

Highgate School Science Building Design & Access Statement

**Ed Toovey Architects
August 2025 FINAL**

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Executive Summary

This Design and Access statement is submitted in support of a planning application submission by Highgate School for works to their existing Science and Administration building on the North Road campus, including refurbishment, renewal of all building services, alterations, fitting out and new extensions. The address is:

Highgate School Science Block
North Road
Highgate
Haringey
London N6

The proposed works in this submission are:

- Refurbishment of existing building including renovation of external stone and brick facades.
- Refurbishment and cleaning of existing building exterior fabric masonry walls
- Replacement of existing windows and doors, to match period style and details
- Stripping out of interior of buildings back to original shell
- Internal alterations including demolition of existing east stair and various local alterations to change the plan layout and walls
- Extension in Science Quad to west side of the east Science wing, comprising a 4-storey high building with basement and glazed roof, to include the new entrance Foyer, main new lift and general access and fire escape stairs.
- Extension in Garner Quad to north side of the Science centre block, comprising a 2-storey building at upper levels, with open colonnade and modest extension to ground floor offices.
- Interior alterations with new extensions will enable the number of dedicated science laboratories to be increased from 15 to 19 at the ideal laboratory area for educational purposes, improving facilities for modern science educational teaching for the principal departments of Physics, Biology and Chemistry.
- Provision of Part M compliant and fire evacuation new lift and stairs to bring full inclusivity and accessibility to a building which currently is not fully accessible
- New rooftop astronomy observatory module
- Rooftop extension for a louvre-screened open plant area for air source heat pumps to assist in converting the whole building to electrical power supply
- New dormer to roof on the west side, in the building known as “Link Block”, to locate a plantroom in the un-used attic roof space
- Complete stripping out and replacement of mechanical and electrical building services on all floors, removal of gas heating services, and replacement with new energy efficient services with electric power source.
- Minor external alterations to reduce solar gain to the southernmost classrooms
- New hard and soft landscaping with new trees to external spaces in Science and Garner Quads

These proposals should be seen in conjunction with the associated “Island site” proposals [a separate planning application] just to the south of Science. Together they represent a major enhancement of the Science Quad and the aspect of the School seen from Southwood Lane.

1.0 Introduction outline of proposals

1.0 Introduction

1.1 Highgate School

Highgate School was established in 1565 by a Royal Charter of Her Majesty Queen Elizabeth the First. Sir Roger Cholmeley, Founder of the School, was granted Letters Patent to found ‘a *grammar school...for good education and instruction*’.

Highgate comprises three co-educational Schools:

Pre-Preparatory School established in 1993 located in Bishopswood Road. The School teaches pupils in Reception, and Years 1 and 2.

Junior School established in the nineteenth century on the current location of Dyne House and relocated in 1938 to Cholmeley House in Bishopswood Road. Cholmeley House was demolished in 2014 and a new Junior School was completed for the 2016/17 Academic year. The School teaches pupils in Years 3 to 6.

Senior School, still located in the centre of Highgate Village on three separate sites. The School teaches pupils in Year 7 to 13.

The three Schools share facilities in Bishopswood Road including the Mallinson Sports Centre, Caen Wood Hall, the Dining Hall and the Mills Centre. The latter provides specialised Design Technology and Art teaching facilities for the Senior School, as well as exhibition, meeting, presentation and social gathering facilities. In addition, the School has sports fields around Bishopswood Road and about half a mile away at Far Field, at the junction of Hampstead Lane and The Bishops Avenue.

Highgate is one of Haringey’s leading schools. As a charity it has developed significant partnership arrangements with a considerable number of Haringey primary and secondary schools. Its position in the Haringey community has been further advanced in 2017 with the establishment of the Sixth Form London Academy of Excellence in Tottenham, with the welcome and active support of Haringey Council. Highgate is the lead academic sponsor of the new free school working in partnership with Tottenham Hotspur Football Club.

1.2 The Need for the Project

The original Science building was built to meet the growing needs of Science education in the late 1920’s, and included workshops for aeronautics and other practical sciences. The spaces are well built, generally tall and with good natural daylight, and are worth retaining as they continue to be adaptable to changing needs.

