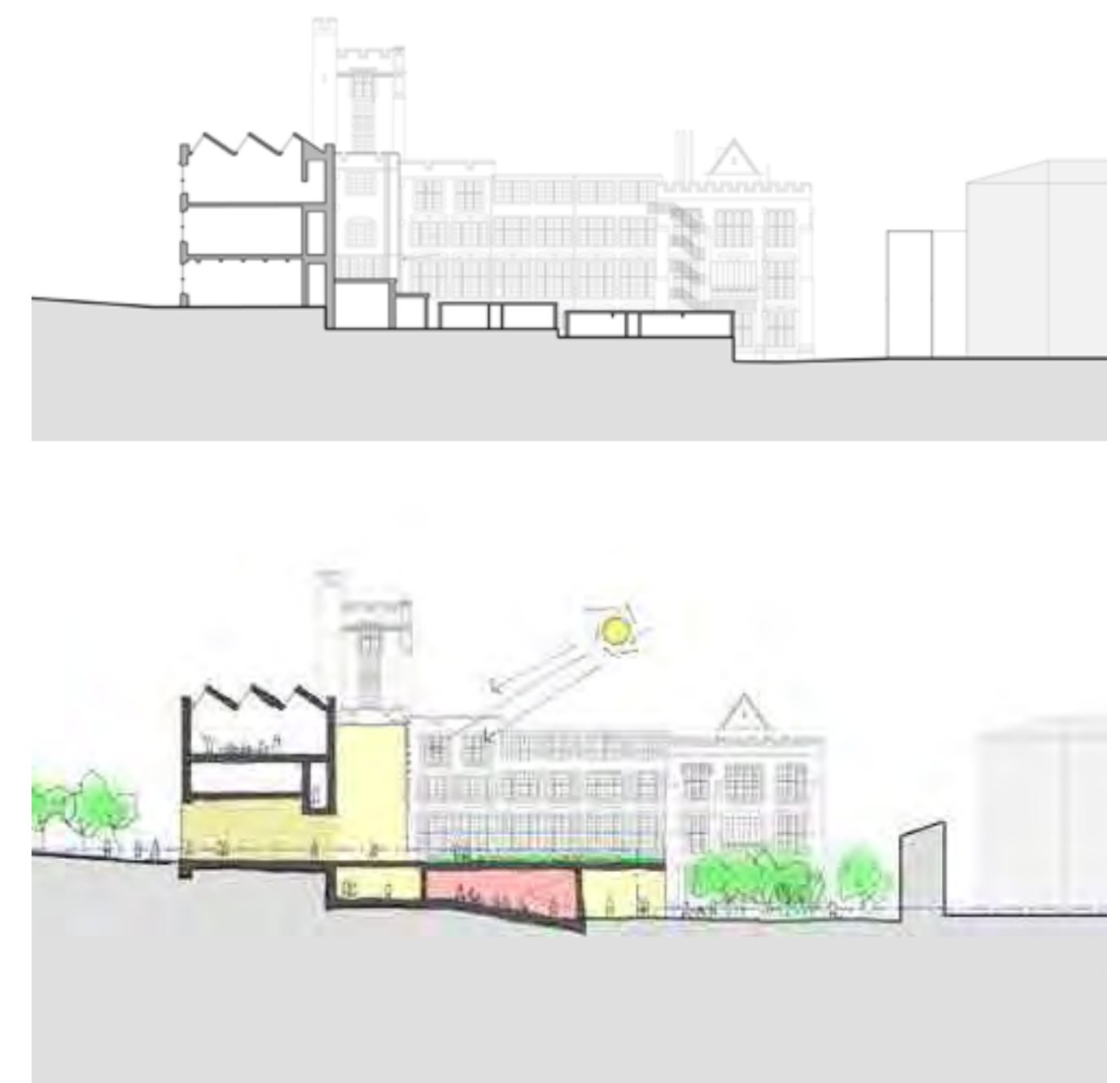


1. Entrance piazza
2. Reception
3. New entrance lobby
4. Cafe
5. Admin office
6. Tutorial room
7. Garden
8. Garden terrace
9. Existing vertical circulation
10. New vertical circulation
11. Storage
12. Group study rooms
13. Break out space

Initial concept study for the proposed lower ground floor interventions



Proposed Lower Ground Floor Plan



Initial before (top) and after (bottom) section studies through the new main entrance and lower ground floor extension

