Design & Access Statement

New Teaching Building - Meadow High School

December 2022 REV. B
Project No. 4267
Client: London Borough of Hillingdon

CDC Studio

Issue Status

ISSUE	DATE	REVISION	BY	CHECKED
DRAFT	09 Dec 22	-	AK	RD
PLANNING	13 Jan 23	A	AK	RD
PLANNING	07 MAR 23	B	RD	DD

Contents

Preface

Introduction

CDC Studio were appointed by the London Borough of Hillingdon to develop a new teaching block to replace temporary teaching spaces at Meadow High School.

Meadow High School is a Hillingdon maintained special school with a designation of Complex and Moderate Learning Difficulties (including Autistic Spectrum Conditions) for pupils aged 11-19.

The proposals include the following:

- Demolition of temporary teaching spaces.
- Redesign of the landscape and external spaces to provide better external space provision for pupils and staff.
- Integrate the new teaching block into existing school facilities, creating efficient routes of movement between accommodation blocks, and improving cross-site movement of pupils and staff.
- Incorporate organisational and construction processes that reduce disruption to the school and enables its operation to continue unhindered.
- Phasing of the works and carefully considering ease of construction is key to mitigating potential disruption.
- Incorporate an inclusive design process that involves all stakeholders and produces a product that fulfils user and stakeholder aspirations.

Concept visualisation

Preface

Project Team

Project Team

Client: London Borough Of Hillingdon

End User: Meadow High School

Employers Agent: Pellings

Quantity Surveyor: Pellings

Principal Designer: Pellings

Architect: CDC Studio

Civil / Structural Engineer: MHA structural Design

Landscape Architect: Hyland Edgar Driver

Service Engineers: Edward Pearce

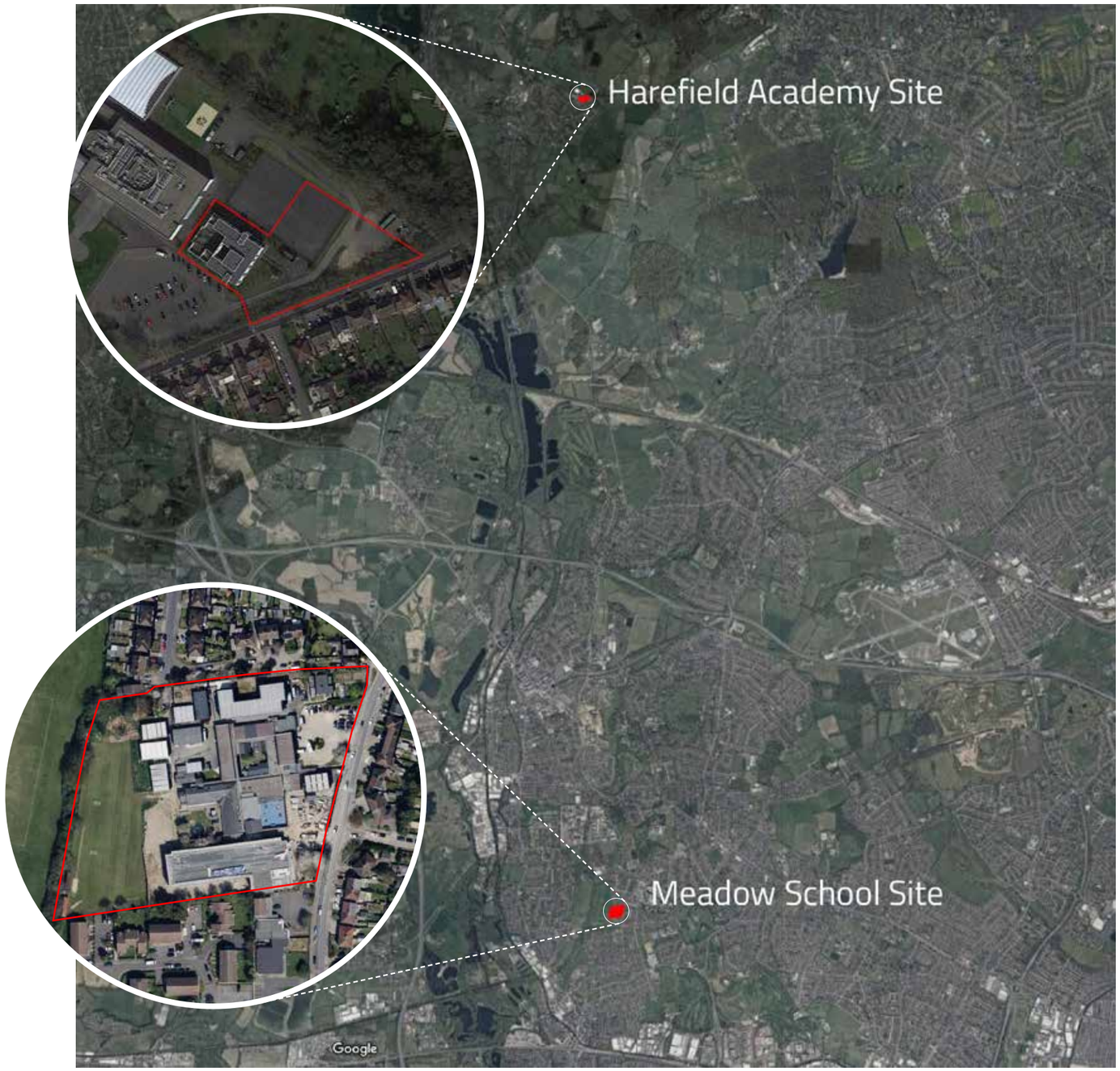
Fire Consultant: Hoare Lea

Acoustic Consultant: Sharps Redmore

Transport Consultant : Robert West

1.0 Project Background

1.1 Special School Expansion Sites



The London Borough of Hillingdon has initiated two projects to accommodate pupils of Meadow High School over two sites.

Site A comprises a site at Harefield Academy, Hillingdon forming the Hillingdon application ref: 17709/APP/2022/1387. The brief required the establishment of a new facility for up to 90 pupils identified as ‘Pathway 1’, which are children with complex learning difficulties and autistic spectrum conditions.

Site B (the focus of this application) comprises the existing site of Meadow High School, Hillingdon. The brief requires the replacement of existing single-storey structures on the site with a new teaching block.

1.0 Project Background

1.2 Meadow High School

Meadow High School is a local authority maintained community special school in Uxbridge. The school currently serves pupils in school years 7-14 (pupil ages 11-19).

Maintained by the London Borough of Hillingdon, the school has a designation of Complex and Moderate Learning Difficulties (including Autistic Spectrum Conditions).

“Our provision focuses on personalised learning to meet the holistic needs of the individual. This means that we baseline and monitor progress not only towards the aspirations and outcomes as identified in the EHCP, but also in relation to communication, emotional regulation and independence.” Meadow High School

It is the intention of this project to improve the provision of Meadow High School by creating a teaching block to replace a cluster of temporary teaching accommodation.

2.0 The Site

2.1 Aerial Site Context

Note: Aerial view was taken prior to completion of Sports Hall, MUGA and car park.

2.0 The Site

2.2 Site Photos

School entrance from Royal Lane and reception.

View from car park exit facing West towards Sports Hall, MUGA and Sixth Form block.

View facing East toward temporary classrooms. Sports Hall and MUGA in distance, sports field in foreground.

View of temporary classrooms.

2.0 The Site

2.3 Existing Site Plan and access

Meadow High School is situated in the London Borough of Hillingdon, within the ward of Brunel, a short distance from Hillingdon Hospital.

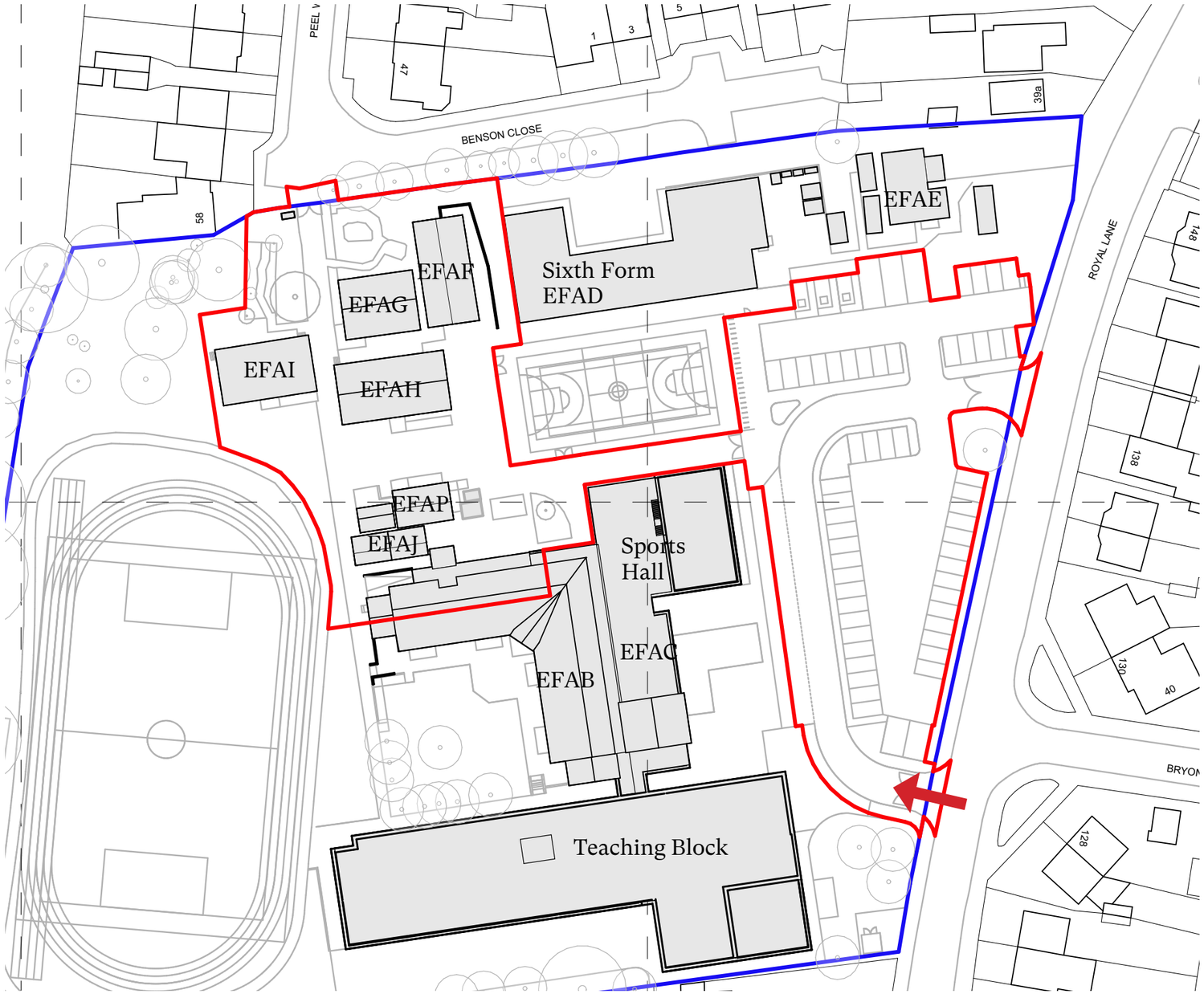
The school site has a total area of 2.12ha, as indicated with a blue line.

Pupil, staff and visitor access is via Royal Lane, indicated with a red arrow. This entrance provides drop-off and car park within the site boundary.

A secondary maintenance access to the site is located via Peel Way at the junction of Benson Close.

Visitor and staff enter the buildings via the security line at the school reception to the South-East of the site.

Works associated with this application are indicated within the boundary of the red line, including vehicular access to the site and car park. Application boundary has an area of 0.58ha.



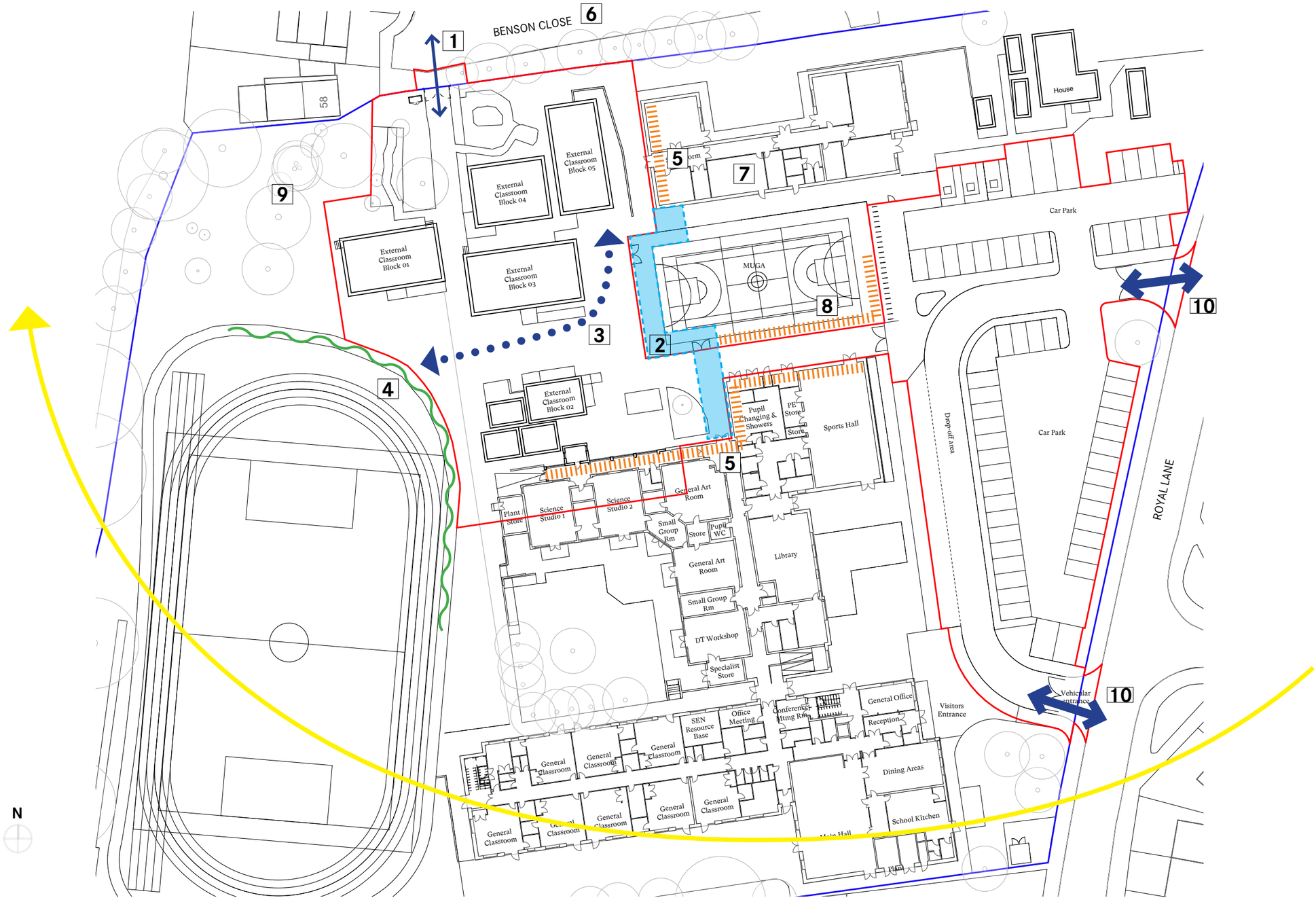
Site plan as existing.

Red line indicates application boundary.

Blue line indicates school ownership boundary.

2.0 The Site

2.4 Site Constraints



1 Existing gate access to site for maintenance vehicles (eg. lawnmower) to access sports field to be maintained during and after construction.