However the existing buildings are now in need of refurbishment to renovate external fabric, walls and windows, and the interior layouts no longer meet current Science teaching requirements, with the existing balance of very large laboratories with others that are too small, and under-sized servant spaces, creating an excess of space in some rooms, and a scarcity of space in others.

In addition, the Science department has never had a well-defined entrance that not only provides good inclusive access for all, but also provides a focal and gathering point for all the disparate disciplines within the umbrella of science teaching. Currently pupils and staff enter directly into two stair lobbies that are in part shared with other facilities, and these entrances are not spacious enough to allow congregating or orientation, prior to moving up through the building to the individual science departments.

The new layout aims to provide more laboratories of a medium size, ideally suited to pupil class numbers across the range of ages. The diversity of modern science teaching also calls for a greater number of specialist spaces for the various different disciplines which the School provides in its educational curriculum. Interior alterations with new extensions will enable the number of dedicated Science laboratories to be increased from 15 to 19, improving facilities for modern science educational teaching for the principal departments of Physics, Biology and Chemistry, as well as supporting space for staff areas, preparation and storage. At basement level in the new south extension there will be additional toilet and shower facilities, to encourage cycling.

Building electrical and mechanical services are nearing the end of their useful life, which is of particular relevance for Science spaces, which are generally highly serviced for practical science work and experiments. The buildings therefore require a full strip out of all services and replacement with new more efficient services based on electric power source, to give the buildings at least another 30-50 years of life before next significant maintenance. The works will reduce carbon emissions and include more heat recovery.

General circulation in the building is also in need of modernisation and improvement. The new plans will provide a disabled and fire evacuation lift to all levels, and the existing cramped and difficult circulation movement will be greatly enhanced by replacing an existing stair in the back of the plan with a new, more open modern southern stair in the Science Quad extension, connecting with the new Science Foyer at ground floor.

The new entrance off the Science Quad provides the main access and focal point for all the science subjects, giving a clear identity and an affirmative entry and orientation area where science teaching can be displayed and celebrated.

The result is a proposal that will meet all these requirements in one construction project, planned to minimize operational disturbance in the least time possible. To that end the proposal is to carry out all the varied works in one single phase.

1.2 Project Background and SPD

A separate Planning Heritage Analysis document shows the history of the site in historic maps, from when the School originally acquired the site under lease, to its purchase and use for games.

The Science building opened in 1928 and since then has been the centre of science teaching at Highgate School.

Haringey Council developed a Highgate School Supplementary Planning Document with the School, issued March 2021 to provide guidance on the development of sites. The SPD refers to the Science building requirements under '*Building Refurbishment and Modernisation Needs*' as follows:

“In assessing the opportunities for the academic requirements set out above, the School has carefully considered those buildings and areas of the estate that need substantial repairs and maintenance following the years of relatively low re-investment in the fabric of the School and that need substantial modernising as they are no longer ideal-for-purpose for modern educational environments.

The following buildings and areas are key facilities that require significant investment in the coming period to maintain them at their current levels:

- *Senior School Campus: Science Block (internal refurbishment and reconfiguration of science laboratories) and the Dyne House Site;*

On many of the School’s properties, the mechanical and electrical systems are old and no longer cost or energy efficient. In many cases the buildings within the estate need to be brought up to modern standards. It is against all of this background that it is necessary for the School to resolve its major building projects over the coming decades ensuring a more sustainable and energy efficient estate that provides a suitably adaptable and safe learning environment for children. Whilst it would be desirable to establish a school-wide decentralised heat and energy facility, including the potential link into a wider network should one come forward, the fragmented nature of the School’s estate makes this unviable. The Council will assess the approach to energy and carbon conservation against policy on a site-by-site basis in the detailed planning application stage looking to make each building as energy efficient as possible.”