SECTIONS / ELEVATIONS



Existing Sectional Elevation A

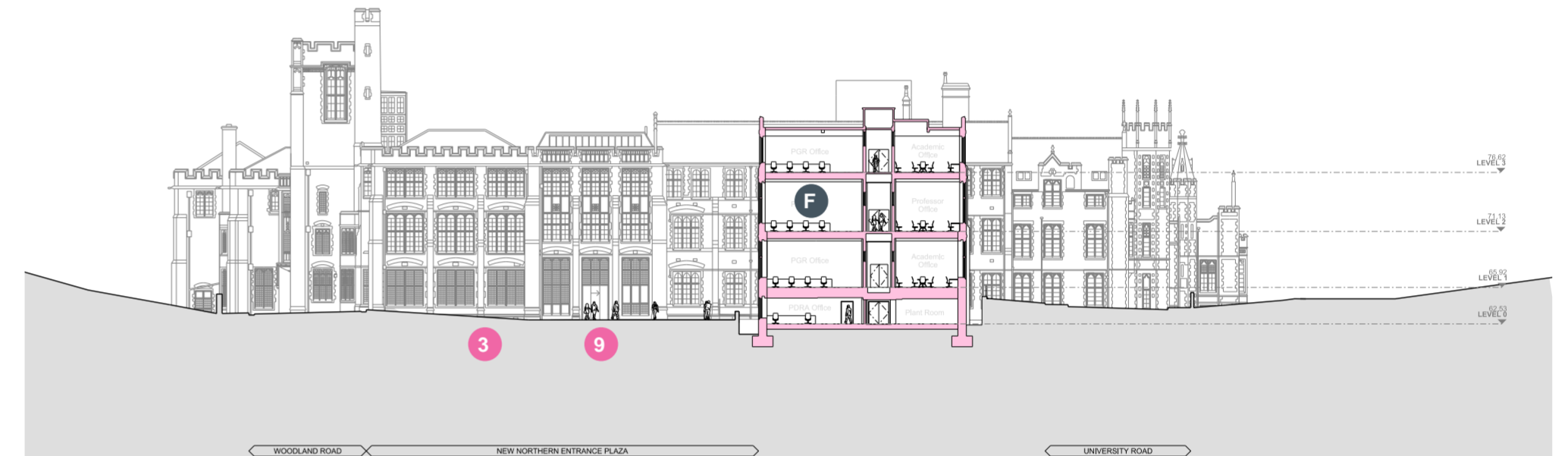


Existing Sectional Elevation G



Proposed Sectional Elevation A

Existing and Proposed Sectional Elevation A



Proposed Sectional Elevation G

Existing and Proposed Section Elevation B



Existing East Site Elevation



Proposed East Site Elevation

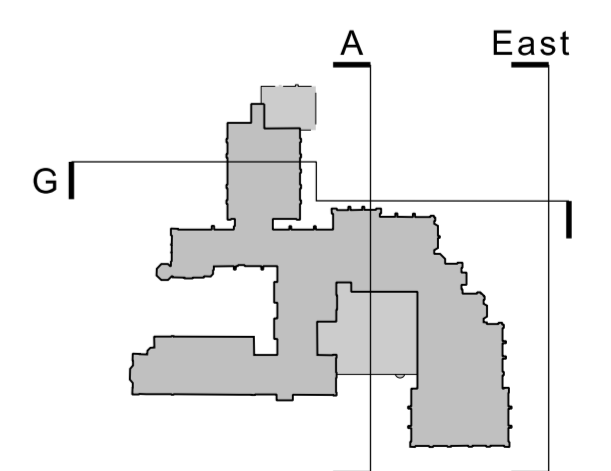
Existing and Proposed East Elevation to Woodland Road

KEY TO SPACES:

- A. New Senior Common Room
- B. Entrance Lobby
- C. New Atrium
- D. New Raised Lawn and Terrace
- E. New Lecture Theatre
- F. Offices

NOTES:

- 1. Existing services removed
- 2. Outbuildings demolished
- 3. New northern landscape and plaza
- 4. New fire escape doors
- 5. Non-original mezzanine and suspended ceiling removed
- 6. Northlights reinstated
- 7. Redundant plant removed
- 8. Non-original fire escape doors removed and window reinstated
- 9. New main entrance