2 Pupil footpath link between Sixth Form and main building to be maintained during and after construction.

3 Pupil footpath link between Sixth Form and sports field to be maintained by proposed design.

4 Development boundary defined by edge of sports field and running track.

5 Maintain use of corridor and teaching spaces during construction.

6 Adjacent residential street to be considered within design and during construction.

7 Adjacent two storey Sixth Form building.

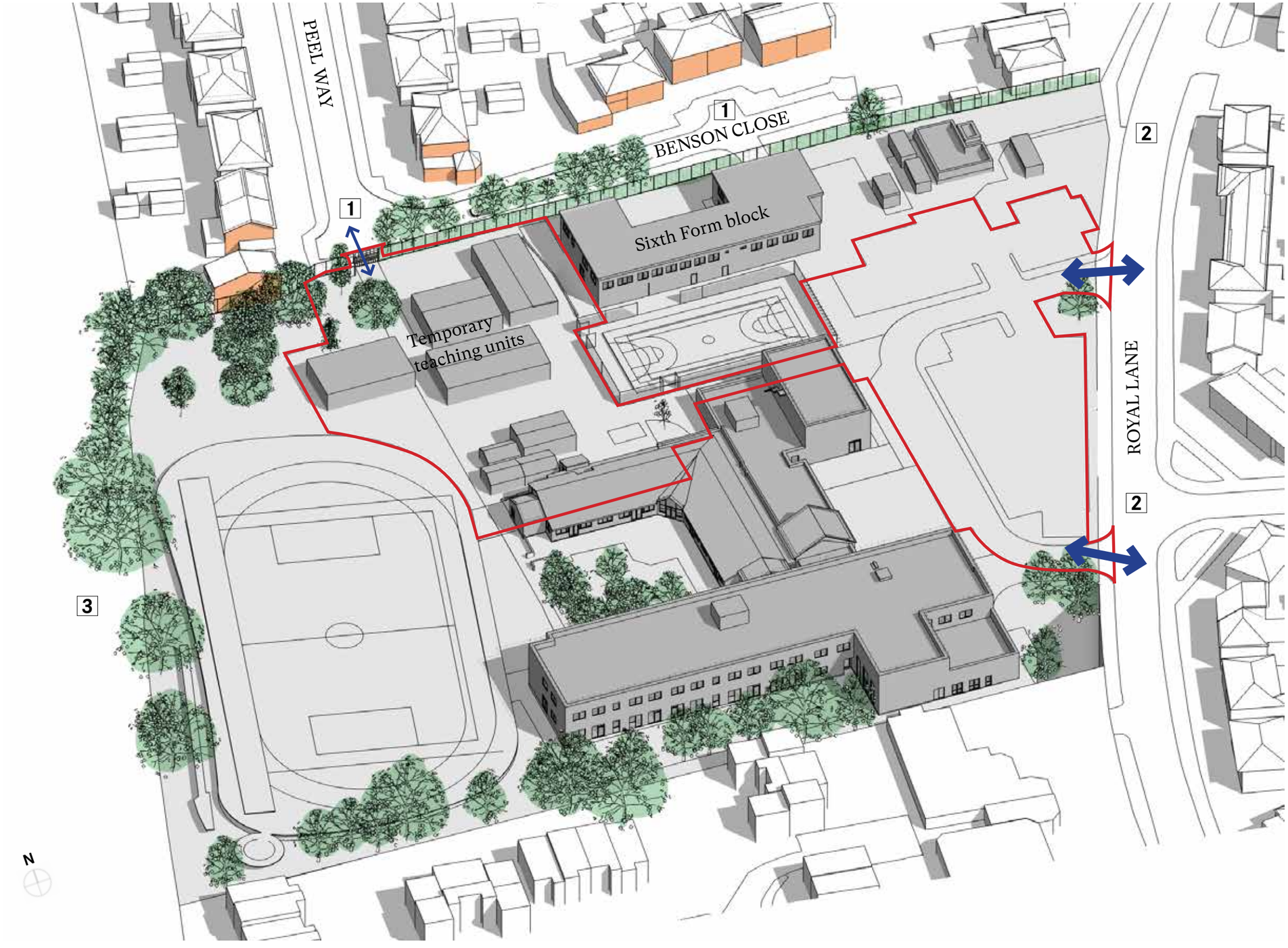
8 Maintain adjacent MUGA, Sports Hall and pupil access to play areas.

9 Existing trees and bushes.

10 Pupil, staff and vehicular access to site.

2.0 The Site

2.5 Site Constraints



The school site is located within a wider urban context, bordered with residential streets.

1 **North boundary:** The northern boundary is bordered by a line of existing trees and a grass verge. The site faces onto Benson Close where several residential frontages sit broadly opposite the long elevation of the existing two-storey Sixth Form block. The existing temporary teaching units and school access gate face onto the side elevation of three properties on Peel Way.

2 **Eastern Boundary:** The main school Entrance is accessed from Royal Lane. Residential dwellings face the school car park. The north-eastern corner of the school faces the Hillingdon Hospital site on Royal Lane.

3 **Western Boundary:** The school playing fields are bordered by a dense tree boundary and playing fields beyond.

2.0 The Site

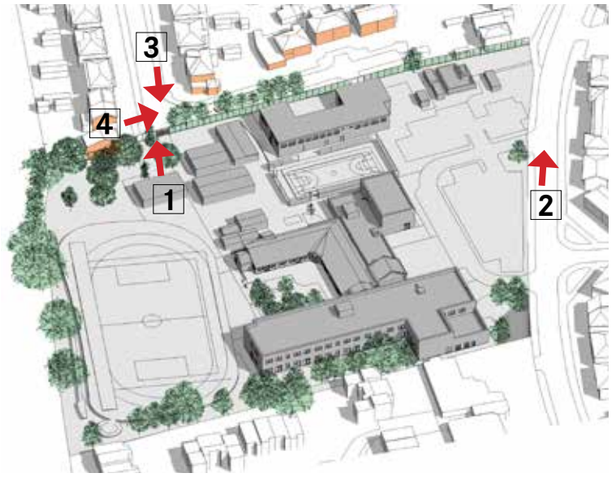
2.6 Adjacent context

1 North boundary school gate facing out to Peel Way.

2 East boundary front of school, car park exit onto Royal Lane.

3 Facing back to north boundary school gate at the junction of Peel Way.

4 Grass buffer screening between school boundary and Benson Close.

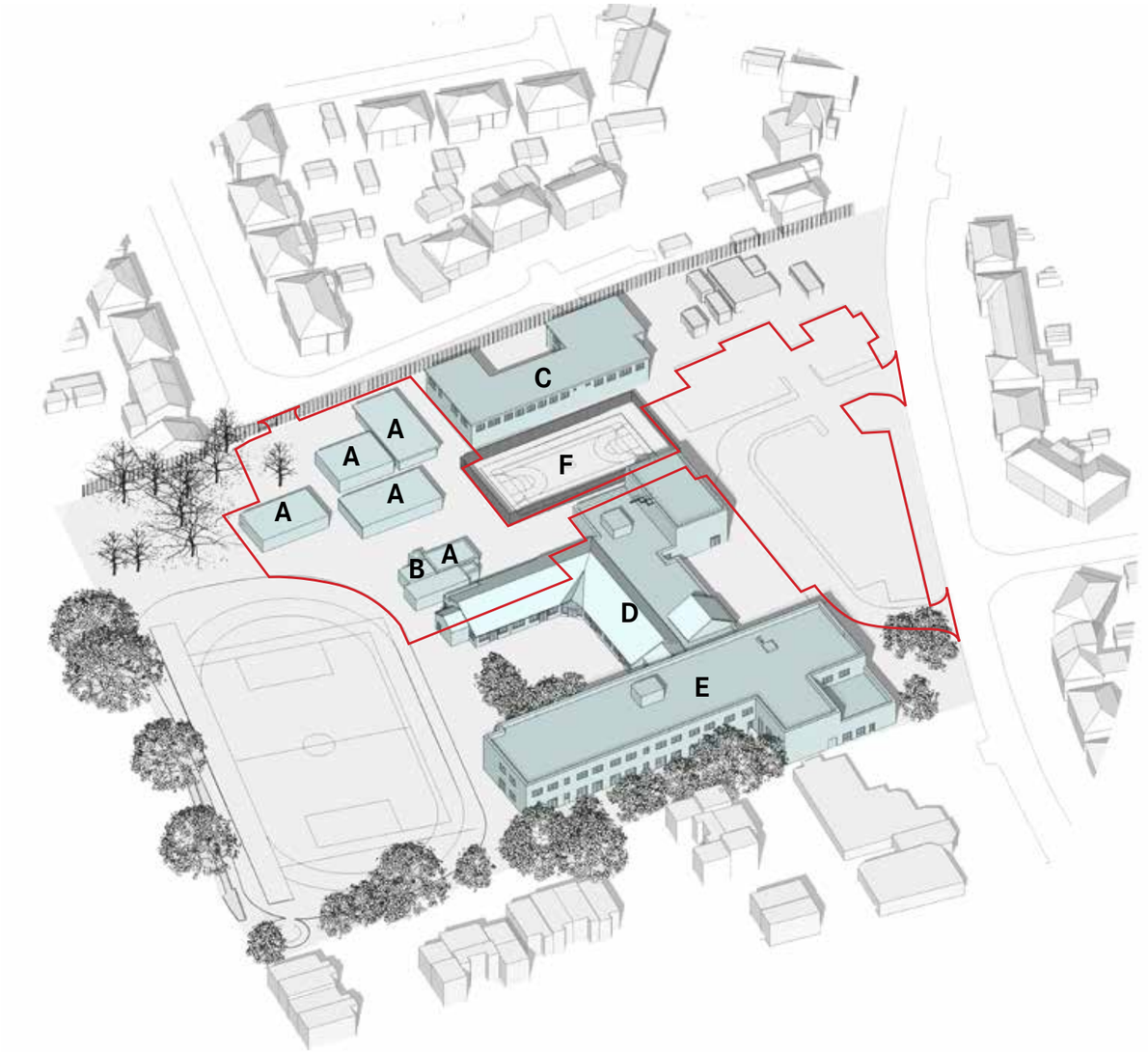


2.0 The Site

2.7 Existing Buildings

Within the Meadow High school wider site there are a number of existing buildings, including a new build teaching wing recently complete to the south and east of the site. Also recently complete is a new MUGA located in close proximity to this project's site.

Within the projects red line boundary there are a number of temporary buildings that are in poor condition and in need of replacement. These are to be demolished.



a Temporary teaching space
b 'Tuck' shop temporary structure
c Sixth Form
d Main school building
e New build teaching wing
f MUGA


A) Temporary teaching space


B) 'Tuck' shop temporary structure

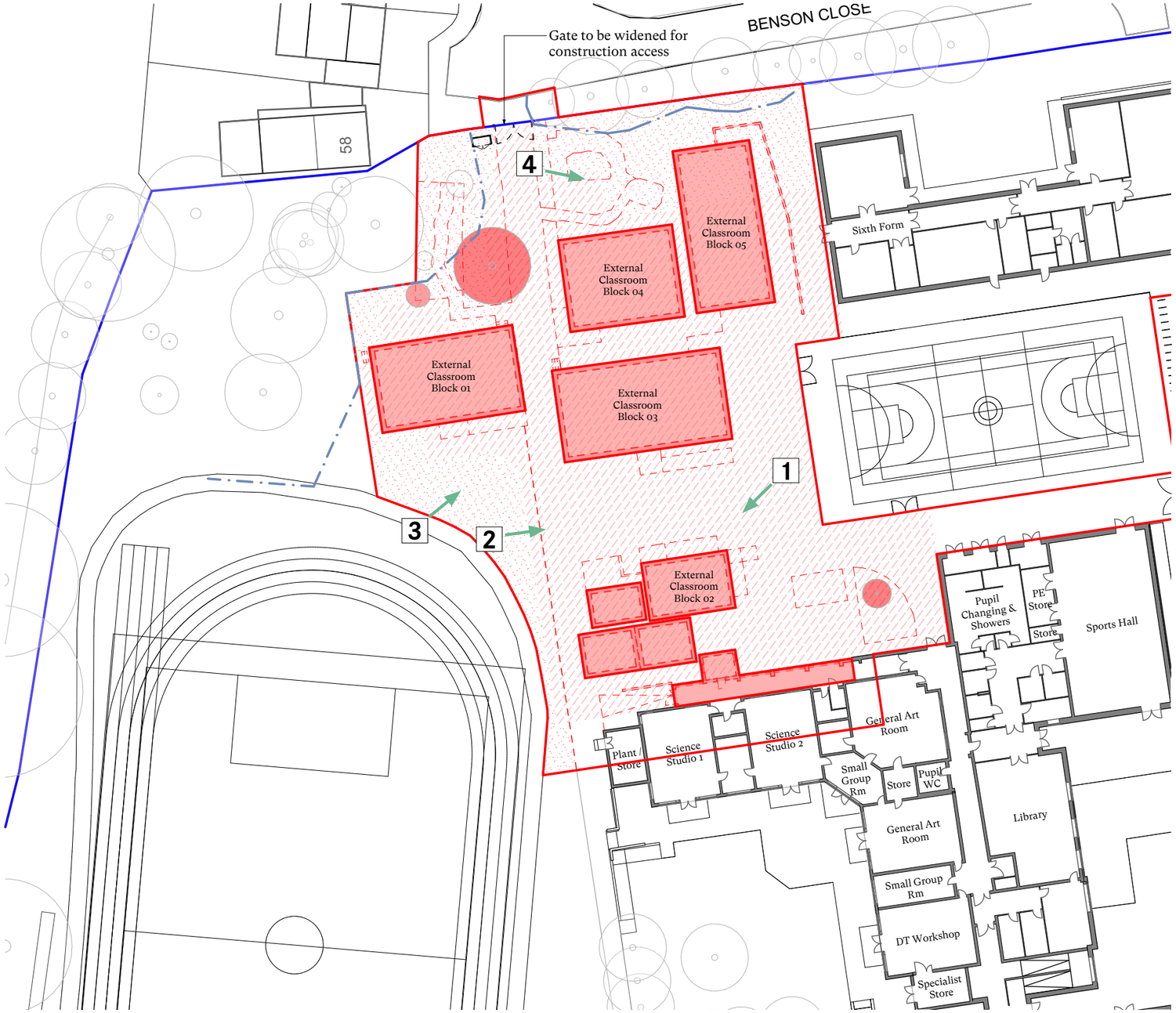

A) Temporary teaching space


A) Temporary teaching space


E) New build teaching wing

2.0 The Site

2.8 Demolition Plan



Application Boundary

Ownership Boundary

Tree protection fence (see tree protection plan)

Building to be demolished

Element to be demolished

Area of external surface to be removed for new building work & hard landscaping

Area of external surface to be removed for new soft landscaping

1 Temporary teaching space and adjacent access ramp.

2 Temporary teaching spaces. MUGA and sports hall in behind.

3 Temporary teaching spaces.

4 Temporary teaching spaces with Sixth Form in background.

2.0 The Site

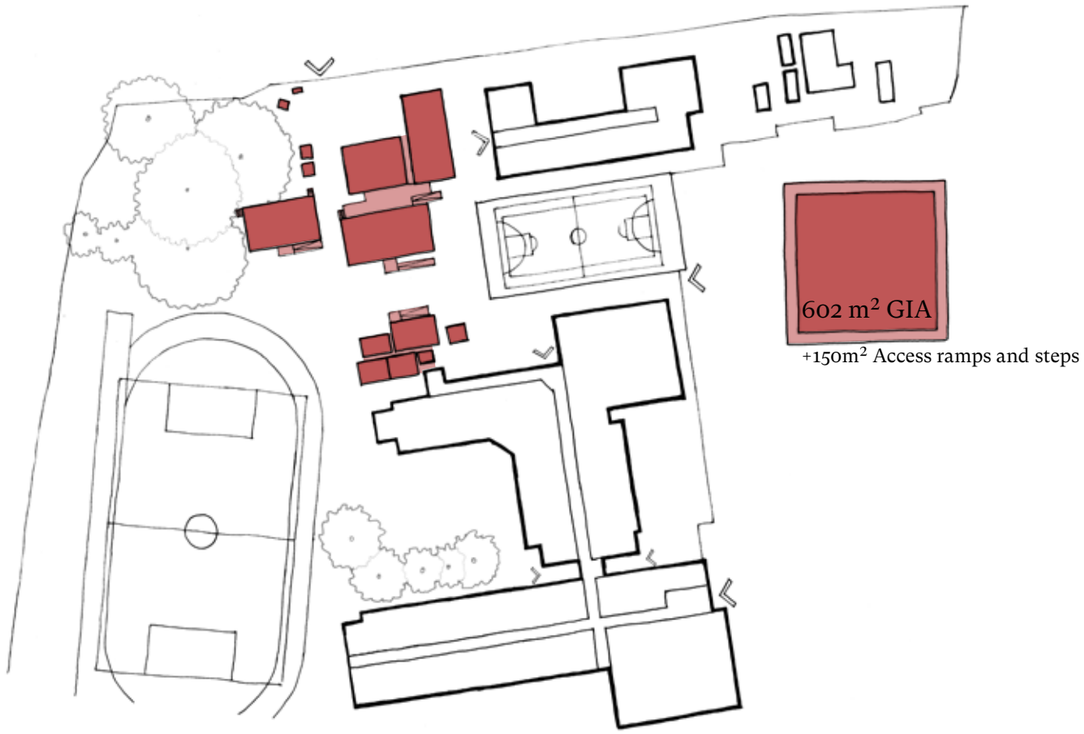
2.9 Available site

Currently, the single-storey temporary accommodation provides teaching space for 82 pupils.

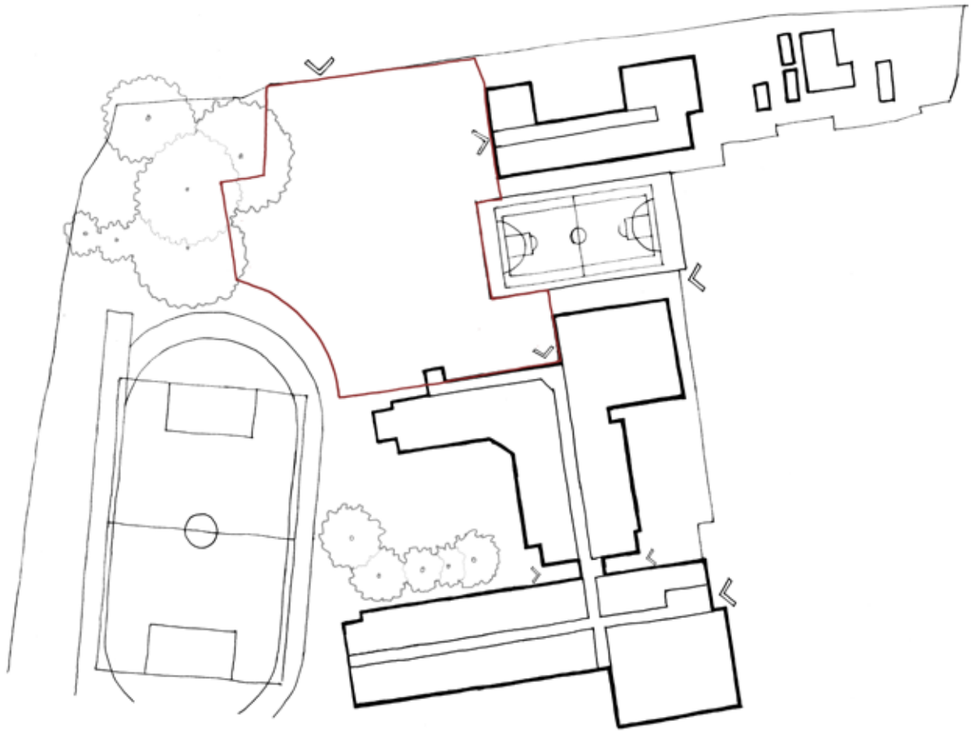
These temporary units have been in operation from as far back as 2004 and are in need of replacement.