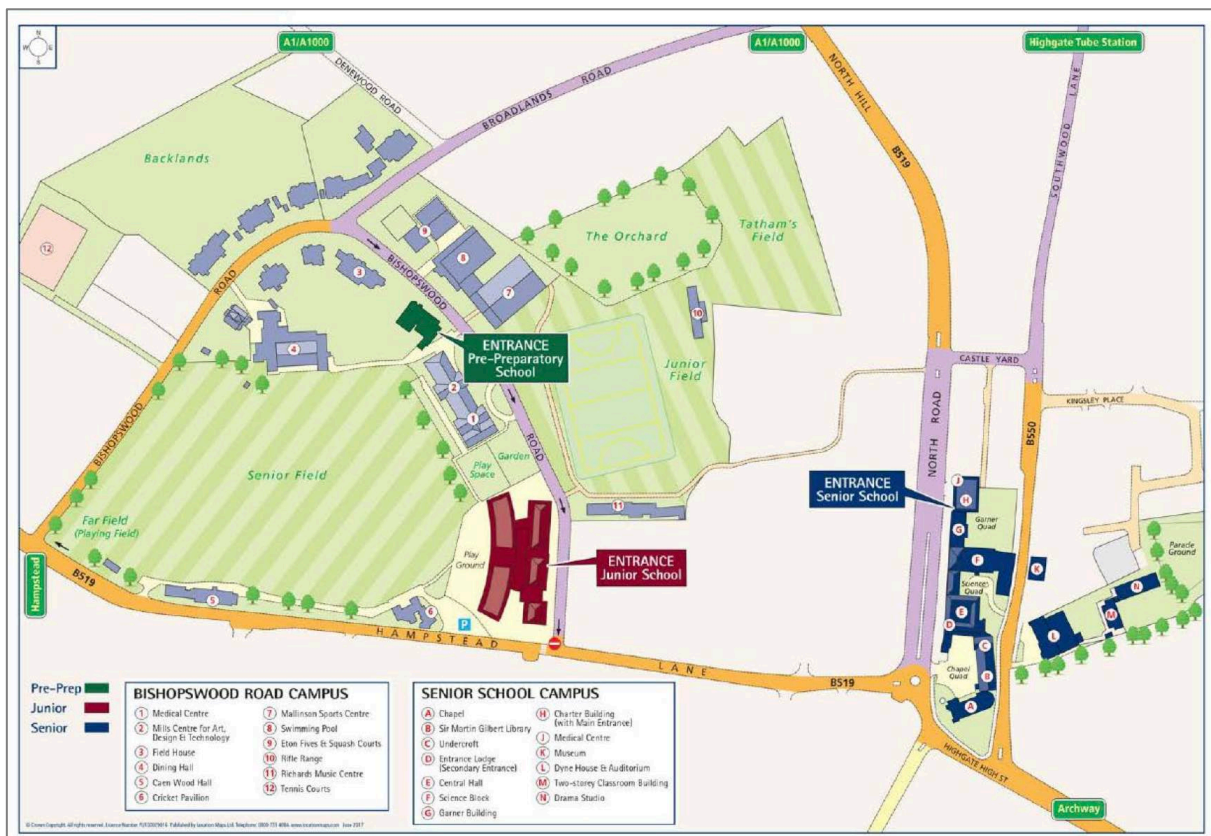


Diagram plan of Highgate School, with Science Building as reference ‘F’ on North Road site

These proposals for the Science Building are in accordance with the SPD, which is a material consideration in planning decisions.

2.0 The Site

2.0 The Site

2.1 Site Location

Since 2004 the School has been carrying out the regeneration of its Bishopswood Road and Senior School Sites. This has been extremely successful, delivering high quality buildings which are sensitively integrated into their context. The plans below show the extent of these two sites as well as the location of the Far Field site, with the future proposed projects numbered and listed below. The Science Building covered by this report is labelled [1].



Senior School Campus

Senior School Campus:

1. Science Building
2. Dyne House & Island Site Tunnel Building

Bishopswood Road Campus:

3. Richards Music Centre
4. Mallinson Sports Centre & Orchard
5. Decant Facility

Far Field:

6. Far Field



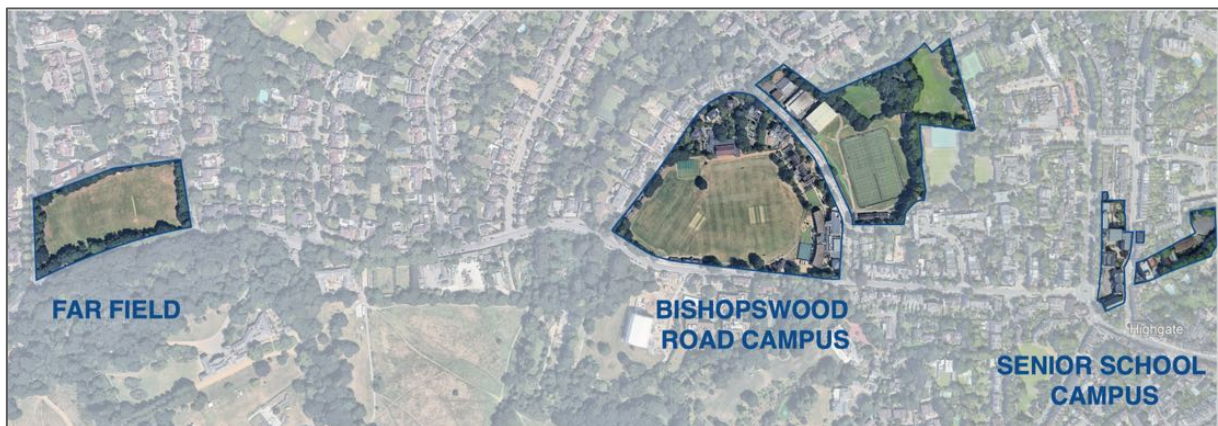
Bishopswood Road Campus

Past projects include:

Restoration of historic buildings: Big School, Chapel, Mills Centre, Central Hall

Extension to existing buildings: Science Block, Garner Building, Pre-Prep School, Pre-Prep Dining Hall

New buildings and facilities: Charter Building, Junior School, Junior Field Synthetic Pitch, as well as many minor projects