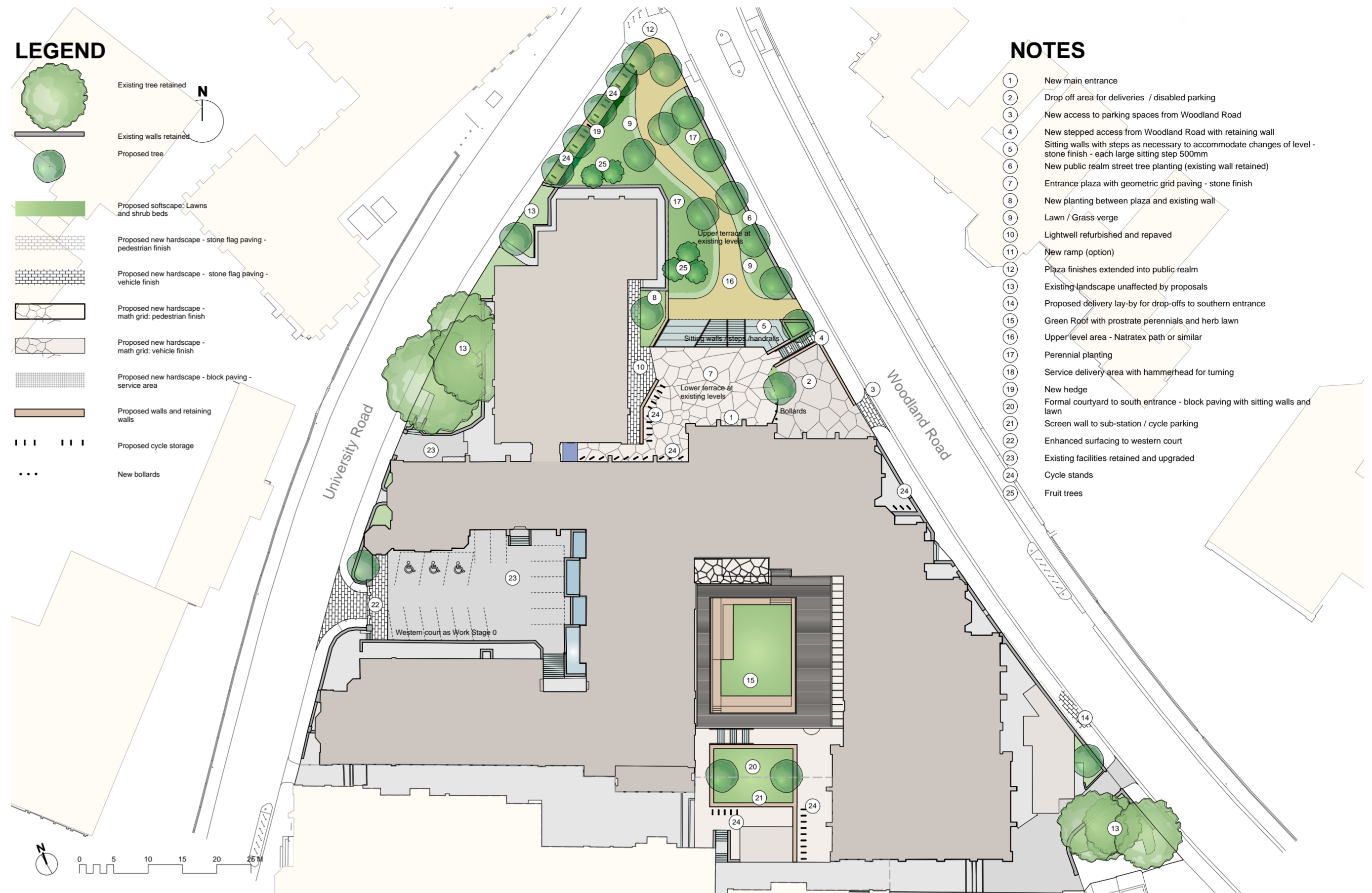


Drawing Key Plan

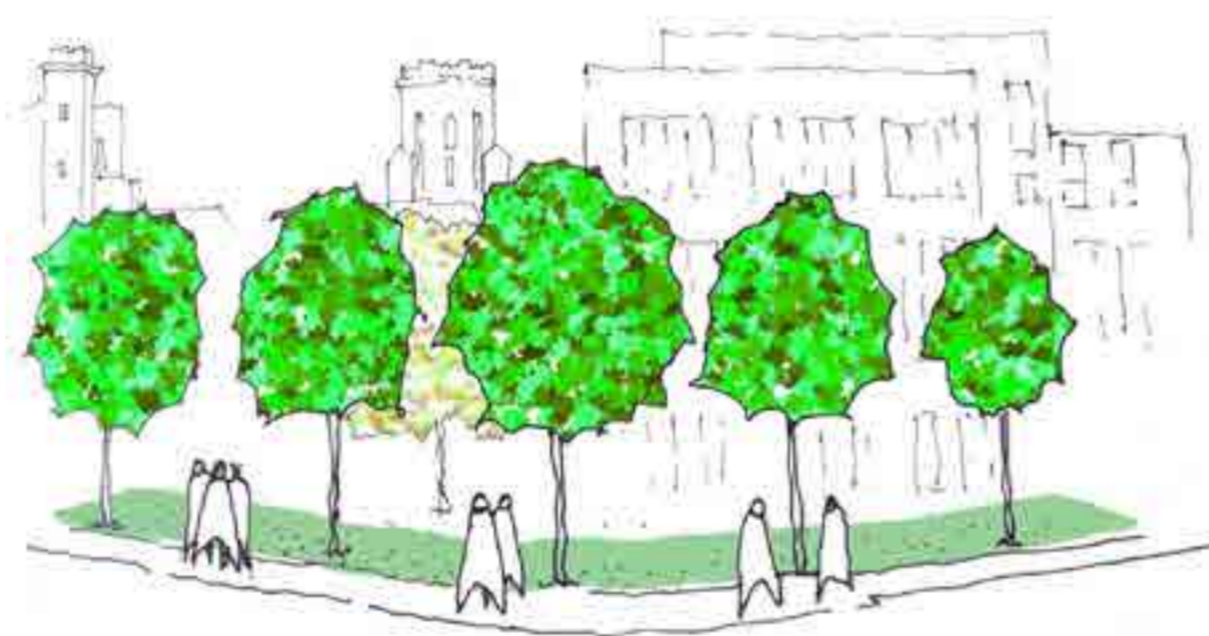
The key features of the proposed landscape design are as follows:

- A new landscape and entrance plaza to the north of the building, which opens up the site and connects the new main entrance to the core of the University Precinct to the north. This plaza features sitting walls and steps which help deal with the level changes across the site and includes new street trees and planting.
- A new landscaped terrace with raised lawn at ground floor level within the southern courtyard of the existing building.
- A new landscaped courtyard at lower ground floor level
- Refurbishment of the western courtyard to improve the current parking and access provision.
- General improvement of hardscape finishes to complement and enhance the setting of the Fry Building.

These spaces will become highly usable areas for outdoor teaching, relaxation and social interaction, and with the potential to accommodate new activities as demand increases or changes over time.



Proposed Landscape and Urban Realm Plan



Defined external spaces through new tree planting along site boundary



Axial connections and open spaces



Alternatives to grass lawns



Pop-up Cafe



Open Space / Plaza



Green Space in front of Wills Memorial Building



Paving Precedent

In line with Bristol City Council's sustainability policy, the initial environmental and sustainability design has demonstrated the following key outcomes:

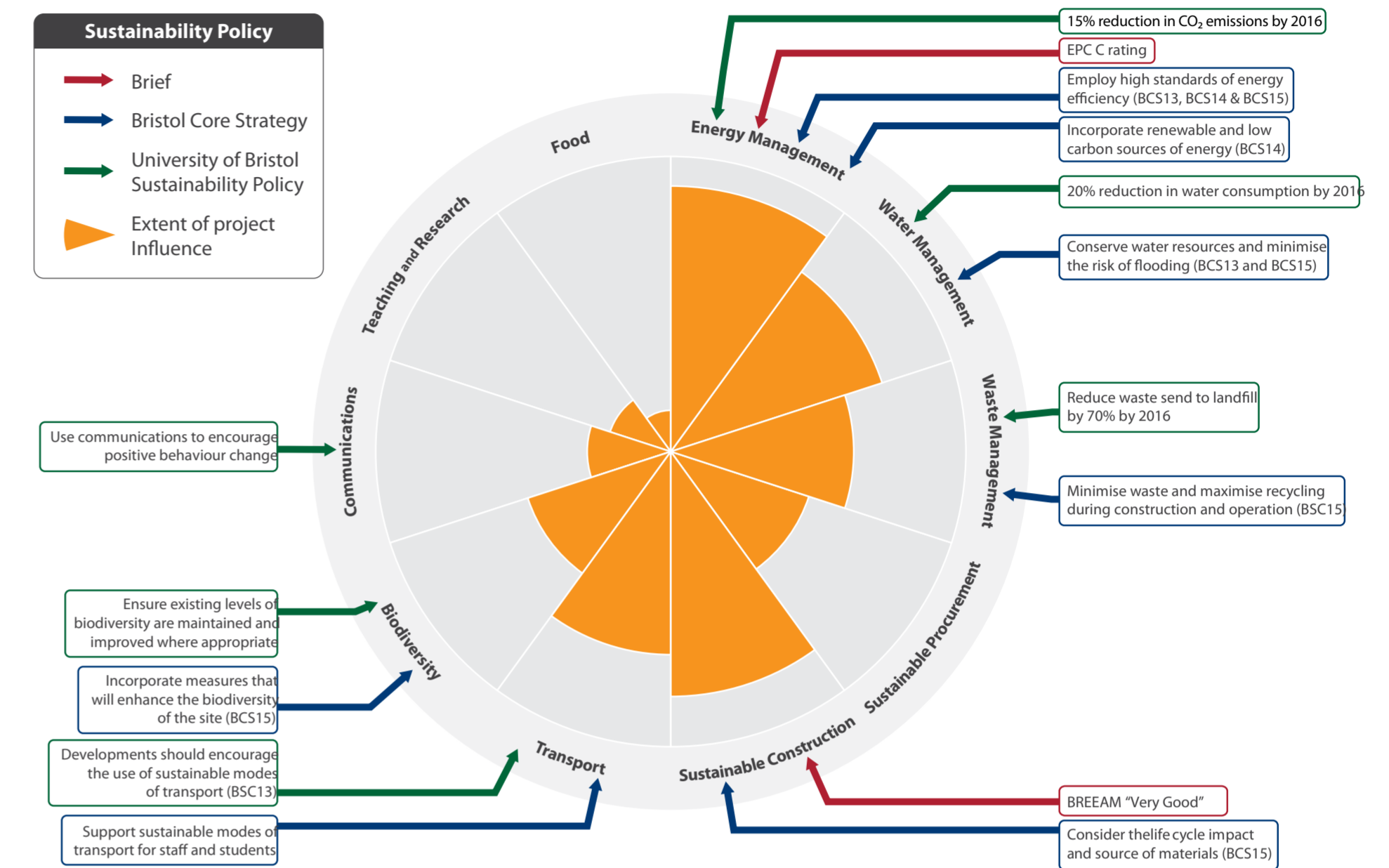
- A BREEAM rating of 'Very Good' is achievable and an EPC 'C' rating is also an achievable target.
- Solar Photovoltaics (PV), Combined Heating Power (CHP) and a connection to a universities local district heating network (from existing plant located in the Wills Memorial Building) are the most viable options for incorporating low and zero carbon technologies into the project.
- Further investigation into the district heating opportunities will be undertaken. This will include looking at the possibility of 'future-proofing' the installation such that it could connect to the proposed 'ELENA' district heating network.
- The preferred approach to improving energy efficiency is to concentrate on the building fabric and system Improvements (PFSI) and in addition to this provide a Combined Heat and Power plant (CHP). It would also be possible to accommodate 200m² of photovoltaic cells (PV) at roof level but this needs to be carefully considered given the heritage considerations associated with the Fry Building. These measures combined would potentially provide a carbon reduction of approximately 20%.
- The listed building status imposes significant restrictions on the ability to reduce energy consumption through upgrading the existing fabric.
- The existing building has generous floor to ceiling heights and a considerable amount of thermal mass, which will help moderate the internal temperature during the summer months and provide resilience against climate change.
- We also plan to carry out a wider review of the sustainability issues and emerging proposals relating to water, waste, materials, biodiversity and transport.