The gross external area of the temporary units is calculated as 602 m^2, with a further 150 m^2 of access ramps and walkways. It is proposed that the irrational layout of temporary units is replaced with quality external spaces and a better suited new teaching block.

Furthermore, the available site opens up the opportunity for the design team to assess the movement, connectivity and open space on site and in turn provide a better teaching and learning environment for the school.



Temporary units identified in red for removal.



Available site after removal of temporary units.

3.0 Project Aims

3.1 Educational Requirements Brief

The following project brief has been developed by CDC Studio with the London Borough of Hillingdon and key stakeholders at Meadow High School.

Accommodation requirements and areas have been developed using Building Bulletin 104 - Area guidelines for SEND and alternative provision: BB104

Pupil occupation of new building
7 X 10 pupil classrooms used as form rooms
Pathway 2 & 3 children
Ambulant designation - no more than 10% wheelchair users

Seven classrooms
Based upon BB104 Zone H space
One Room to be used for music
One room to be ICT rich
Adjacent store per classroom

Fitness room
BB104 Zone J ‘Heavy Practical’ space
Current fitness space used by school
Adjacent food tech store

Food tech room
BB104 Zone Upper I ‘Heavy Practical’ space
Adjacent food tech store

Science room
BB104 Zone I ‘Light Practical’ space
Adjacent science store

6th form common room
BB104 Zone E space

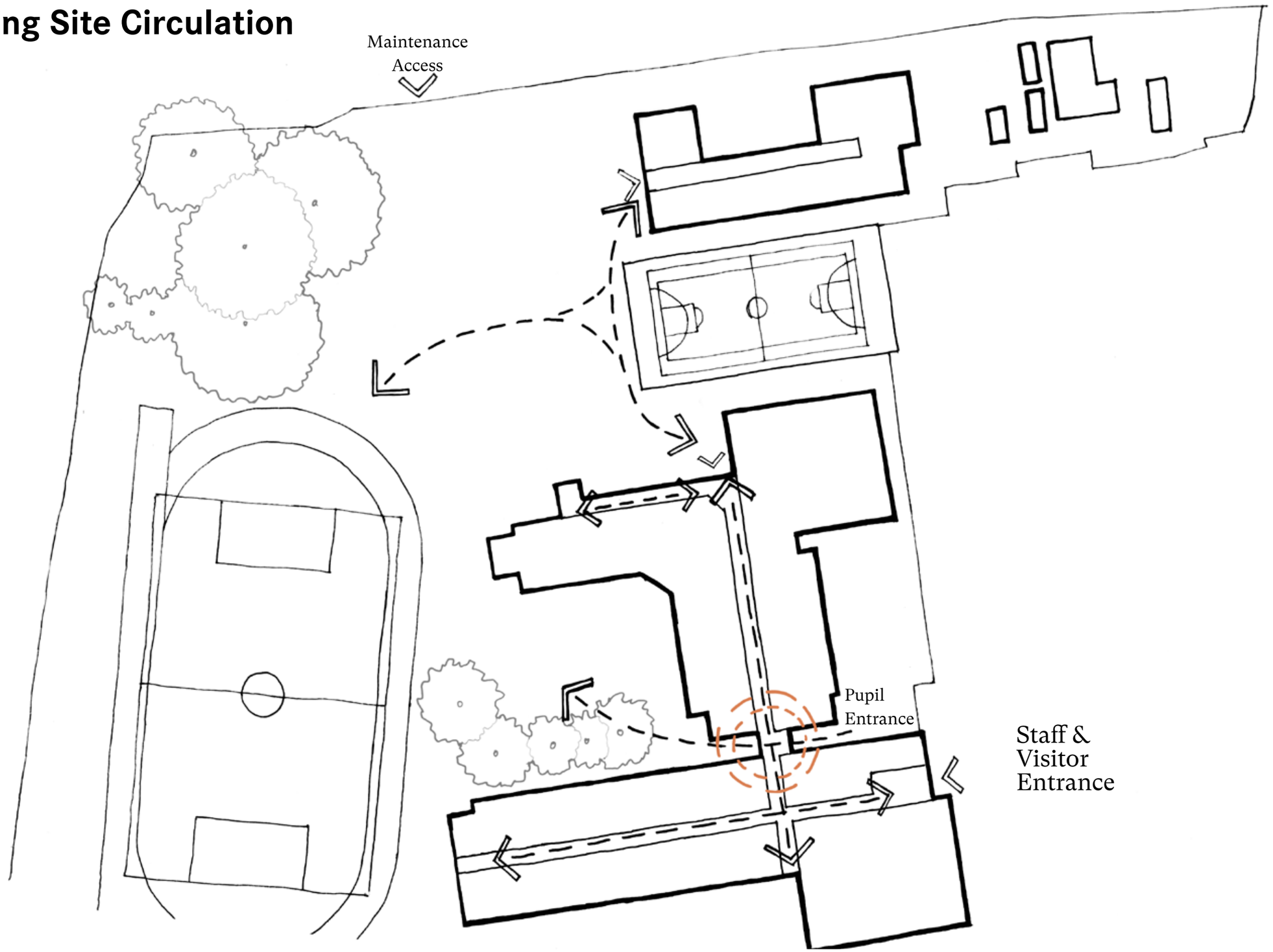
Group rooms
4 Group rooms
1 Small break out room for ‘time out’
Quiet study space for students

Staff
2 Assistant Head offices - single occupancy
1 Team Leader office - 5 person occupancy
1 Faculty Leader office - 5 person occupancy
1 Staff work room
1 Staff social room

WC Provision
4 Staff WCs (3 of which accessible)
8 Pupil WCs (3 of which accessible)
1 Hygiene Room

3.0 Project Aims

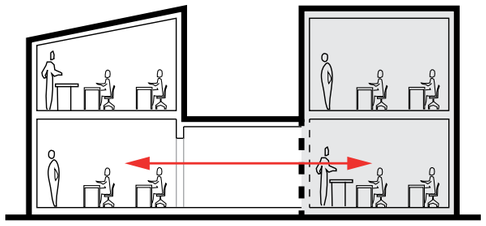
3.2 Existing Site Circulation



3.0 Project Aims

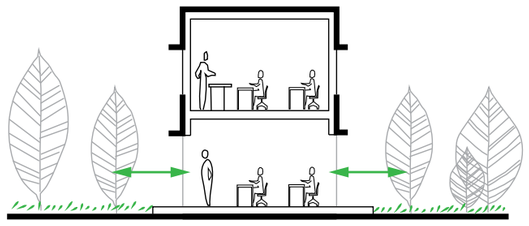
3.3 Core Design Principals

The design aims to create teaching spaces that provide successful environments for both staff and pupils with the following values:

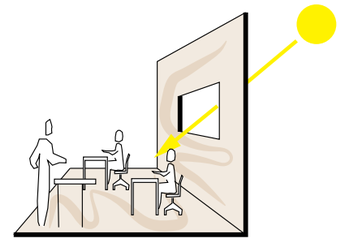


1. Integrate new teaching spaces into existing school to improve cross site movement and accommodation adjacencies

2. Maximise amount of ground floor external space and improve quality of external space available to pupils



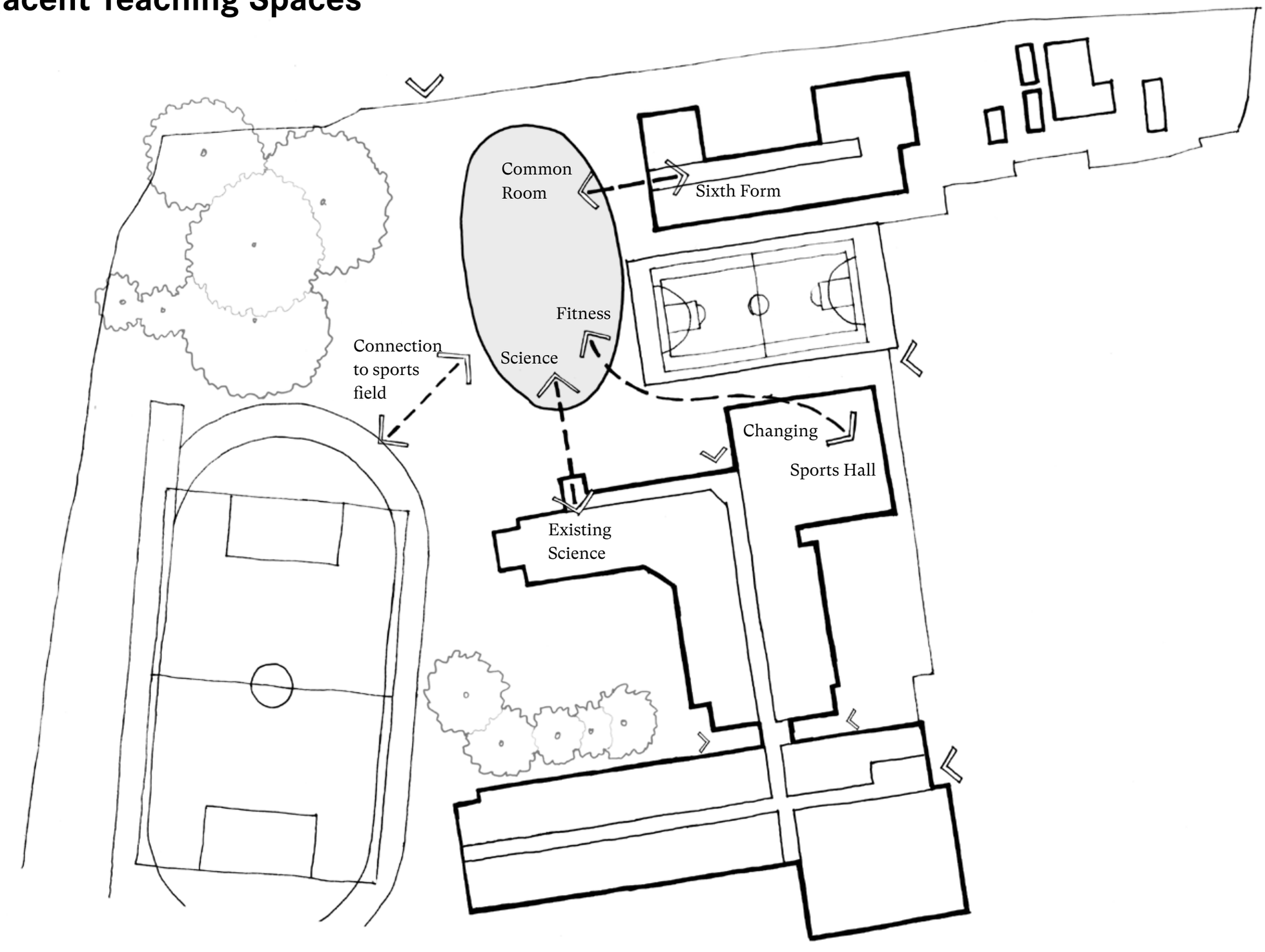
3. Improving pupil well-being through the creation of strong connections between external and internal space



4. Improving pupil well-being through good levels of daylight and careful design.

3.0 Project Aims

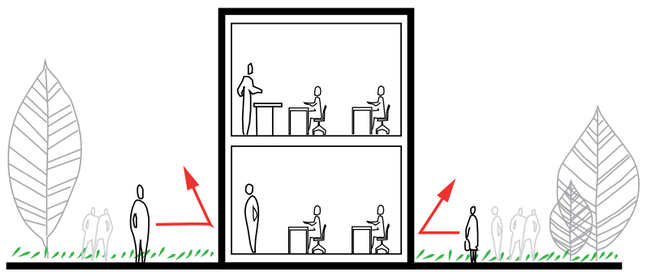
3.4 Adjacent Teaching Spaces



4.0 Design Development

4.1 Initial Approach

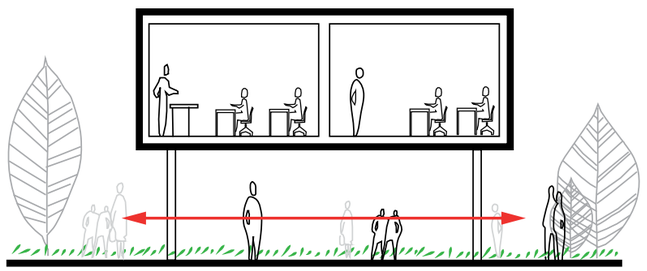
Standard Approach:



Standard approach:

Restricts pupil and staff movement across the site and reduces the amount of external recreational space is available on the ground floor

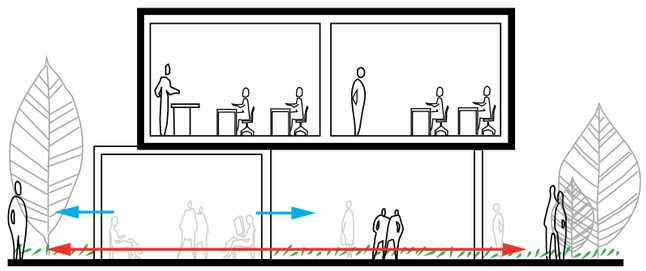
Proposed Design Principal 01:
Free up ground floor space & improve connections



Elevated accommodation:

Concentrating a majority of accommodation at first floor frees up the ground floor to provide more external space. Creating an external covered passageway allows staff and pupils to cross the school site easily.

Proposed Design Principal 02:
Animate communal space with activity



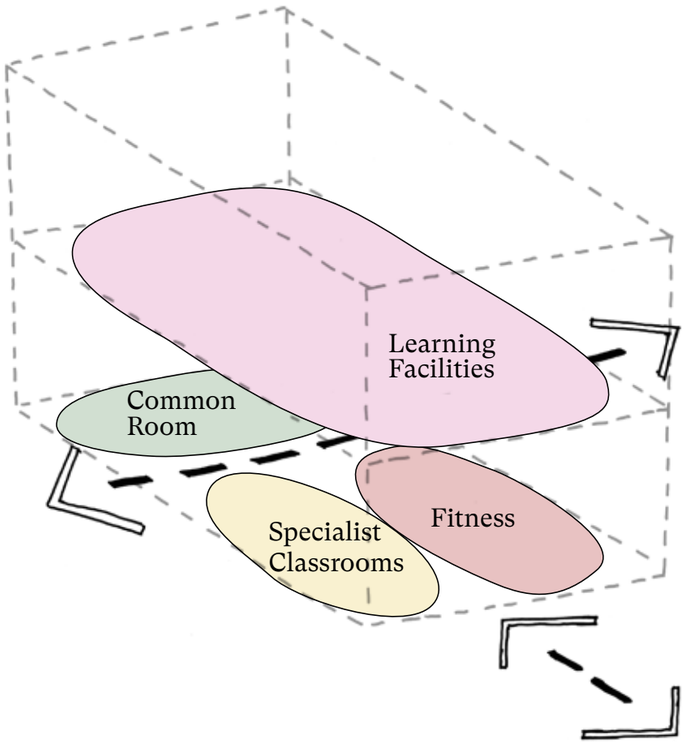
Positioning communal parts of the accommodation (e.g. common room) at ground floor helps to create animated and engaging adjacent external spaces.