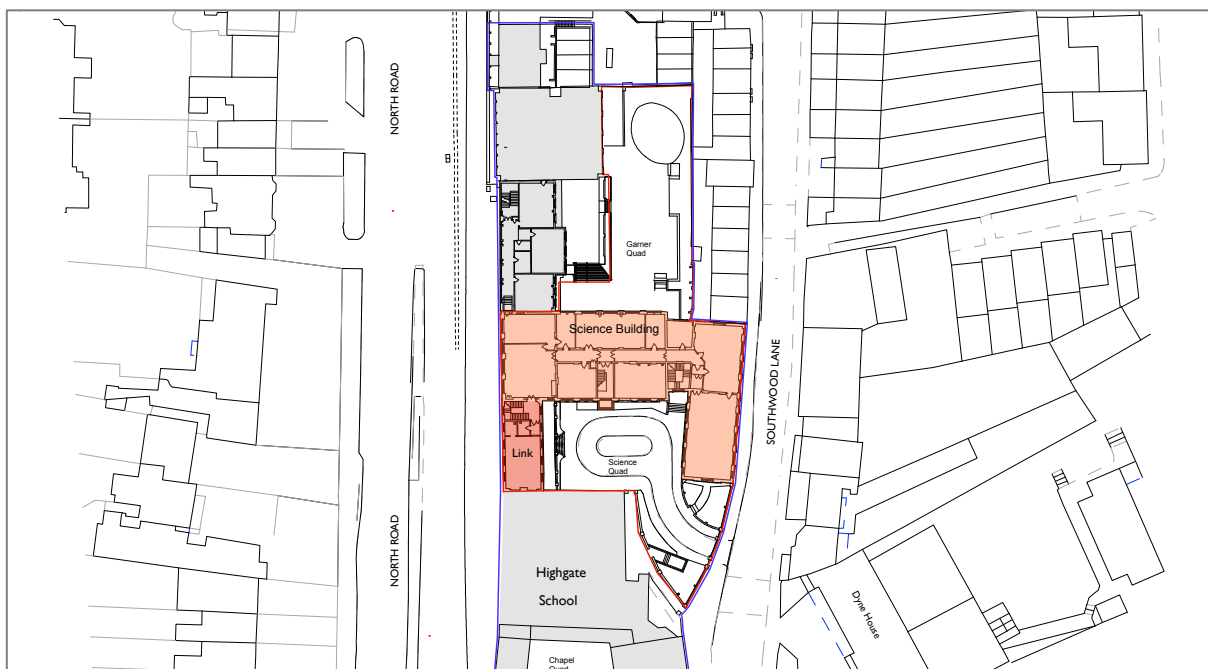


School Campus Masterplan



Far field

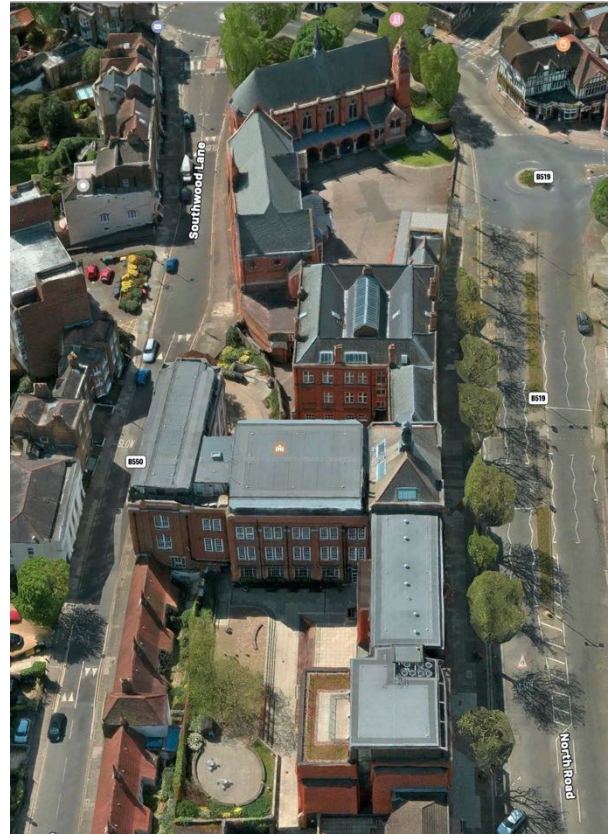
The hilltop site of Highgate School is the main campus for Senior School, and comprises a collection of inter-linked buildings built at various times that frame three open outdoor amenity spaces or quadrangles: from south to north these are known as Chapel Quad, Science Quad, and Garner Quad.



Site plan existing – refer to project drawings for all details



Aerial view of the North Road campus, with Science on the left side



Aerial bird's eye view of the Science Buildings from the south [left] and the north [right]

The subject of this application are three connected blocks that sit between Science Quad and Garner Quad. The buildings are:

- Science Centre Block
- Science East Wing
- Link Block - roof attic [on west side of Science Quad]