In conclusion the initial feasibility work has established the following:

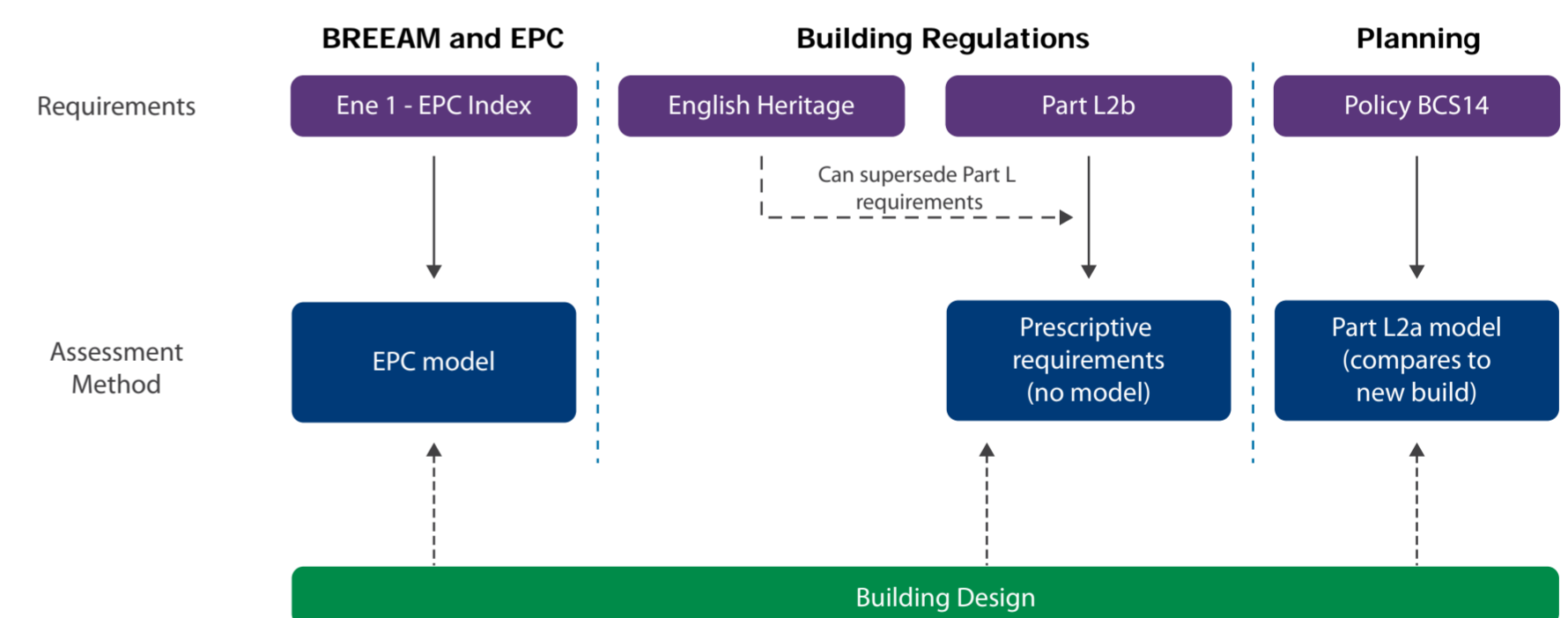
1. The University of Bristol's sustainability aspiration and those of the Bristol City Council planning department are aligned.
2. Meeting the project brief requirements and demonstrating compliance with Bristol City Council policy BCS14 requires the creation of a Part L2a 2010 model and an EPC energy model.