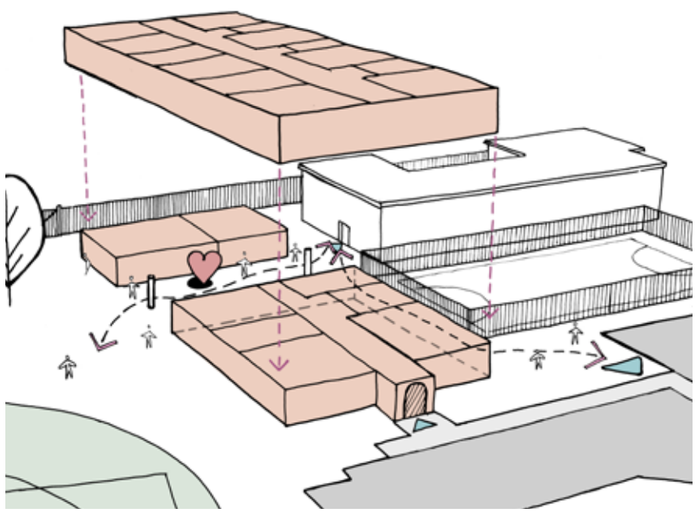
4.0 Design Development

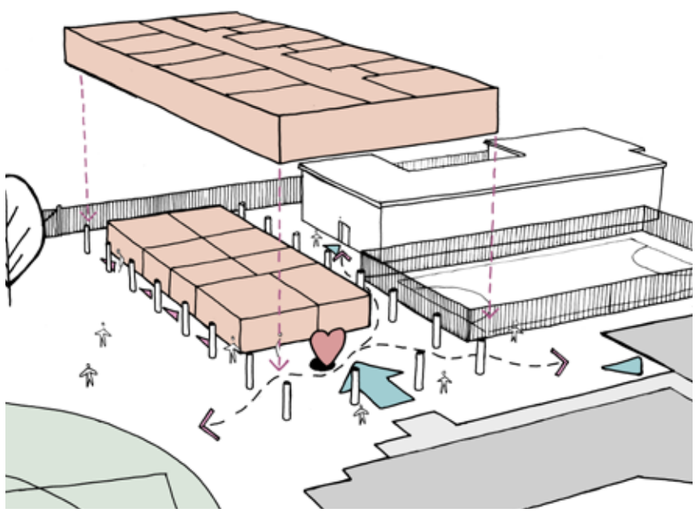
4.2 Initial Options

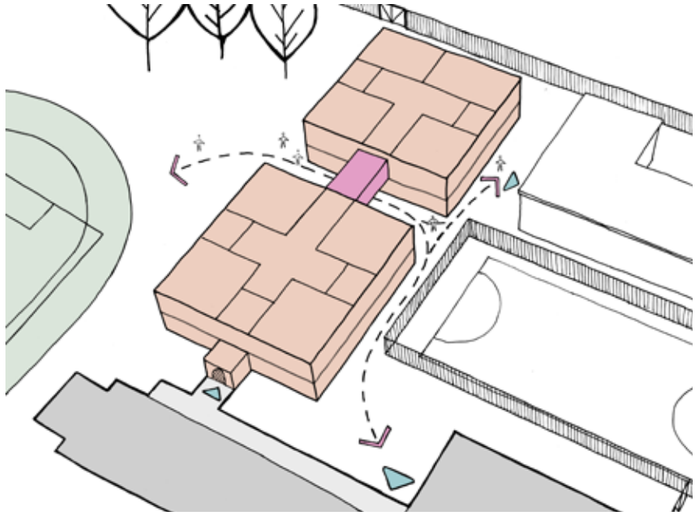
The building form has been explored through multiple concept diagrams, looking at how the site can establish connectivity between teaching spaces and external areas.

Three options below explore how paths and interesting spaces can be created using the building form.





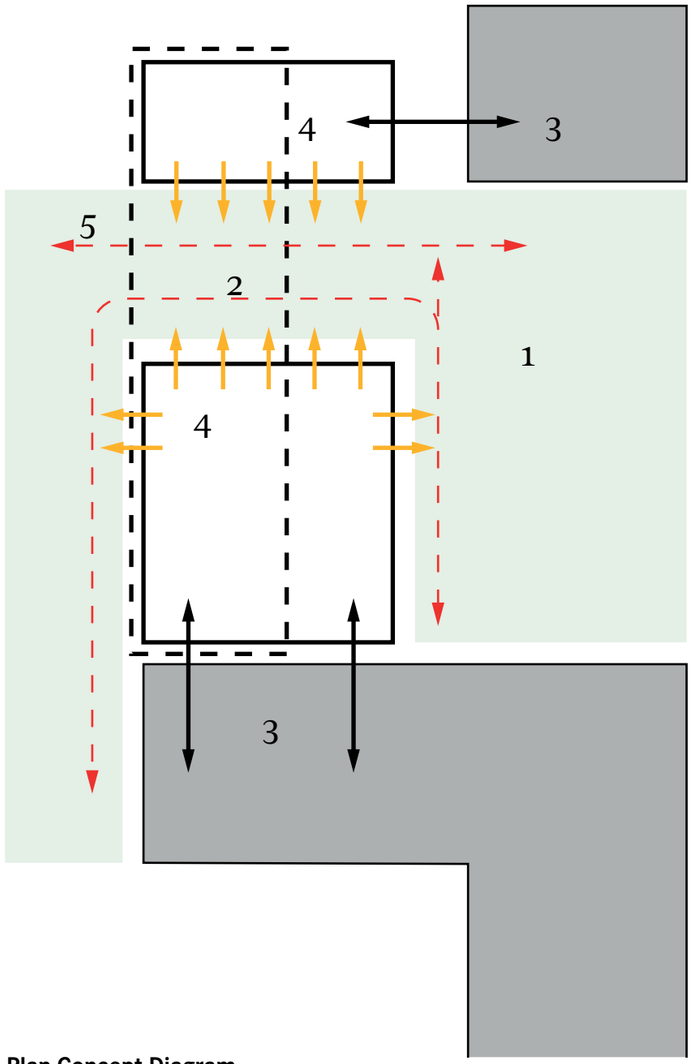




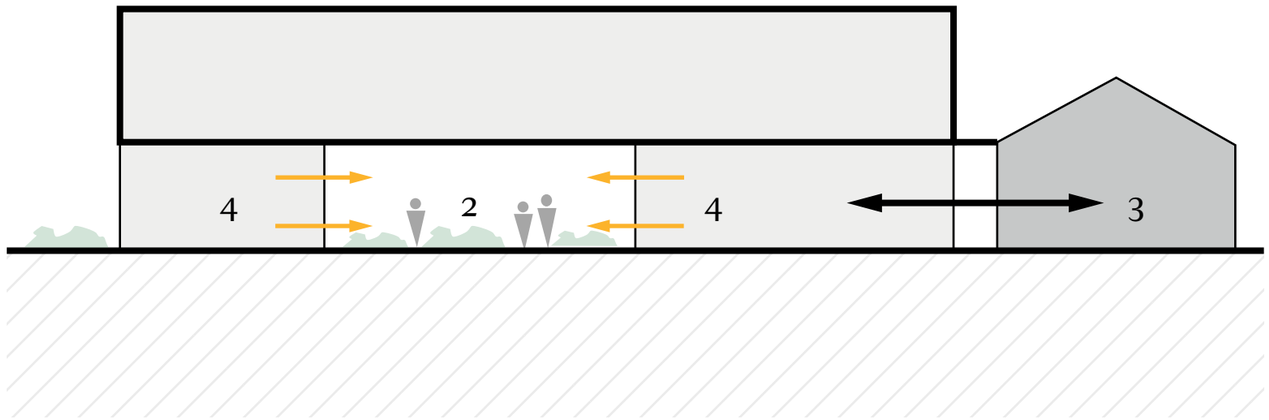
Initial Option Appraisal

4.0 Design Development

4.3 Option Development



Plan Concept Diagram

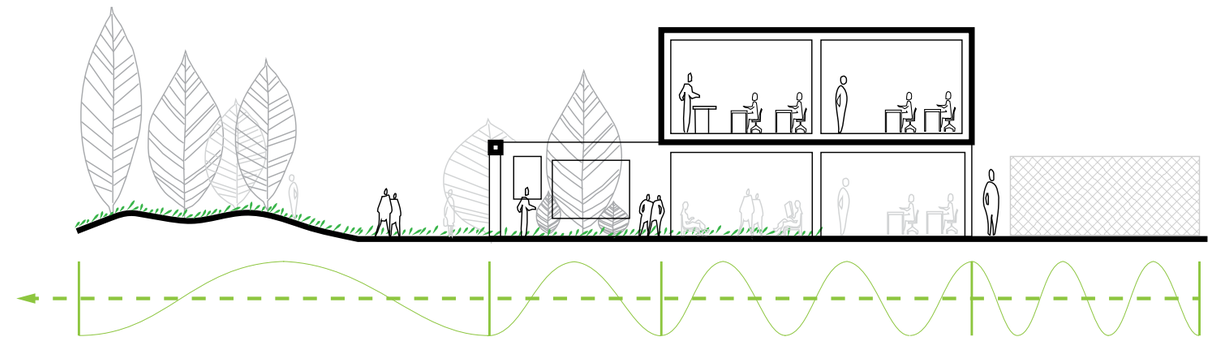


Section Concept Diagram

1 External space on the ground floor is maximised
2 Internal and external spaces are linked and relate to each other
3 Important connections with the existing school and sixth form established
4 Social spaces and shared facilities face outwards, animating external informal space
5 Movement across the site is enabled through the ground floor massing of the proposed block

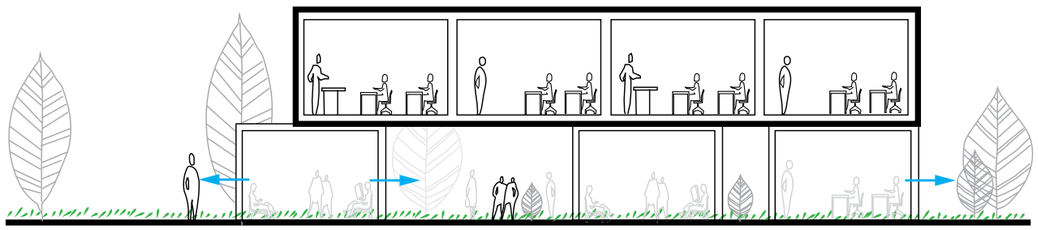
4.0 Design Development

4.4 Connection with Natural Surroundings



Sequence of landscape spaces

The design aims to respond to the natural green areas of the Meadow High School site, and recognises the school's position on the edge of Pield Heath. The design creates a sequence of landscaped spaces that form a gradual transition from soft landscaped space to hard.



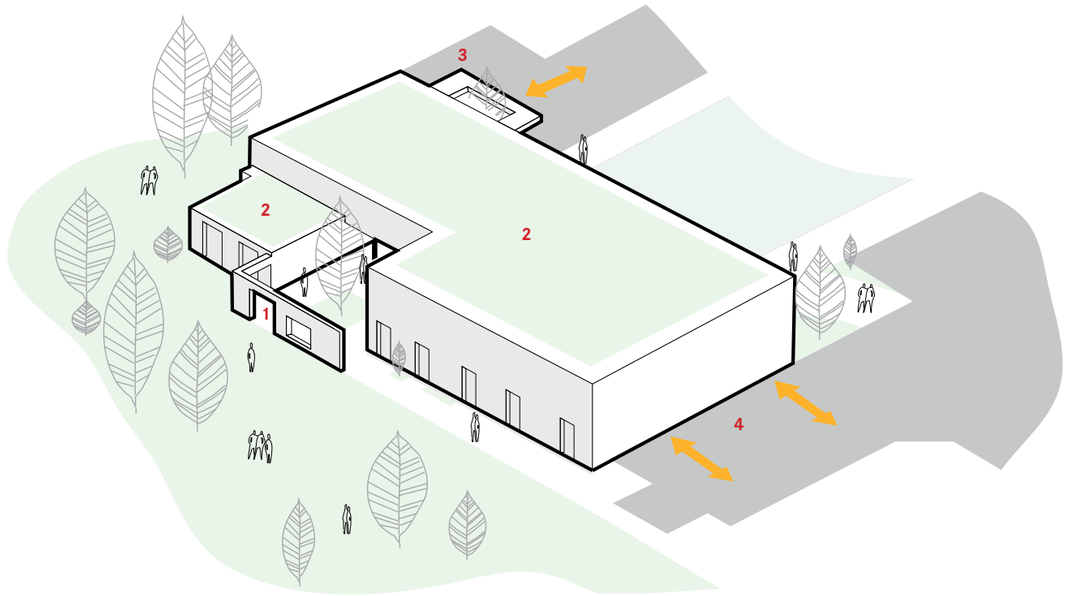
Increasing integration of internal space and nature

The design aims to increase the level of access and integration the internal teaching spaces have with external green areas. This is achieved by creating pocket gardens and courtyards.

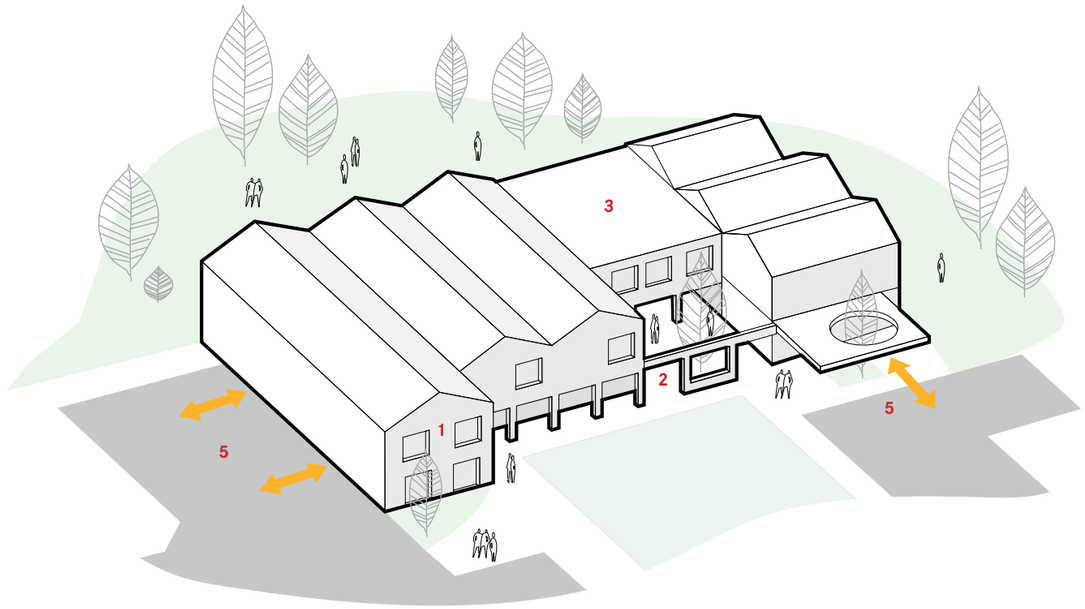
4.0 Design Development

4.5 Scale and Massing

Variations of the building form and massing were considered as the design developed.
This exercise looked at roof form and building composition to respond to the differing context on each side, emphasising physical connectivity with adjacent school buildings.



1 Courtyard Gardens
2 Green Roofs
3 Canopy link with Sixth Form
4 Link with existing school

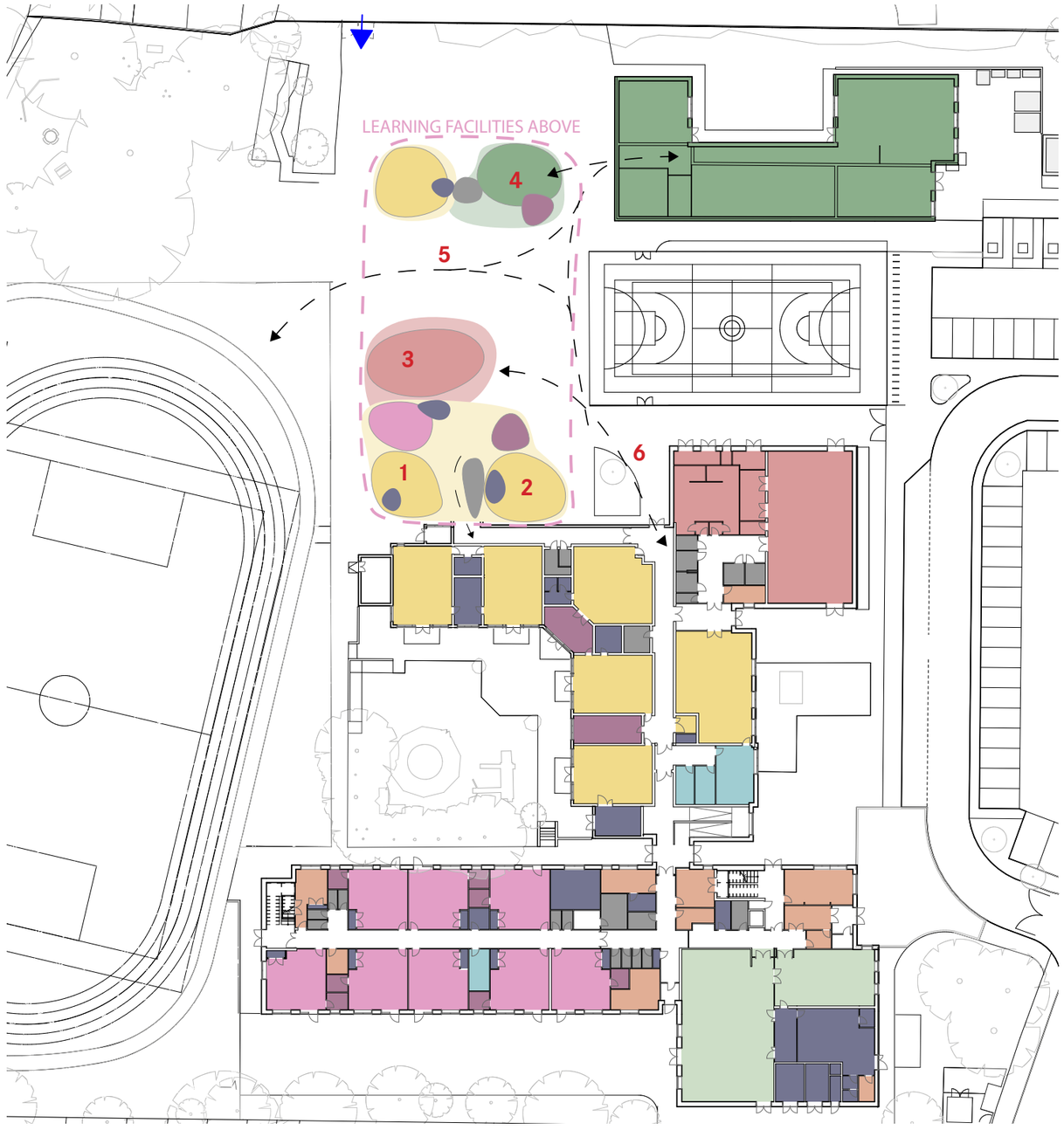


1 Residential character of built form
2 Courtyard
3 Accommodation bridging over external space
4 Canopy link with Sixth Form
5 Link with existing school

4.0 Design Development

4.6 Connections with Existing Facilities

The proposed arrangement of accommodation in the new building is intended to efficiently connect with the existing teaching spaces, enabling easy use and integration into the current school. Direct or canopied connections are established with the existing science teaching spaces and sixth form block. To improve pupil/ staff usability, accommodation in the proposed building is co-located with existing teaching spaces that will have similar or shared use.