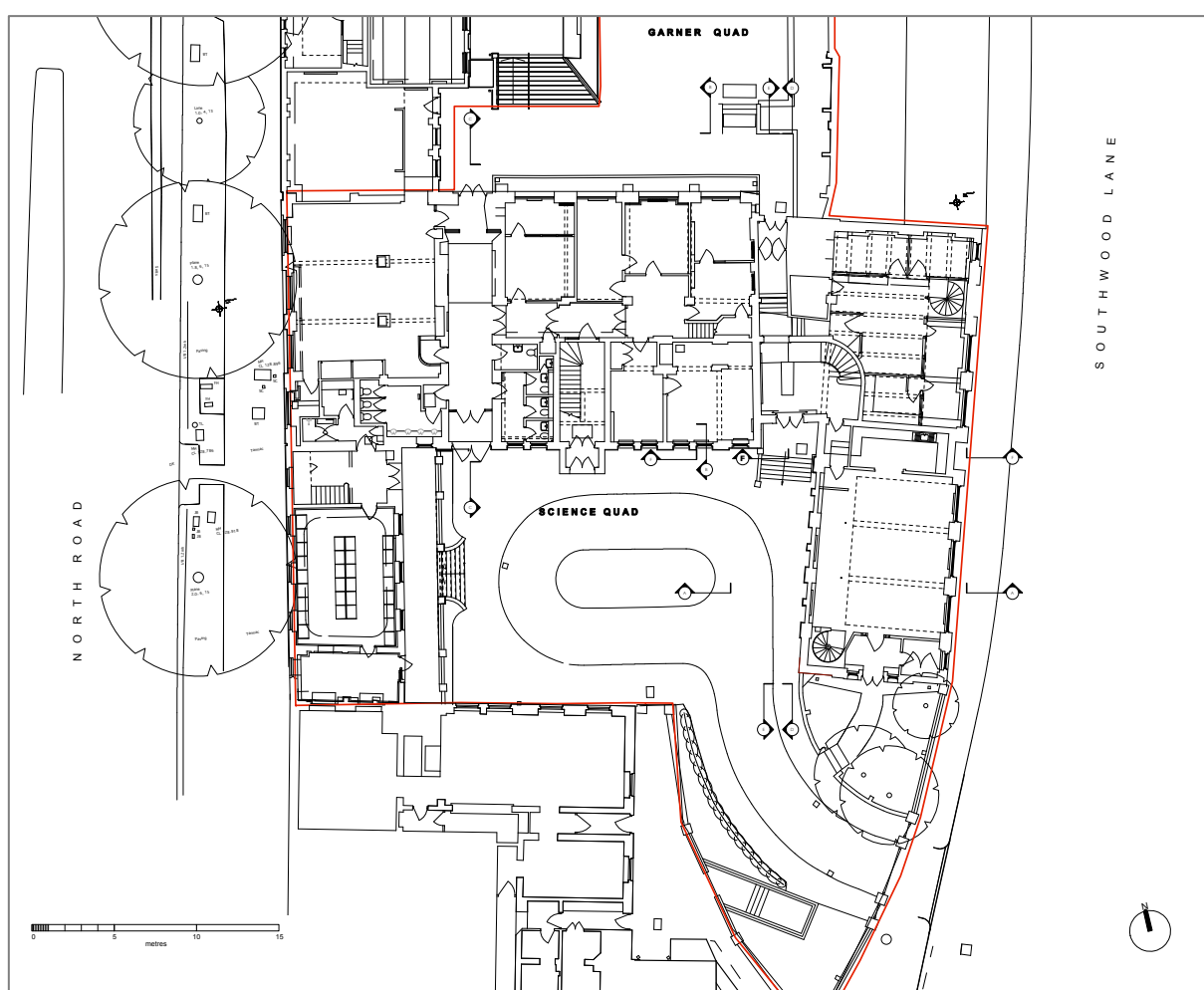
2.2 Science Buildings & Condition

2.2 Buildings

A Heritage Assessment by the planning consultant accompanies the planning application which should be referred to for more detail on the history, character and evolution of the existing buildings.

2.2.1 Centre Block

The building was constructed in 1927 on the site of earlier buildings, with the dedicated purpose of providing Science and Administrative facilities for the School. The original building is a 3-storey building, with particularly tall floor to ceiling heights at first and second floors, to provide well-ventilated spaces for Sciences. The construction is load-bearing masonry walls on traditional concrete footings, with solid masonry walls of brick and Portland stone, steel and concrete internal floors and painted timber windows.



Ground floor plan existing – refer to project drawings for all details

The central block in its architectural design creates a strong sense of front and back, with the front elevation to the south with Edwardian classical elevation and details, combining decorative Portland stone fluted columnar piers, capitals, dressings and cornices with recessed red brick panels and sides. The south façade comprises a classically ordered symmetrical composition, with a storey-height articulated stone base or plinth level, with expressed rustication of deep V-shaped joints, and a double storey order above manifested in the row of ionic piers of fluted stone columns with decorative capitals, surmounted by

a strong and projecting stone cornice, with traditional mouldings.

Between the columns, the bays are distinguished by a contrasting brick facing, with white painted timber paired windows set within. Smaller stone elements add an extra layer of detail, breaking down the whole order into repeating bays, each symmetrical about a central feature bay. In this centre bay the stone predominates and the expression of curved arches above windows adds greater emphasis.

At the ground floor of the central bay is the main entrance to the central stairs, although this is less frequently used as a main entrance into the building in the daily life of the School. On the east side the façade is recessed back into the corner of the junction with east wing, with entrance doors formed at a half level down from the courtyard – this provides access to one of the key staircases, as well as a corridor right through to the Garner Quad and is effectively the main entrance. On the west side of the Centre Block, a project from 2012 created a through corridor to connect Science Quad with Garner Quad.