These will both be developed to demonstrate compliance ahead of the full planning application.

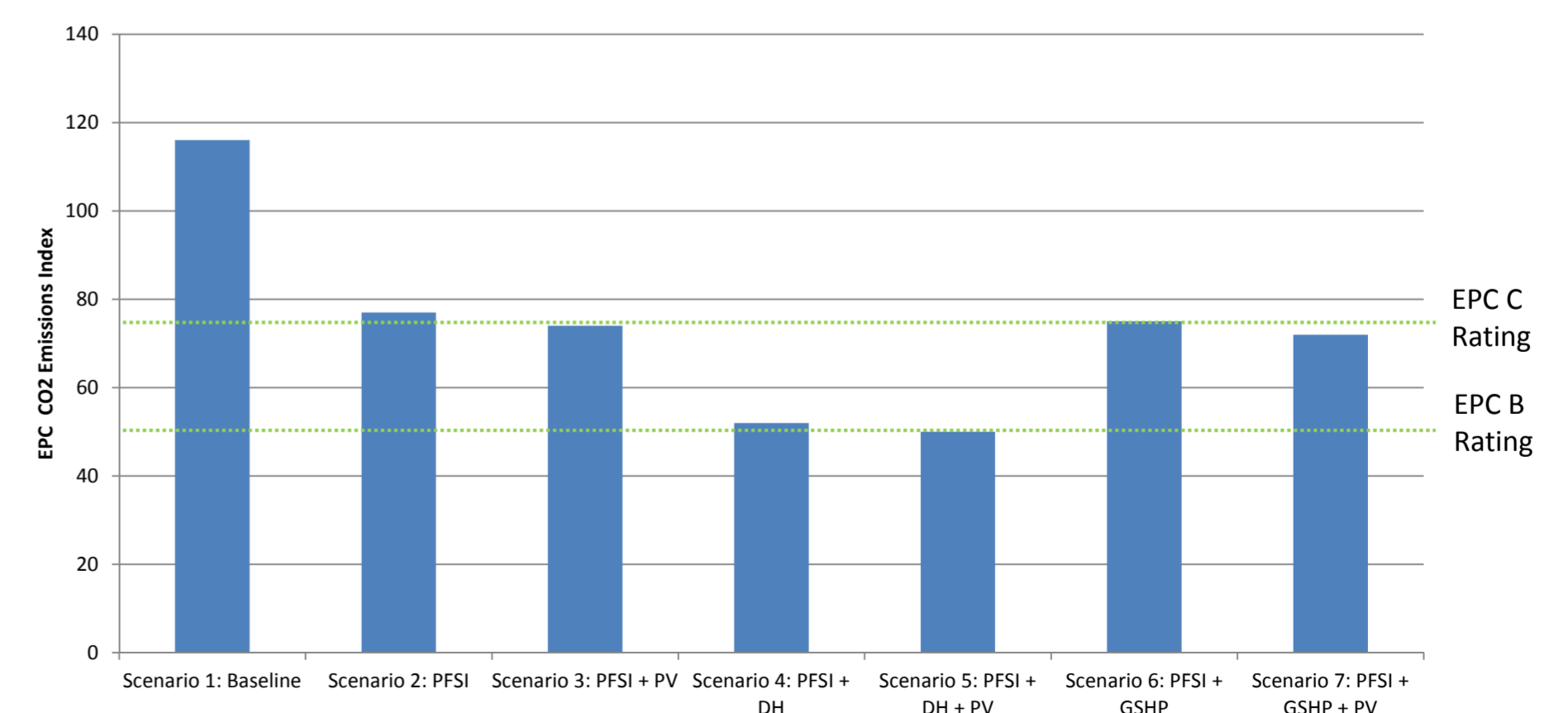
University of Bristol - Sustainability Policy



Project sustainability drivers and the ability of the project to address these drivers