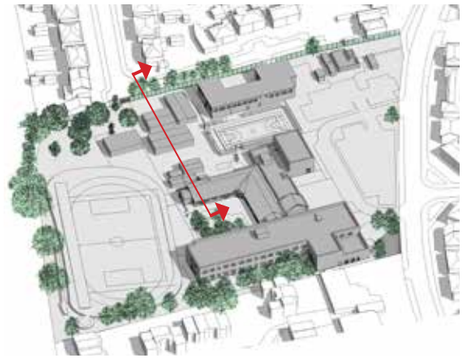


1 Co-location of existing and proposed science classrooms.
2 Co-location of proposed Food tech room with existing Art and Design tech rooms.
3 Location of Fitness suite in close proximity to existing changing rooms and other PE facilities.
4 Location of proposed Sixth Form common room in close proximity with Sixth Form block.
5 Enabling of cross site movement from sixth form block and MUGA out into wider school site and sports field.
6 Enabling of movement path from south of school northward towards sixth form block.

4.0 Design Development

4.7 Scale and Massing

We looked at opportunities to reduce the visual impact of a two-storey block by breaking the mass into smaller portions. The massing composition was considered to soften the visual impact and improve the building appearance. We and considered alternate roof designs and various material palettes. As we developed the design, a single storey element was introduced towards the northern boundary (as seen in the bottom image).



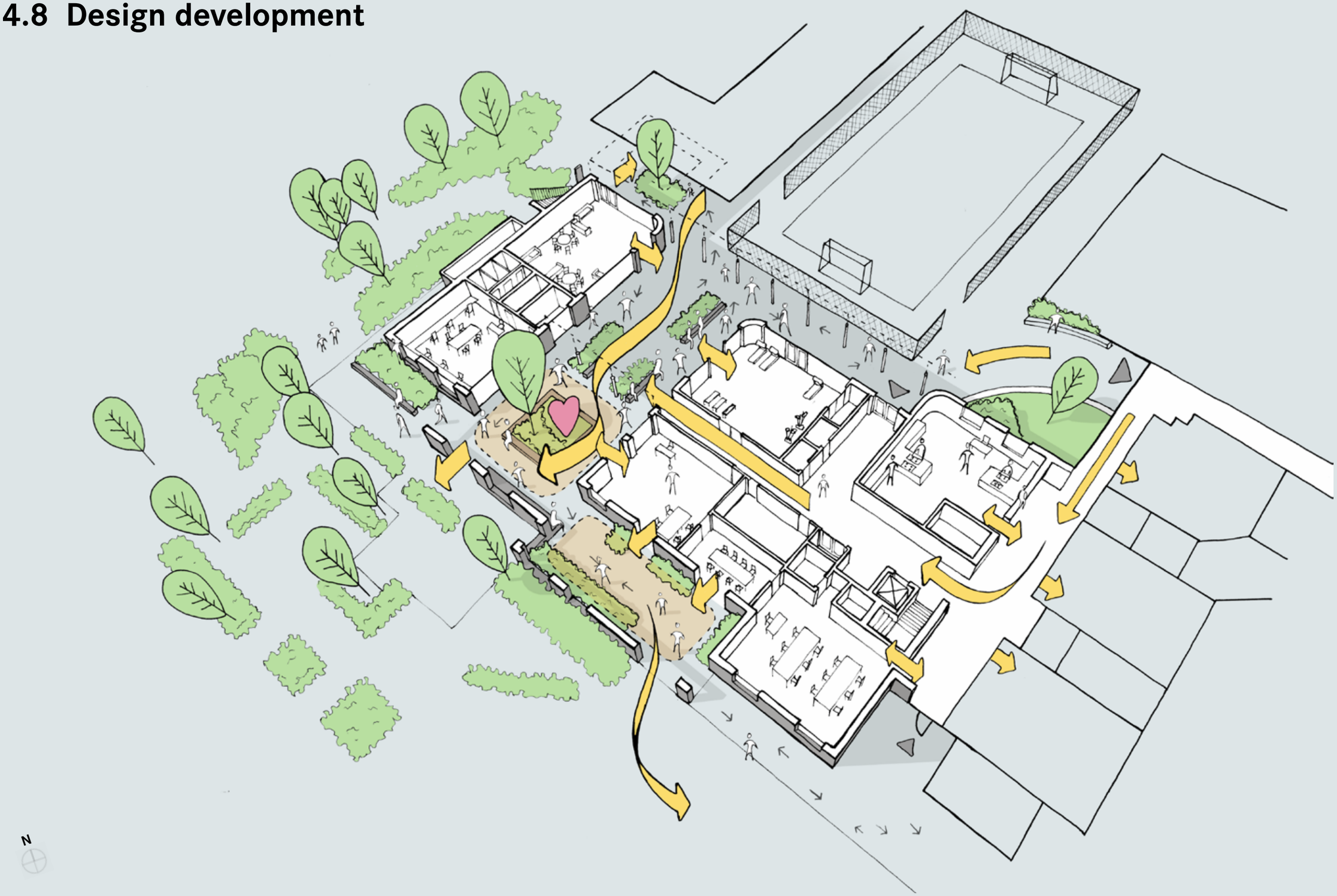
Section line indicated over existing site

Concept: Breaking the mass up into smaller scale modules

Concept: Softening the mass with single storey elements and depth.

4.0 Design Development

4.8 Design development



4.0 Design Development

4.9 Material appraisal

Concept design CGI

Concept design CGI

Concept design CGI

Precedent Image - Natural wood with green roof

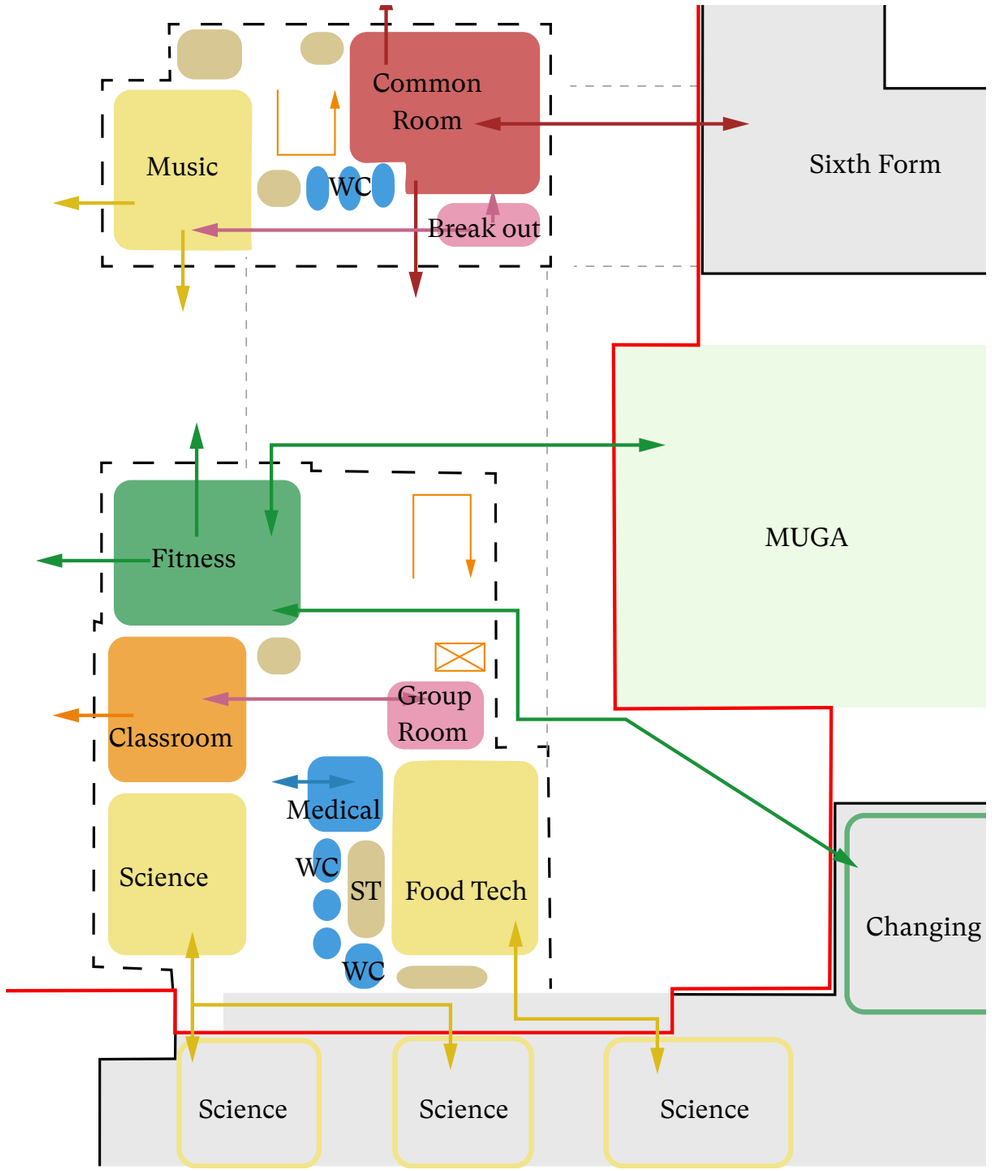
Precedent Image - natural brick and timber

Precedent Image - red brick and masonry

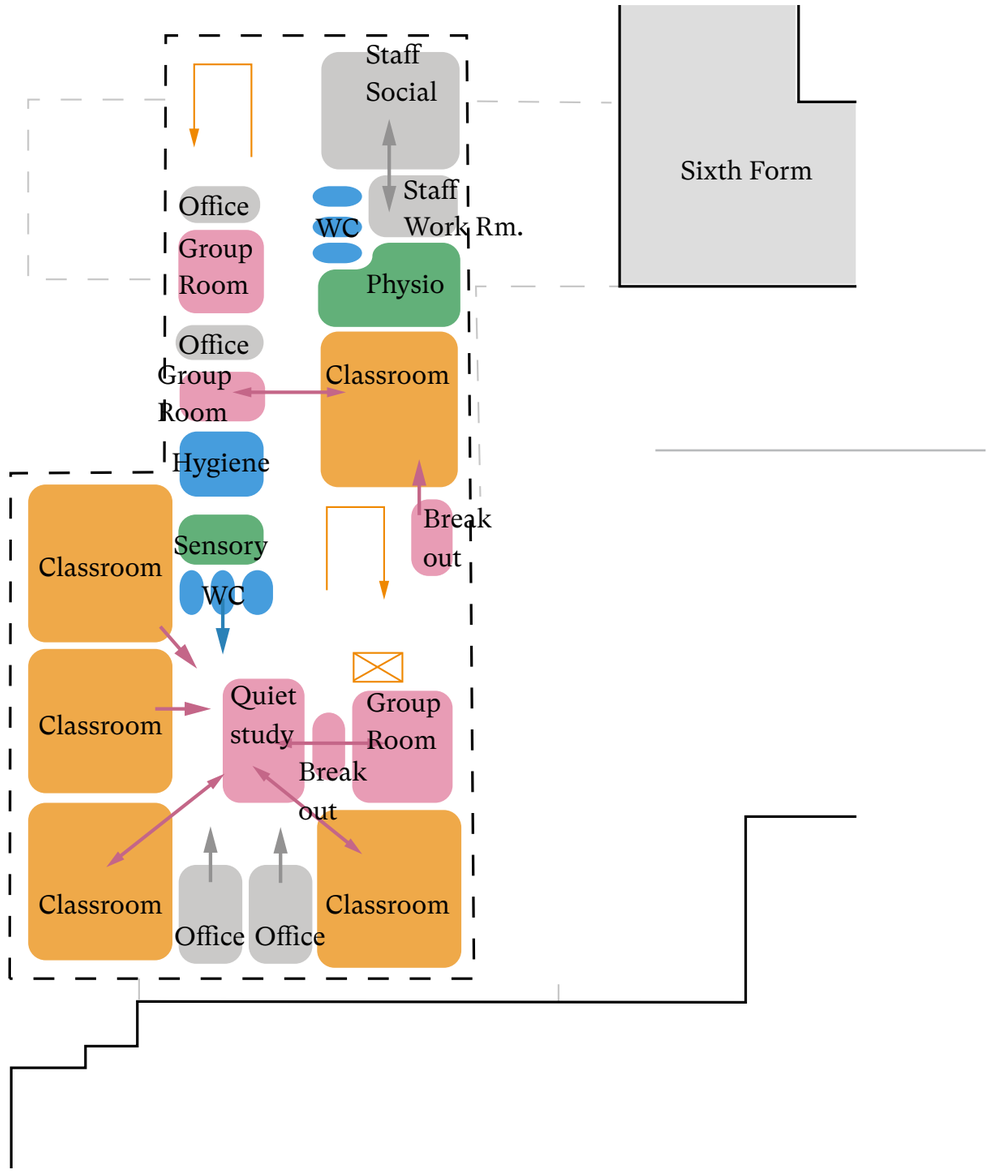
Precedent Image - natural brick with feature colour

4.0 Design Development

4.10 Adjacencies and Zones



Ground Floor Accommodation and adjacencies diagram



First Floor Accommodation and adjacencies diagram

4.0 Design Development

4.11 Community Involvement

A public presentation was held at Meadow High School to introduce the design to neighbours and pupil parents. The event was held on 19th October 2022. Neighbours were invited to the presentation via the leaflet shown to below. The flyer was delivered to properties adjacent to the site boundary and on surrounding streets. Parents of pupils were invited by email. During the event 10 individuals attended.

Neighbours and parents were able to attend to learn about the project and the reasons for proposing the new facilities. The event helped create greater transparency with the community and allowed individuals to raise design feedback, as well as share general concerns about the project.

A number of varied issues were raised by those who attended including concerns about construction traffic. Residents were reassured that construction traffic management is being considered by the design team and will continue to be developed as the project continues. Some of the design concerns raised were addressed as the design developed (see next page).

Public Presentation

You are invited to drop in and view the proposed expansion of Meadow High School in the London Borough of Hillingdon.

Meadow High School at Royal Lane

Proposed replacement of the modular classrooms with a new teaching block, including general purpose classrooms and specialist teaching spaces for Meadow High School.

This is the second part of a two phase project the council is undertaking to augment Special Education Needs facilities in Hillingdon, having already commenced on a new campus in Harefield.

Event to be held on:
Wednesday 19 October 2022
between 6.00pm and 8.00pm
Meadow High School, Royal Lane,
Uxbridge, UB8 3QU

HILLINGDON LONDON

www.hillingdon.gov.uk

Flyer for the Public Presentation

Photos of the Public Presentation at Meadow High School

4.0 Design Development

4.12 Further Design Development

1. To respond to concerns raised at the public presentation about the visual impact of the stair enclosure, the protruding stair enclosure was removed and replaced with a low level access that is much less visually intrusive.

2. Following client feedback. The roof parapet was made completely flat to reduce the maximum hight of the roof.

3. Due to concerns raised at the public presentation about overlooking, the north facing first floor windows were changed to obscured glass.

See 1.

4. The first floor external material was changed to brick in order to respond to the brick used elsewhere on the site. The client also preferred the robustness and durability offered by a fully masonry building.

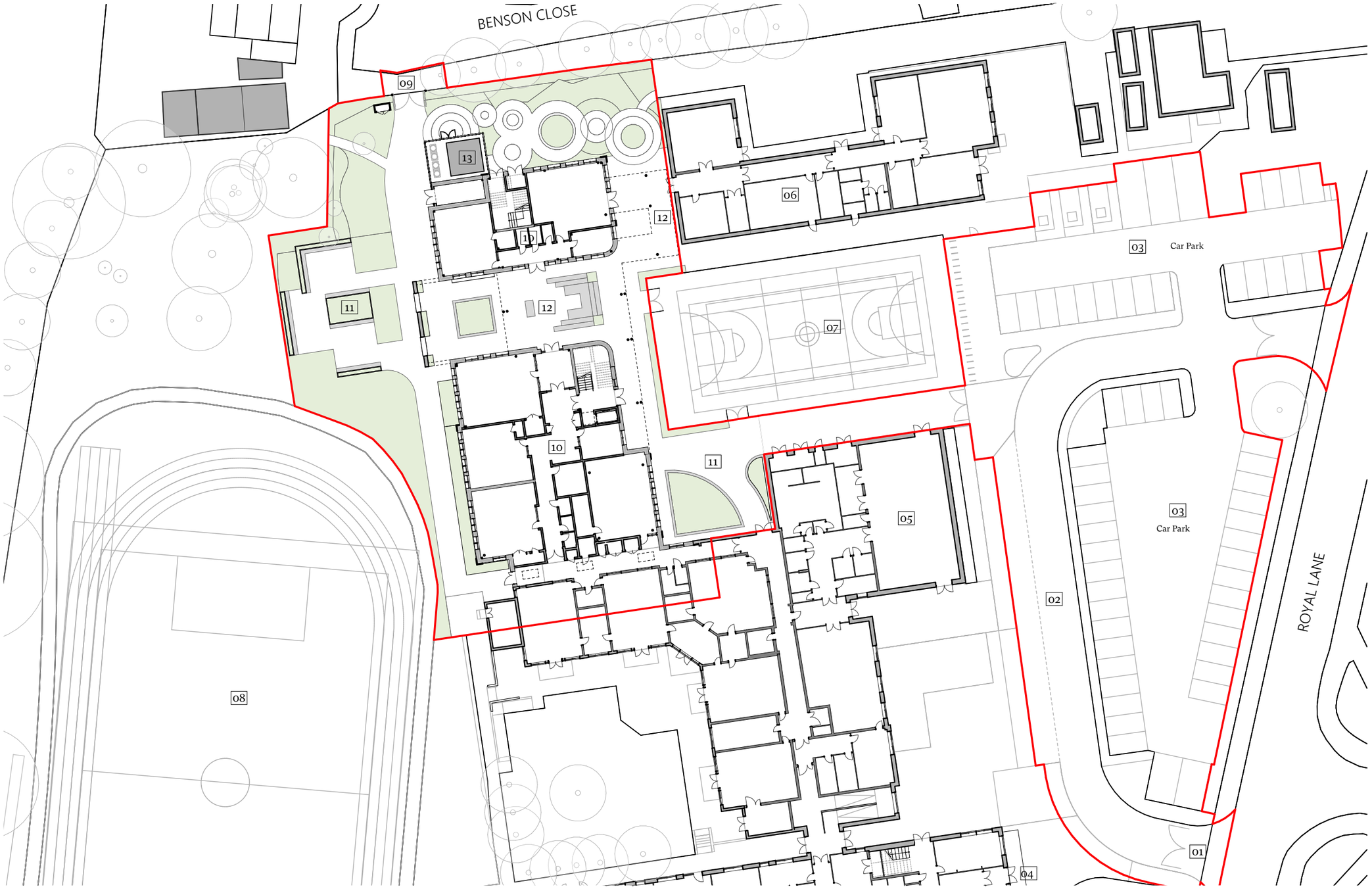
5. Neighbours were concerned about overlooking the school playground. Boundary planting to the north of the site has been proposed to reduce the visibility of the new building and playground. See landscape proposals for more information.

5.0 Design Proposal

5.1 Birds Eye Visualization

5.0 Design Proposal

5.2 Proposed Site Plan



Notes:

N

Application Boundary

Ownership Boundary

01 Vehicular access to site
02 Drop-off area
03 Staff and visitor car park
04 Staff and visitor reception
05 Sports hall block
06 Sixth Form block
07 Multi-Use Games Area (MUGA)
08 Sports field and running track
09 Maintenance access gate
10 Proposed new teaching block
11 Proposed external landscape
12 Proposed covered walkway
13 Proposed sprinkler tank and screening

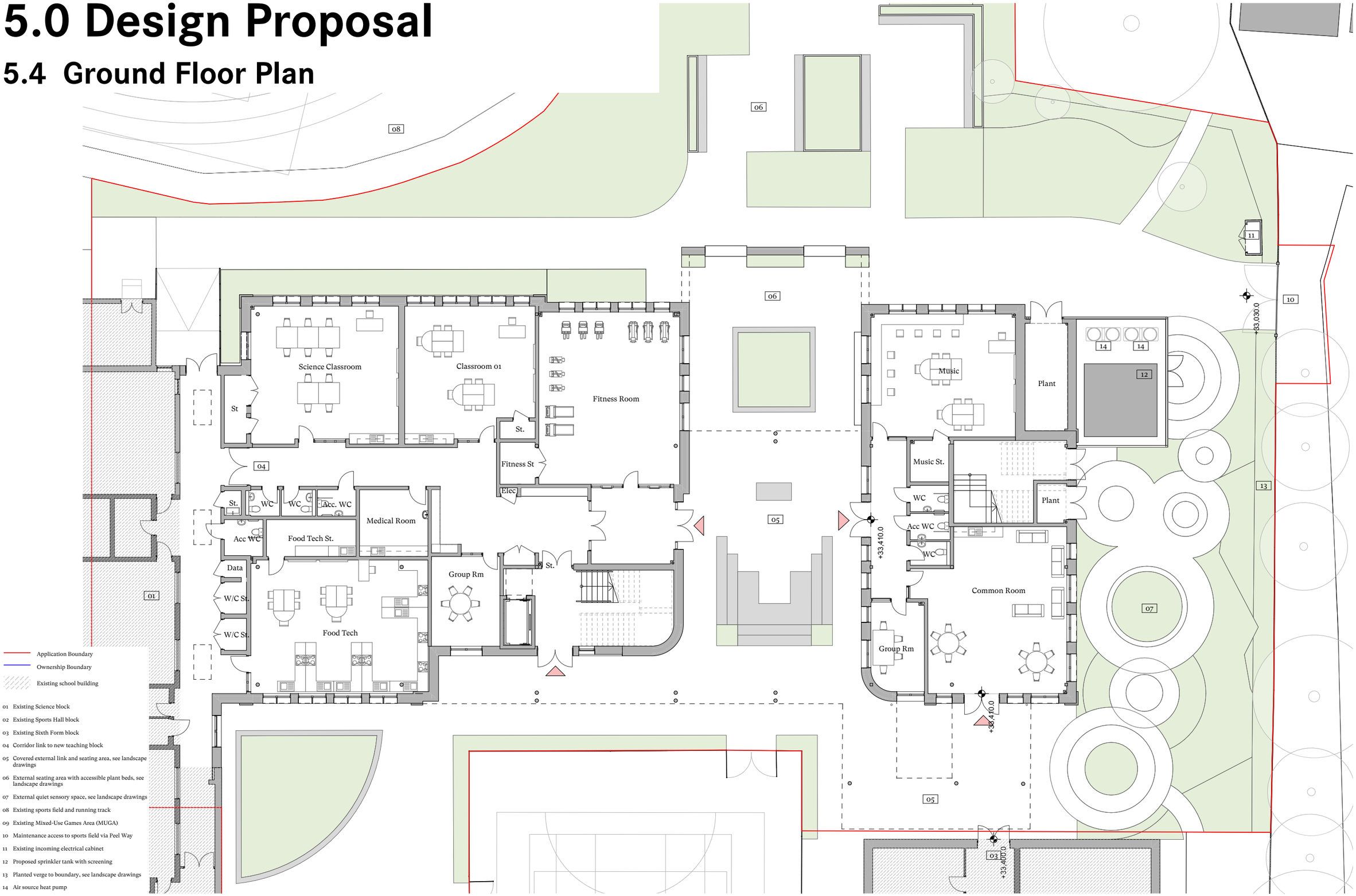
5.0 Design Proposal

5.3 Relationship with Existing Teaching Spaces and MUGA

The proposed block is positioned to allow efficient moment of teachers and staff between existing and proposed facilities, both internal and externally.
Internally, the block connects to the existing corridor. Externally, hard landscaping creates external walkways between existing exists and entrances to the new block. A covered canopy is also proposed, making it is possible to walk between every school block while remaining undercover. A gap is proposed to the west of the MUGA allowing circulation as well as space for staff, pupils, and parents to gather while watching activities within the MUGA.

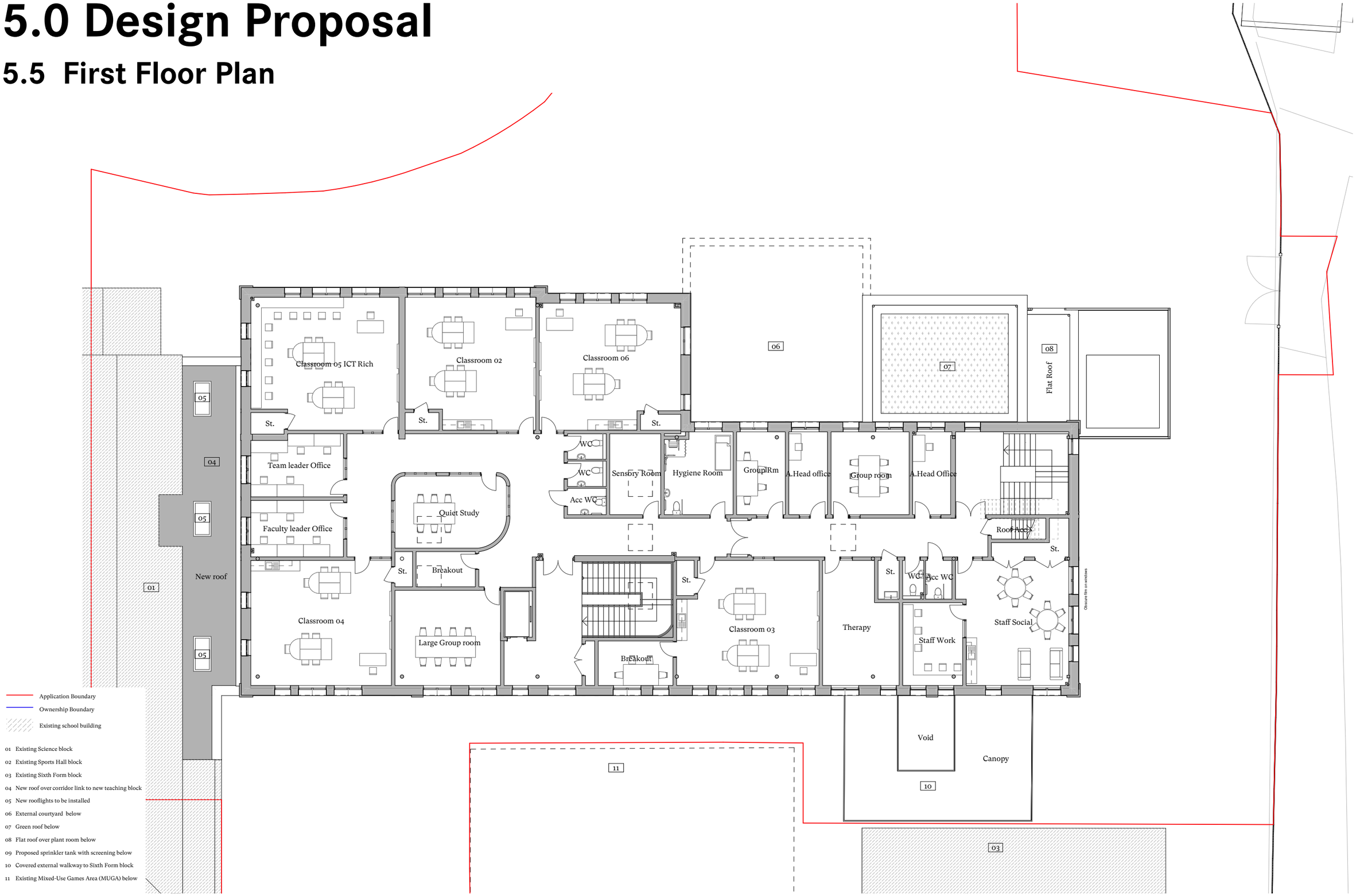
5.0 Design Proposal

5.4 Ground Floor Plan



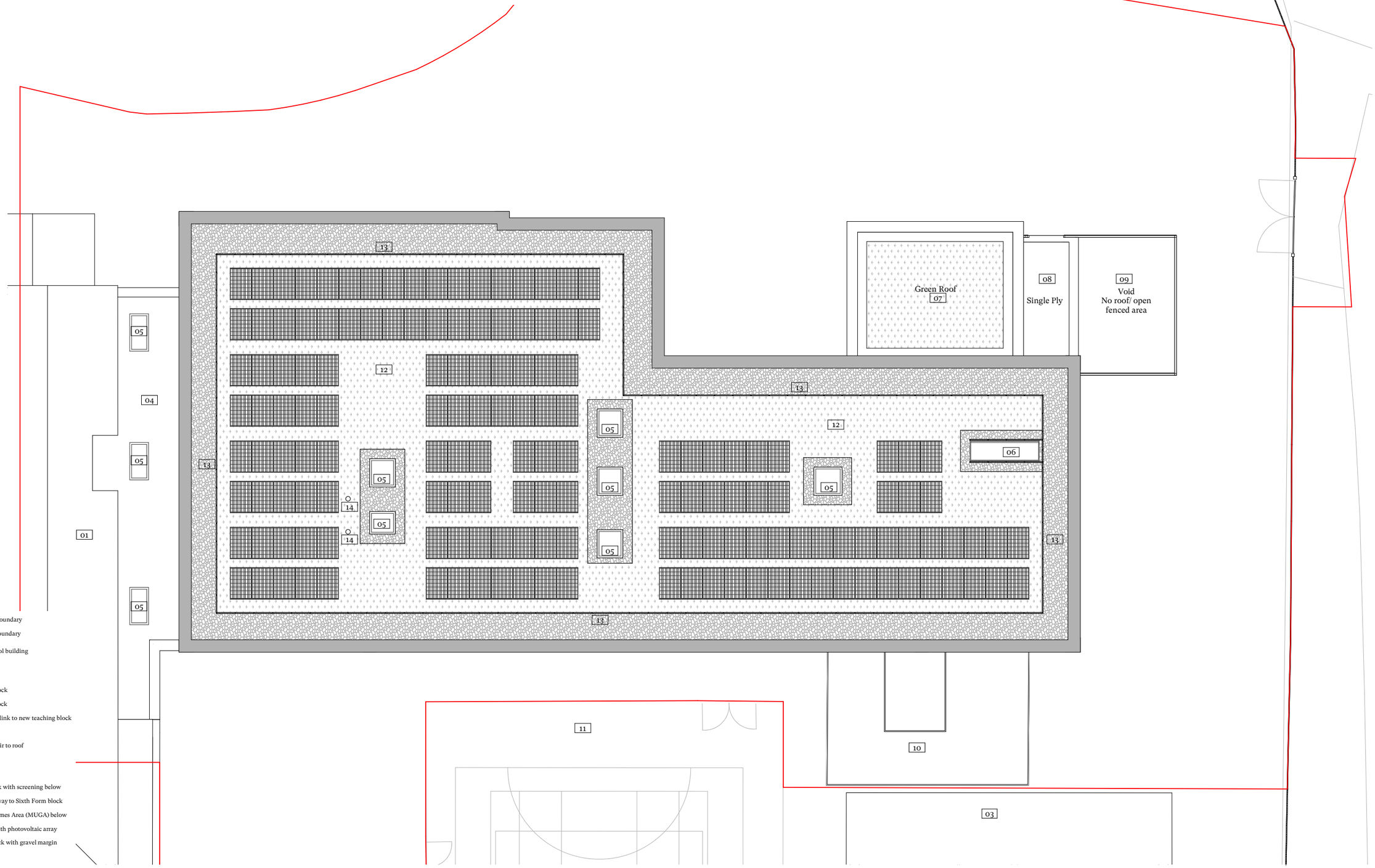
5.0 Design Proposal

5.5 First Floor Plan



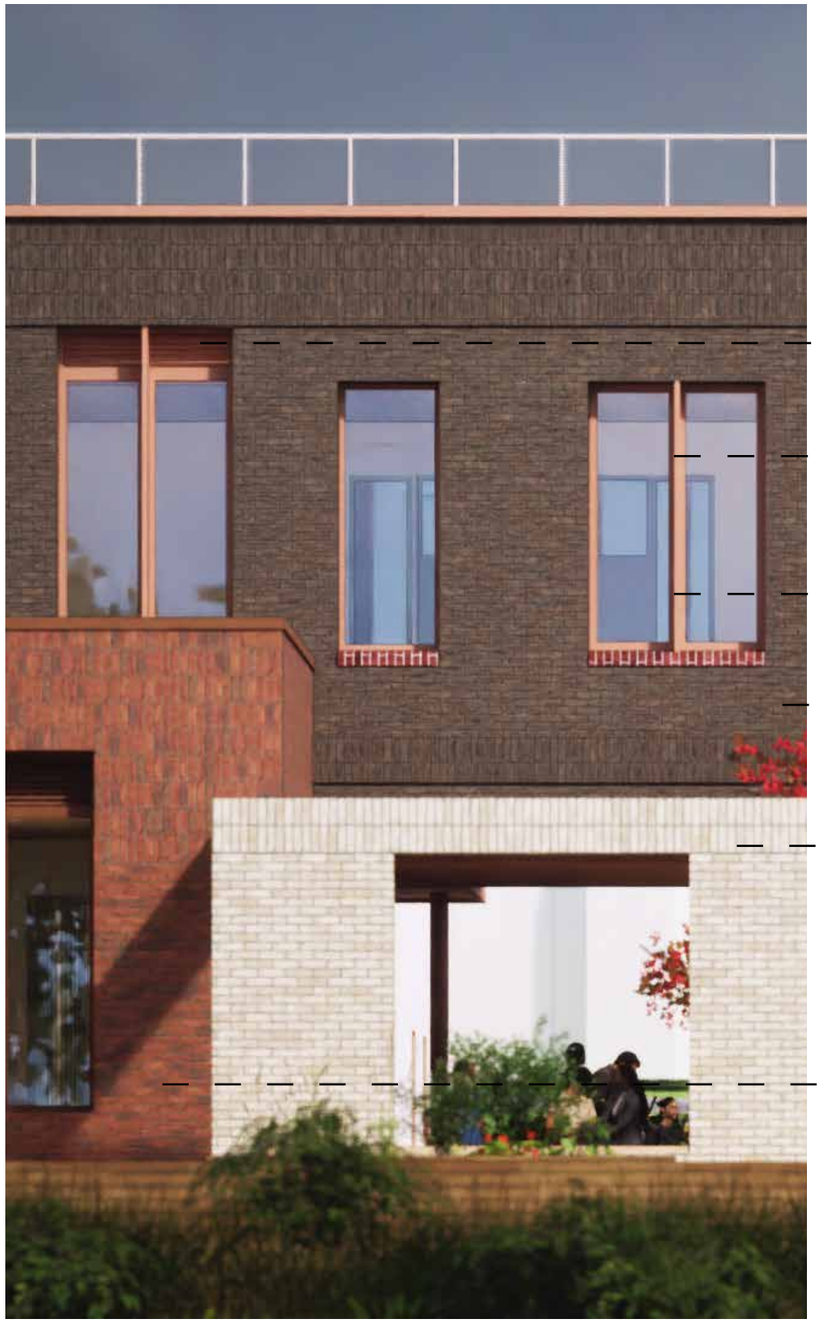
5.0 Design Proposal

5.6 Roof Plan



5.0 Design Proposal

5.7 Materials



A bright, playful, and varied pallet of materials has been used in order to create a joyful addition to the school site. The school is currently made up of a collection of buildings consisting of a variety of different materials and colours. The use of 3 different brick types aims to continue this theme of a collection of unique and varied buildings that together form the school. One of the three bricks is proposed to be similar to the brick used on the newly completed school buildings, offering a level of continuity.