Energy compliance requirements and assessment methods



Initial EPC Study results

THE TEAM

Wilkinson Eyre Architects

Buro Happold Multidisciplinary Engineers

4D Landscape Design Landscape Architects

Capita Project Management, Transport and Ecology

Gleeds Cost Consultants

CSJ Planning Consultants

Heritage Places Heritage Consultant



Bodleian Library, University of Oxford
Extensive refurbishment, alteration and extension of a Grade II listed building in a Conservation Area



Explore@Bristol
Refurbishment, alteration and extension of a Grade II listed building



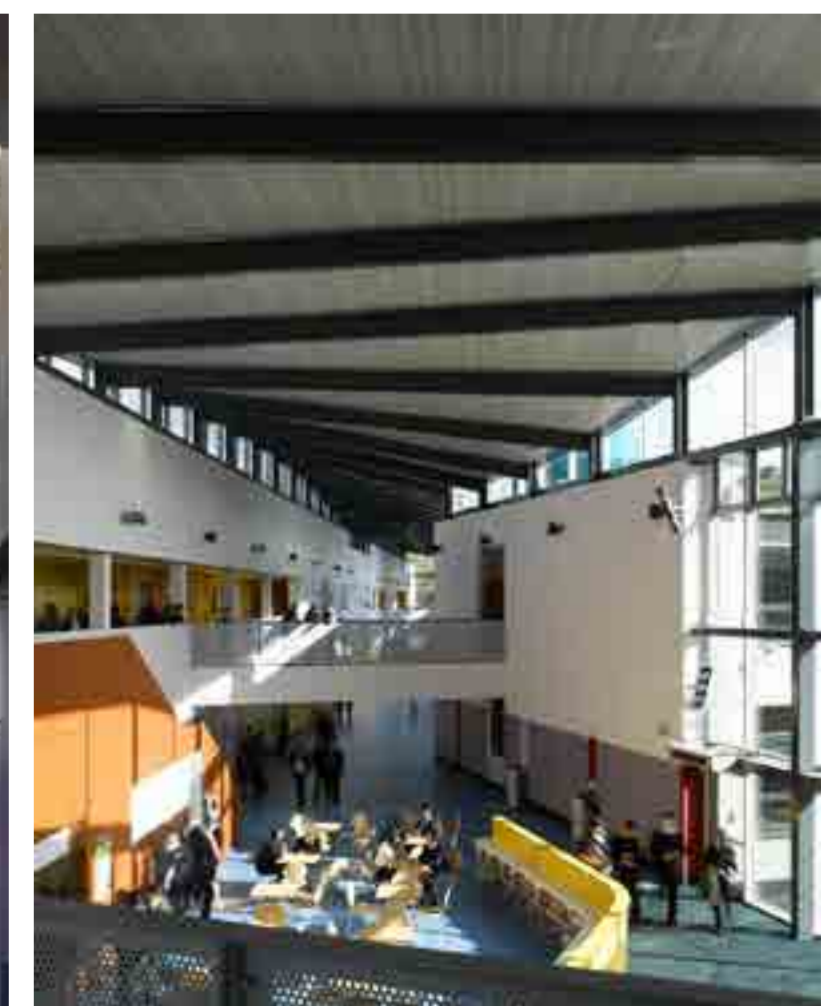
Department of Earth Sciences, University of Oxford
New building located adjacent to other listed buildings and a Conservation Area



Bath Spa Railway Station
Refurbishment, alteration and extension of listed Brunel structures adjacent to the UNESCO World Heritage Site



The Forum, University of Exeter
Higher Education and Research Building of the Year, World Architecture Festival 2013



Building Schools for the Future (Wilkinson Eyre, Buro Happold and 4D Landscape Design)
Bristol Brunel Academy (left) and Bristol Metropolitan Academy (right)

PLANNING CONTEXT AND CONSTRAINTS

Location and Designations

The site lies within the Cabot ward in the University Lower Super Output area, within the City Centre boundary.

Other than the site's allocation as part of the University Area, it is not covered by any additional land use, aesthetic or ecological designations.

RELEVANT PLANNING POLICY CONTEXT

The relevant planning policy context comprises the following:

- National Planning Policy
- National Planning Policy Framework, March 2012.
- Technical Guidance to the National Planning Policy Framework (Flood Risk and Minerals Planning), March 2012; and
- PPS 5: Planning for the Historic Environment: Historic Environment Planning Practice Note, March 2010.

The Statutory Development Plan

- The Bristol Development Framework Core Strategy, adopted June 2011; and
- The saved policies contained within the Local Plan, adopted 1997.