Louvered Ventilation Panel
Intake and exhaust for ventilation units.

Shading Louver
PPC vertical louver positioned to reduce solar gains.

Coloured Windows
External PPC windows with brick reveal.

Brick Type 01
Dark multi brick

Brick Type 02
Oatmeal brick inspired by the brick used on the newly completed school buildings.

Brick Type 03
Red brick

5.0 Design Proposal

5.8 External Courtyard Space

A transitional courtyard space has been created at ground floor in between the existing playing fields and the proposed external covered gathering space. Clustered around the courtyard are a number of teaching spaces and the fitness suite. These spaces are visually connected to the courtyard and have the ability to spill out into this space, offering opportunists for outside teaching.

The courtyard is bounded by a brick wall with integrated seating and large openings. These openings frame views out to the rest of the school site. A large planting bed and tree are positioned at the centre of the courtyard, creating a green heart to he space.

1 Teaching space
2 Seating
3 Planting bed and tree
4 Connection to sports field

5.0 Design Proposal

5.9 External Canopy Area

The proposed massing creates a large covered area adjacent to the MUGA. As well as enabling free movement across the school site for pupils and staff, the large covered area creates a large multi-use gathering and teaching space. The space is located close to the sixth form and sixth form common room, as well as a number of teaching spaces that overlook it. The spaces weather protection increases its all-year usability, and creates a sheltered space to gather.

The landscape design for the space incorporates a raised seating amphitheatre that will enhance the spaces teaching function.

1 Raised Seating
2 Planting
3 Teaching space
4 Sixth form block

5.0 Design Proposal

5.10 Sustainability and Environment

The roof design incorporates an expansive use of green roof. The large area of green roof replaces a previously mostly hard-landscaped area, helping to increase the greening of the site.

The green roof also benefits the sites drainage strategy by attenuating the flow of rainwater from the roof. The green roof system will also retain an amount of rain water and reduce run-offs of pollutants.

Following DfE requirements a significant proportion of the developments energy needs will be fulfilled by renewable energy sources generated on site. Energy harvested with photovoltaic panel arrays and the building is efficiently heated with air source heat pumps.

The BioSOLAR system allows the PVs to sit above the green roof and the roof area is therefore able to be used as green roof and for PVs.

An example of a BioSOLAR roof

1. Roof access to via stair.
2. BioSOLAR green roof with PVs.
3. Green roof above music room.
4. Enclosure for ASHPs and sprinkler tank.

5.0 Design Proposal

5.11 Approach to Sustainability

Building Fabric Performance

The proposed building is designed with low u-values in order to become efficient and environmentally sustainable to heat. Greater details about the steps taken to create an energy efficient building can be found in the energy statement.

Element	Target U-Value
Walls	0.14
Floors	0.11
Roof	0.11
Windows	0.8

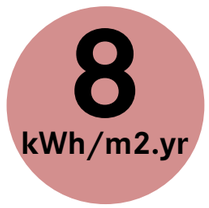
See energy statement for more information.

Air Tightness = 3 $m^3/h.m^2$@50Pa

Energy Use

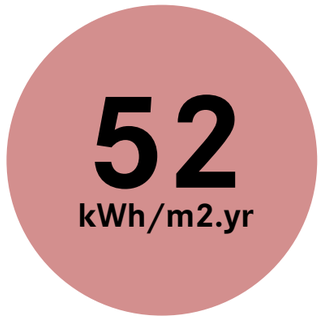
The building aims to meet the targets set out by the Department for Education, to the right. The key requirement of net-zero carbon in operation means the building requires a large number of PVs to meet its energy consumption.

Space Heating Demands



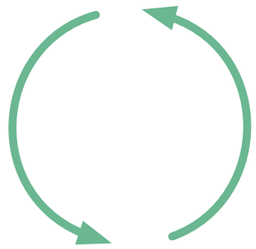
Taken from Dept. of Education

Total Energy Use (excluding renewable)



Taken from Dept. of Education

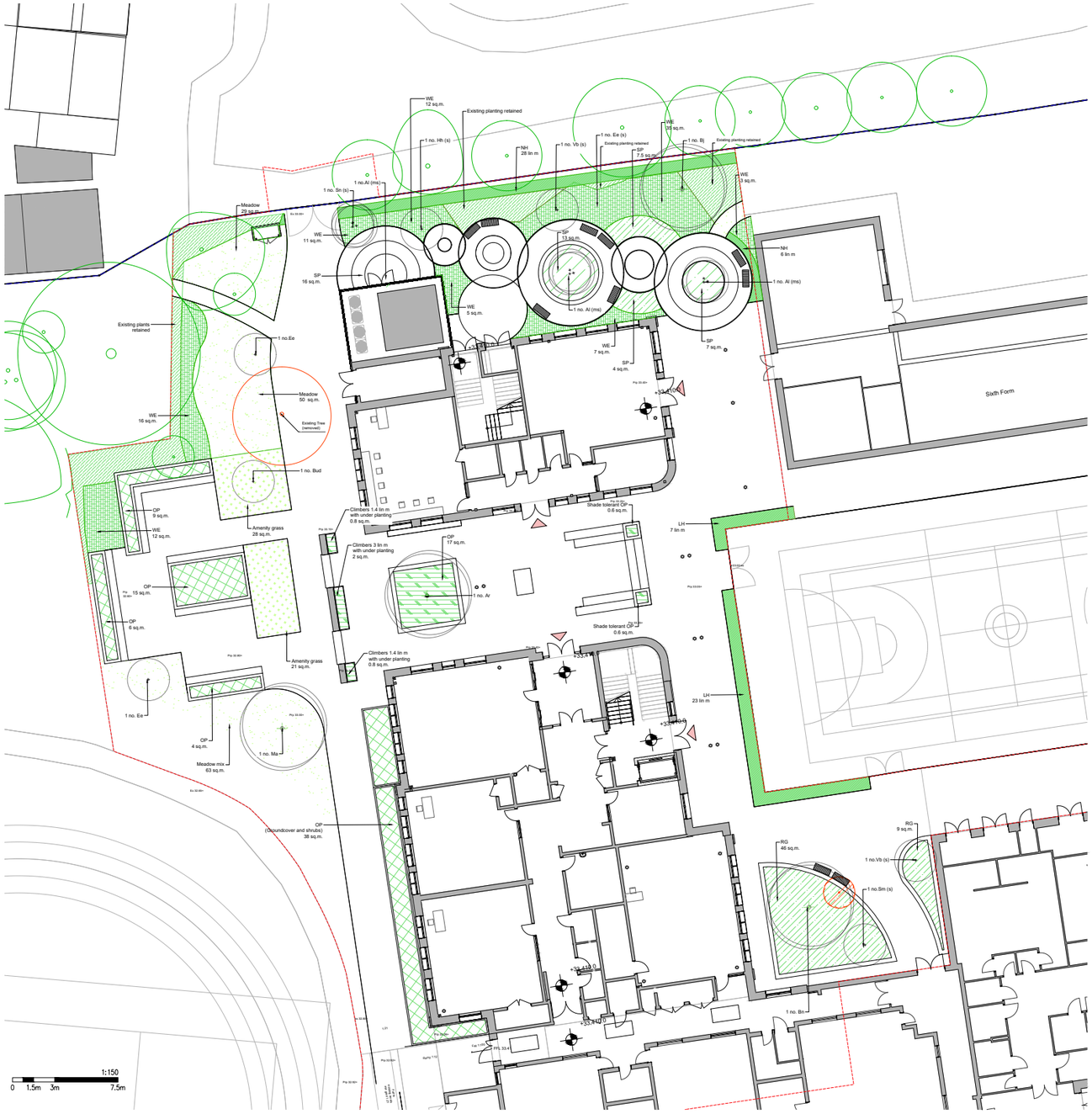
Net Zero Carbon in Operation



Taken from Dept. of Education

5.0 Design Proposal

5.12 Landscape and Ecology



PLANTING SCHEDULE MEADOW SCHOOL - STAGE 3					
Code	Species	Form	Specification	Size	Density
Trees					
Ar	Acer rubrum October Glory	Clear stem specimen			As Shown
Bn	Betula nigra	Multi stem			As Shown
Bu	Betula utilis Jacquemontii	Clear stem specimen			As Shown
Ms	Magnolia x brooklynensis Yellow Bird	Clear stem specimen			As Shown
Large shrubs					
Al	Amelanchier lamarckii	Multi stem shrub			As Shown
Bud	Buddleja x weyriana 'Sungold'	Large shrub			As Shown
Ee	Euonymus europeus	Large shrub			As Shown
Hh	Hamamelis x intermedia 'pallida'	Large shrub			As Shown
Sm	Sambucus nigra 'Black Lace'	Large shrub			As Shown
Vb	Viburnum bodnantense 'Dawn'	Large shrub			As Shown
Woodland Edge Planting Mix (WE)					
	Cornus alba 'Sibirica'	Bushy Shrub	1+1 BR		2/m2
	Acer campestre	Bushy Shrub	1+2 BR		2/m2
	Hedera hibernica	Bushy Shrub	1L CG		6/m2
	Rosa canina	Bushy Shrub	1+1 BR		3/m2
	Corylus avellana 'Cosford'	Bushy Shrub	1+2 BR		2/m2
	Ilex aquifolia (shrub form)	Bushy Shrub	3L CG		1/m2
	Euonymus europaea	Bushy Shrub	3L CG		1/m2
	Viburnum opulus	Bushy Shrub	1+2 BR		2/m2
	Sorbus Aruparia	Bushy Shrub	1+2 BR		2/m2
	Lonicera henryi	Bushy/Climbing Shrub	3L CG		1/m2
	Crataegus monogyna	Bushy Shrub	1+2 BR		2/m2
Ornamental planting Mix (OP)					
La	Lavendula x intermedia 'Grosso'	Bushy Shrub	3L CG		6/m2
Es	Euxus sempervirens	Bushy Shrub	3L CG		6/m2
Ger	Geranium x oxonianum 'Wargrave Pink'	Bushy Shrub	3L CG		4/m2
GeM	Geranium macrorrhizum 'Mount Olympus White'	Bushy Shrub	3L CG		4/m2
Vme	Vinca major 'variegata'	Bushy Shrub	3L CG		6/m2
Pte	Pachysandra terminalis	Bushy Shrub	3L CG		4/m2
Drf	Dryopteris filix-mas	Healthy Spreading growth	2L CG		4/m2
Sby	Stachys byzantina	Evergreen carpeting perennial	3L CG		6/m2
Ste	Stipa tennuissima	Grass	2L CG		6/m2
Vb	Verbena bonariensis	Bushy Shrub	3L CG		as shown
Dos	Daphne odora 'Aureomarginata' E	Bushy Shrub	3L CG		6/m2
Crb	Camellia 'Sparkling Burgundy' E	Bushy Shrub	3L CG		6/m2
PfM	Potentilla fruticosa marian red robin	Bushy Shrub	3L CG		6/m2
HaM	Hibiscus syriacus magenta chiffon	Specimen shrub	3L CG		as shown
EmB	Exochorda × macrantha 'The Bride'	Specimen shrub	3L CG		as shown
Sensory planting (SP)					
Sight					
HM	Heuchera 'Marmalade'	Clump-forming perennials	3L CG		6/m2
Vb	Verbena bonariensis	Bushy Shrub	3L CG		6/m2
KN	Knophofia 'Nobilis'	herbaceous perennials	3L CG		6/m2
Touch					
Sby	Stachys byzantina	Evergreen carpeting perennial	3L CG		6/m2
Ai	Anemanthele lessoniana	Grass	3L CG		6/m2
Smell					
Hi	Helichrysum italicum				
Lan	Lavendula angustifolia	Bushy Shrub	3L CG		6/m2
Ca	Cosmos atrosanguineus	Perennial	2L CG		6/m2
Ct	Choisya ternata	Bushy Shrub	3L CG		6/m2
Sound					
PaH	Pennisetum alopecuroides 'Hameln'	Grass	2L CG		6/m2
Bm	Briza maxima	Grass	2L CG		6/m2
Grass Seed for General Grass Area (Amenity)					
	British Seed House	A24 Mix			50g per m2
Grass Seed for long meadow grass area (Meadow)					
	Emorsgate Seeds	EL1 Flowering Lawn Mix			5g per m2
Rain Garden Mix (RG)					
Ba S	Bistorta affinis 'Superba'	Pot grown	3L CG		6 per lin m
De c	Deschampsia cespitosa	Pot grown	3L CG		6 per lin m
Ho F	Hosta Francee	Pot grown	3L CG		6 per lin m
Ir p	Iris pseudocorus	Pot grown	3L CG		6 per lin m
Pr d	Penstemon digitalis	Pot grown	3L CG		6 per lin m
Po s	Polystichum setiferum	Pot grown	3L CG		6 per lin m
Native Hedge Mix (NH)					
Ac H	Acer campestre	Pot grown	5L CG		7 per lin m
Ca H	Corylus avellana	Pot grown	5L CG		7 per lin m
Cb H	Carpinus betulus	Pot grown	5L CG		7 per lin m
Ia H	Ilex aquifolium	Pot grown	5L CG		7 per lin m
Ms H	Malus sylvestris	Pot grown	5L CG		7 per lin m
Sa H	Sorbus aurcuparia	Pot grown	5L CG		7 per lin m
Low Hedge (LH)					
Ew j	Euonymum japonica	Pot grown	5L CG		7 per lin m

KEY

- Proposed trees 4.5 - 5m high
- Feature shrub / small tree 1.5-1.8m high
- Multi-stem shrubs range of heights - 2m to 3-3.5m
- Ground cover, and climbers where shown
- Rain garden planting
- Ornamental planting
- Sensory planting
- Mixed native hedge heights vary
- Existing planting retained - to be confirmed by new survey
- Amenity Grass
- Meadow Grass
- Metal edge to hard/soft surface
- Thermoset paint to asphalt circles
- Trees to be removed
- Level: exsiting / proposed

ex 32.85+ pro 33.71+

The existing landscaping to the north of the site along Benson Close is proposed to be more densely planted to provide a more efficient screen to the northern edge of the site.

Please refer to information by HEDuk and ecology & habitat managment ltd.

5.0 Design Proposal

5.13 Proposed Landscape Characteristics

1 PAVING: Concrete block paving (permeable)
NTS
Approximate area - 175 sq.m.

2 PAVING: Coloured tarmac surface (permeable)
NTS
Approximate area - 770 sq.m.

3 PAVING: Tarmac and Thermoplastic Markings
NTS
Approximate area - 52 sq.m.

The proposed landscaping proposes a number of different surfaces and outdoor furniture, including wheelchair accessible planters.

For more information please refer to information by HEDuk.

4 FURNITURE: Planter seating
NTS

5 FURNITURE: Accessible growing bed
NTS

6 FURNITURE: Seating
NTS

7 SECURITY: Preimeter Fence (requirement to be confirmed)
NTS

8 SHELTER: Pergola
NTS

9 BIRD BOX: Scwegler 1B Nest Box
NTS

10 BIRD BOX: Scwegler 3SV Nest B
NTS

5.0 Design Proposal

5.14 Proposed Landscape and Ecology Planting Pallet

Planting Pallette

Amelanchier lamarckii

Acer rubrum October Glory

Magnolia x brooklynensis Yellow Bird

Betula Jacquemontii

Betula nigra

Native screen shrub planting mix

Cornus alba 'Sibirica'

Rosa canina

Corylus avellana 'Cosford'

Lonicera henryi

Viburnum opulus

Biodiverse Roof

Seed mix with sedum cuttings

Ornamental planting mix

Lavendula angustifolia
(Sensory planting - Smell)

Geranium x oxonianum 'Wargrave Pink'

Geranium macrorrhizum 'Mount Olympus White'

Vinca major 'variegata'

Pachysandra terminalis

Heuchera 'Marmalade'
(Sensory planting - Sight)

Dryopteris filix-mas

Stachys byzantina
(Sensory planting - Touch)

Stipe tenuissima

Potentilla fruticosa marian red robin

Verbena bonariensis
(Sensory planting - Sight)

Camellia 'Sparkling Burgundy'

Hibiscus syriacus magenta chiffon

Magnolia liliiflora 'Nigra'

Exochorda × macrantha 'The Bride'

Briza maxima
(Sensory planting - Sound)

Boundary hedge Planting

Native mix of
Acer campestre
Carpinus betulus
Corylus avellana
Malus sysivestris
Sorbus aucuparia

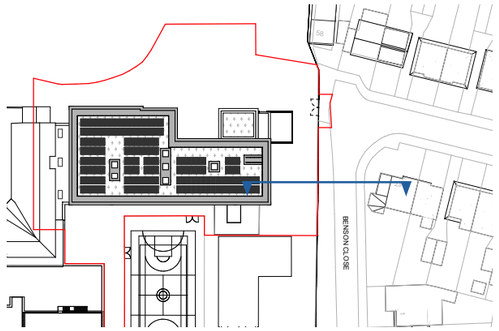
Grass mixture

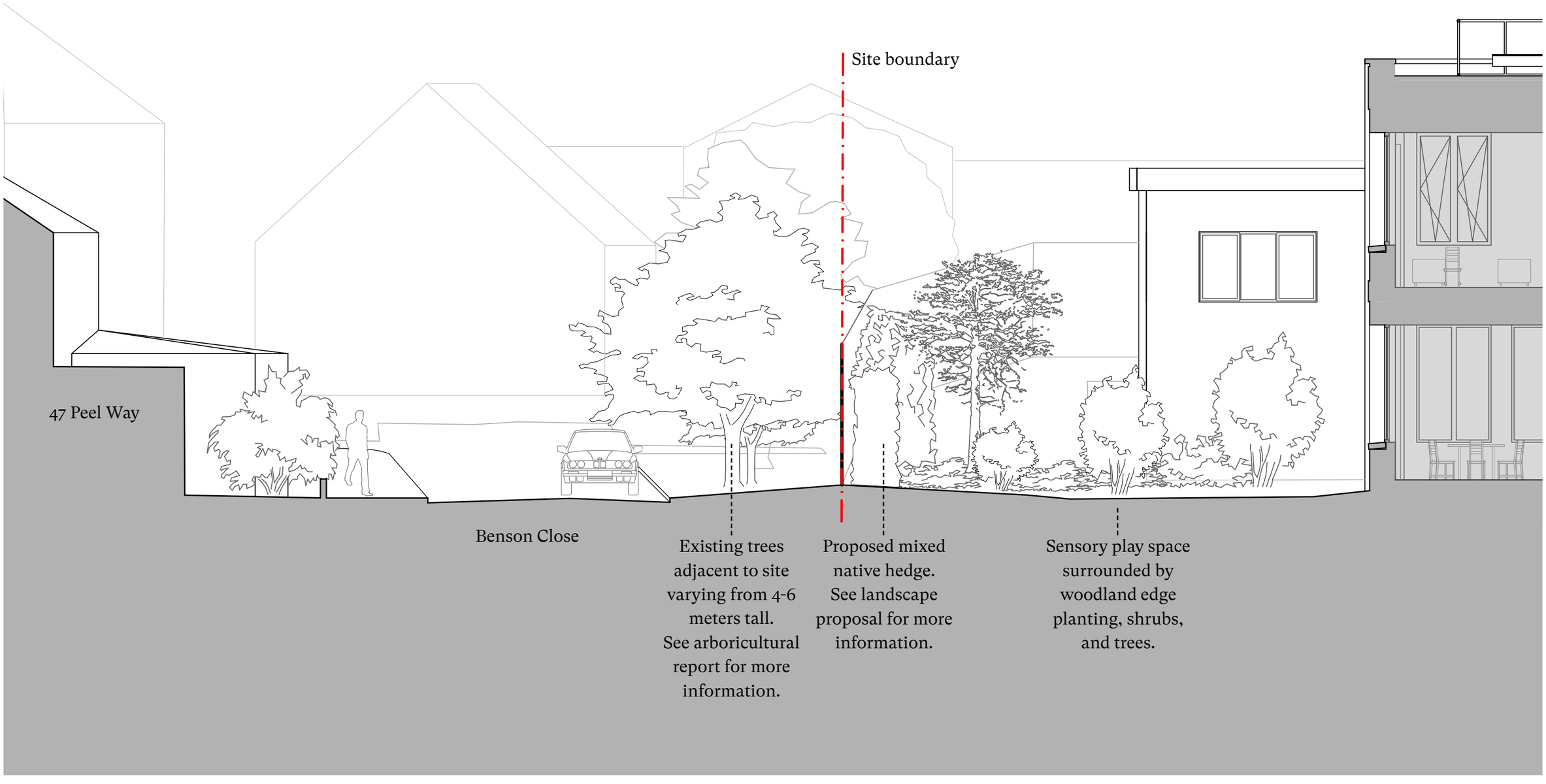
Flowering Lawn Mix - Emorsgate Seeds

The species shown are subject to further development and changes, as design progresses.

5.0 Design Proposal

5.15 Building Relationship with Benson Close





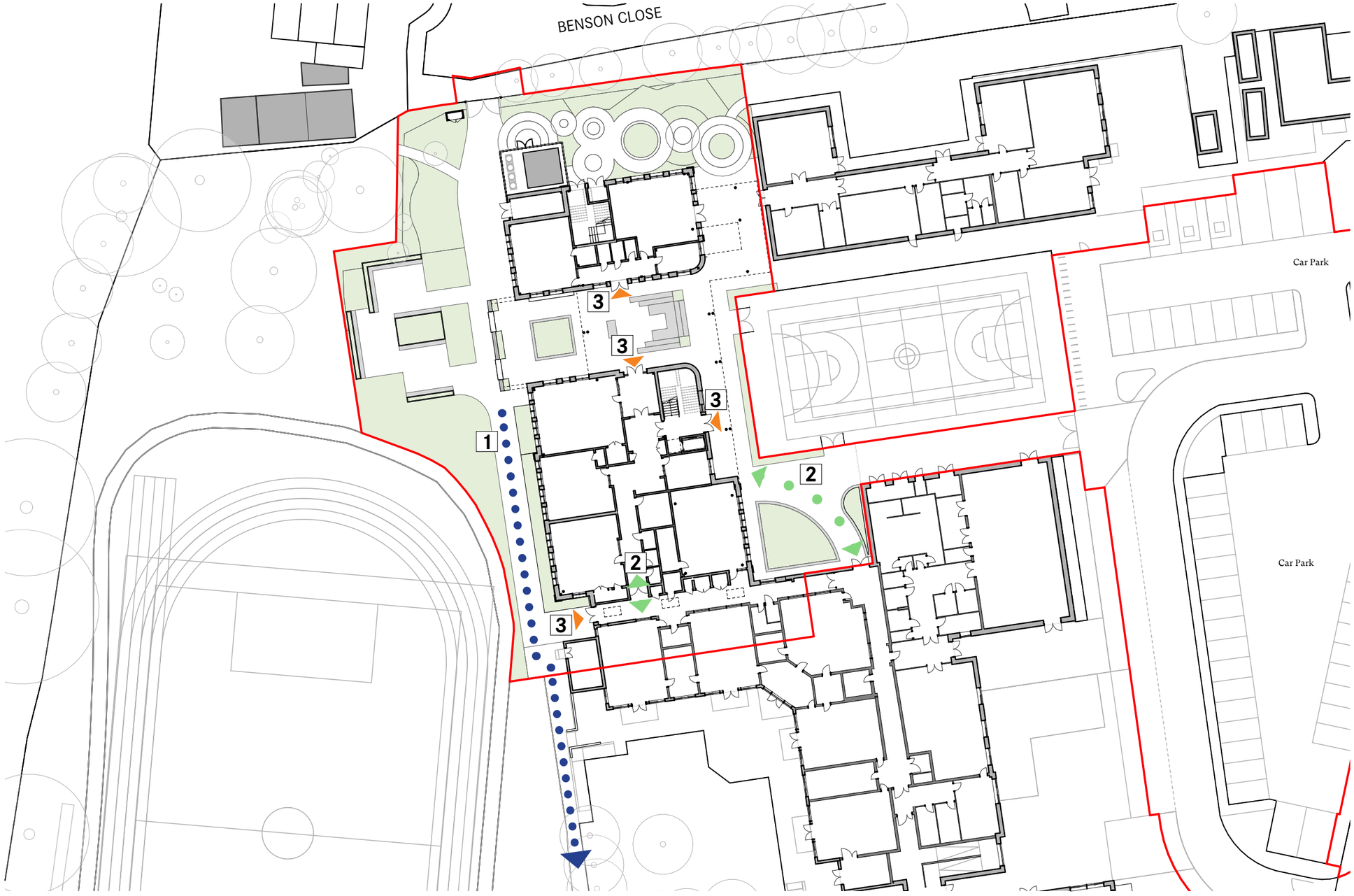
5.0 Design Proposal

5.16 Site Movement, Access & Refuse Management.

1 It is proposed that waste is taken to the existing refuse management area and dealt with within the exiting management plan.

2 The building has been designed to allow uninterrupted circulation, both internally and externally, between existing and proposed facilities.

3 Level threshold access to proposed building.



5.0 Design Proposal

5.17 Relationship with School Woodland Area

The design aims to create a series of outdoor spaces that link the proposed building with the school's woodland area to the west.
The view to the right shows the proposed building as seen from the school's woodland area. A landscaped seating area with wheelchair accessible planters encourages movement from the proposed building out towards the woodland area.

6.0 Appendices

6.1 Accessibility Statement

Overview
In considering the design, location and access for this project, the design team worked closely with the School to ensure that building design would maintain established routes across the site and create new well considered connections. The school were involved throughout to ensure that the access needs for the pupils were fully considered.

Positioning of the building.
There are two key design moves that assist in the accessibility of this building. The first, is splitting the ground floor into two areas of accommodation, and opening up a route from the Sixth Form building and MUGA to the open playing field. The second is connecting the new building to the corridor to the science block. This allows for level access, within a corridor from the south to the north end of the school

Connections
Internal route through the existing corridor to the new building

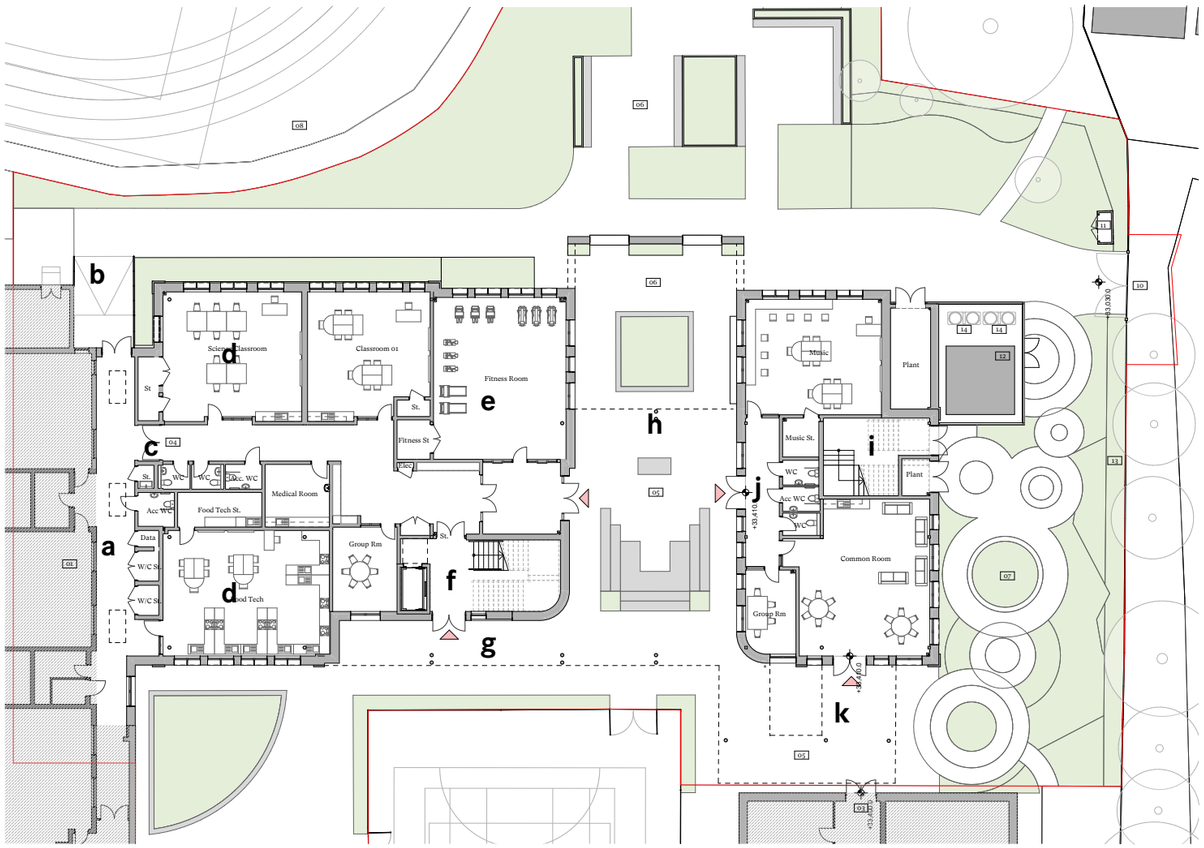
Routes
Free flowing route from the sixth form building to the playing area

6.0 Appendices

6.1 Accessibility Statement

Ground Floor

a Existing corridor remodelled to provide access to the new building.
b New ramped entrance
c Corridor doors held open with magnetic locks to assist in legibility between spaces and accessibility.
d Science and food tech rooms located adjacent to the existing science rooms.
e Fitness room located on ground floor for enhanced visibility and access, especially from 6th form students.
f Main stair core with evacuation lift. The corridor doors are held open for ease of movement.
g Covered area from the building entrance to the Sixth Form Building.
h Under croft providing a covered learning area and protection between the two blocks.
i Fire escape stair. (not to be used for access)
j Lobby with toilets etc, for the music room and 6th form common room.
k Canopy linking the two buildings.

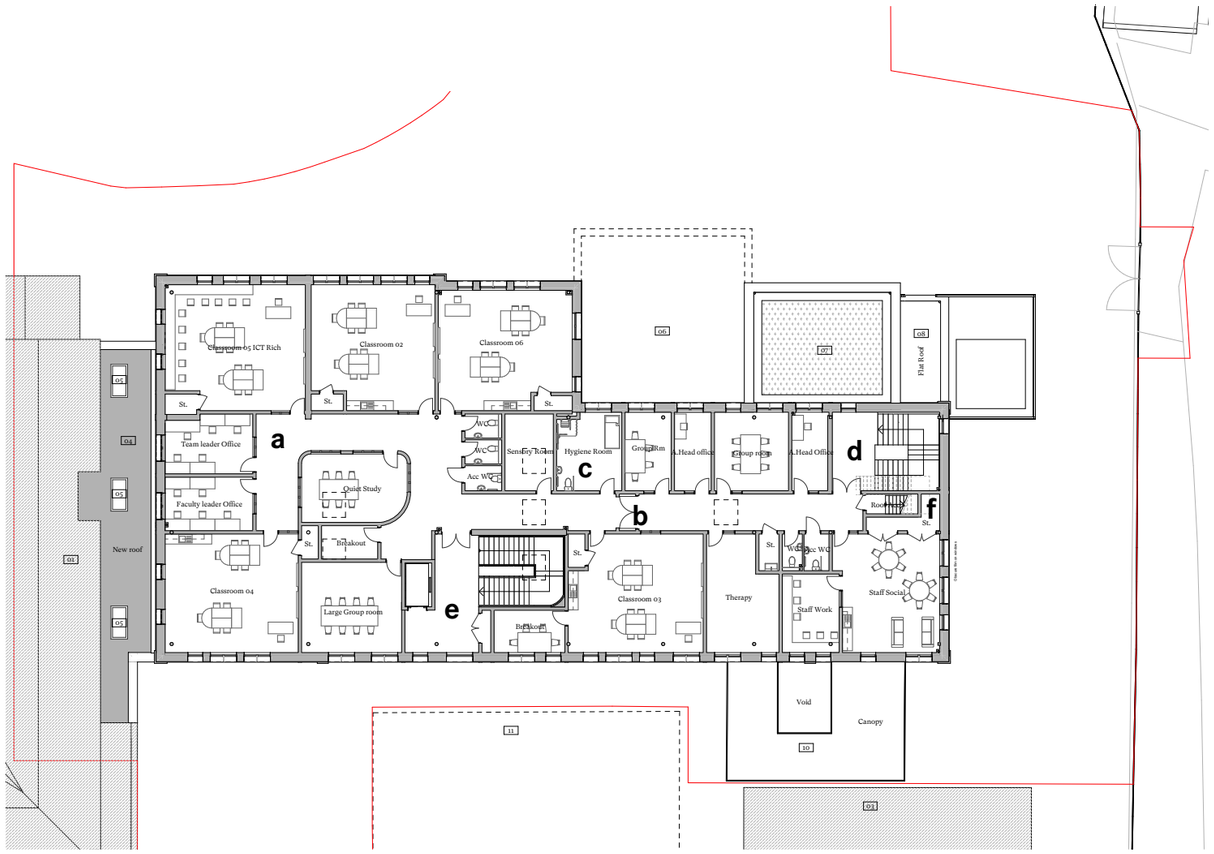


6.0 Appendices

6.1 Accessibility Statement

First Floor

a Protected corridor providing access to the main stair and evacuation lift.
b Corridor doors held open
c Changing places Hygiene room, located central on the first floor. Note, the school have another changing places facility on the ground floor adjacent to the entrance.
d Fire escape stair. (not to be used for access)
e Main stair core with evacuation lift.
f Maintenance Access stair to roof.



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