Supplementary Planning Documents, Policy Advice Notes and Practice Guides

- PAN 2: Conservation Area Enhancement Statements, November 1993;
- PAN 14: Safety and Security, June 1997;
- PAN 15: Responding to Local Character – A Design Guide, March 1998;
- Climate Change and Sustainability Practice Note, September 2011;
- SPD 5 Sustainable Construction, 2005;
- SPD 7: Archaeology and Development, 2006; and
- SPD 11: University of Bristol Strategic Masterplan, 2006.

Emerging Local Planning Policy

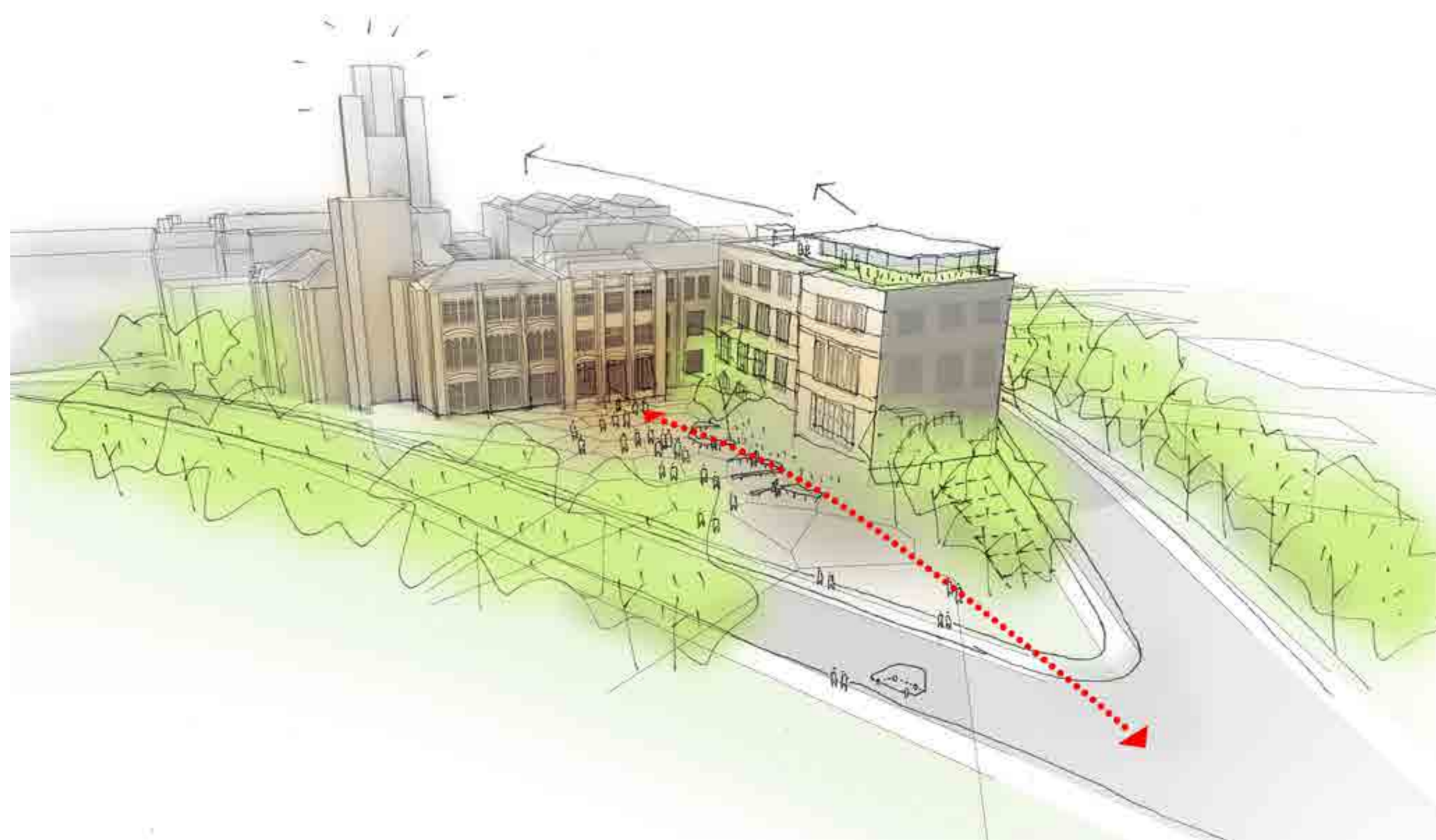
- The Bristol Central Area Action Plan, preferred options, September 2013; and
- The Site Allocations and Development Management Policies publication version, March 2013.

PRINCIPAL POLICY TESTS

The development proposal will consider and assess the following seven issues as part of the design process. These comprise:

The principles of development by the University;

- Heritage impacts;
- Design and local context considerations;
- Trees, soft planting and the public realm;
- Sustainability;
- Transport, movement and parking issues; and
- Ecological impacts.



Initial Concept Study for the entrance plaza with axial approach to building and view connections. Image also shows possible future roof-top extension to the northern wing.