On the north elevation the finish is much more prosaic, befitting what was formerly a rear courtyard that was much less defined than it is now, with unadorned red clay brickwork and large but simple openings. The composition is practical rather than aspirational. The development of the Charter Building has shifted the natural order of approach from the south to the north, and with this the hierarchy of the Quads has changed.

The original flat roof has since been developed with the rooftop extension, constructed in 2006, which comprises a curved aerofoil-shaped roof with dark grey single ply membrane finish, and fully glazed walls with aluminium polyester powder-coated curtain walling, windows and solid panels. The rooftop extension forms a lightweight, modern and contrasting addition to the more traditional building below, and is set back from the original parapet.

The uses within the Centre Block range from Senior Administration at ground floor, two floors dedicated to the Sciences, and a mix of Science and Modern languages on the top floor.

The building connects through internally with the Link Block to the south, and with the Garner building to the north, which was built in 1983 and extended at roof level in 2015. There are changes in level at some floors so that, although the Charter building has a lift, the Science building is not fully accessible at all floors and currently has no lift itself.

2.2.2 East Wing

The east wing was constructed immediately after Centre Block, designed to complement and match it in all its exterior detail. In this case however the building was clearly seen as having two facades of equal import, on to the Science Quad to the west, and to Southwood Lane to the east. Both elevations have a near equal sense of importance, use of Portland stone, composition and detail in the same Edwardian classical style. Neither elevation has a significant entrance, as the building defers to the importance of the centre block main entrance. At roof level the extension of 2005 continues from the centre block, but with a more modest and lower flat roof design.

A key public elevation is to the south, where the east wing has a significant gable façade facing back towards Highgate Village, prominent on Southwood Lane seen from the south. Here the classical composition is completed with an arched pediment, with stone mouldings. The elevation on the north side

follows the same practical red brick approach as Centre Block. The east wing has staff facilities at a lower ground floor and mezzanine, with two floors dedicated to Science above, and Modern languages and Science at the top floor extension.

2.2.3 Link Block

The Link Block is on the west side of Science Quad, and provides mainly teaching, pastoral and administration facilities. The building was constructed in 1904 and was carefully refurbished in 2010. The facades to Science Quad and North Road are predominantly fair-faced red clay facing bricks with decorative details around the windows and a composition of piers and recessed panels, with timber window frames. The building has a steep pitched roof finished in welsh slate. On the east side a terrace with brick guard wall negotiates the set down to the Quad level, with the central stone steps on a curved layout constructed in 2011.

2.2.4 Condition:

The existing buildings are considered to be sound and well constructed, with a long usable service life ahead if periodic refurbishment and maintenance is carried out. The original buildings of Centre block and East Wing require careful detailed refurbishment of masonry brick and stone walls, with targeted re-pointing and sensitive cleaning that still retains the integrity of the materials. Brick, and Portland stonework in particular, will be cleaned to remove years of pollution and weathering stains.



Existing stonework and brickwork requiring renovation

Timber and metal windows, which are single glazed and poorly weather-sealed, are now in poor condition, with many partially rotten, damaged or twisted, and will require replacement, both to improve condition into the future and to bring up to modern thermal and airtightness performance standards.



Existing damaged and poorly fitting windows to be replaced

At roof level, the rooftop extension project over Centre Block and East Wing not only added new accommodation, but also addressed issues at that time of roof finishes and flashings to perimeter flat roof areas and gutters, so there is relatively little that needs to be done to those areas.

2.3 Site Photographs



Aerial bird's eye view of the Science Buildings from the east, on Southwood Lane



Aerial bird's eye view of the Science Buildings from the west, on North Road



Street view on Southwood Lane of the Science Buildings from the south



View of the Science buildings from Garner Quad, from the north



View of the Science buildings from Science Quad, from the south



Street view on Southwood Lane of the Science Buildings from the north



View of the west elevation of East Wing from Science Quad



Detail view of the east elevation of East Wing from Southwood Lane



Interior view of typical laboratory at upper floor



Interior view of typical laboratory at upper floor

2.5 Surrounding Buildings

The relationship with existing buildings on the School site has been noted in section 2.1. A detailed assessment of historic context is provided in the Heritage Assessment accompanying the application. With regards to the village and public realm, the building is located on the east side of the School campus with a significant façade to Southwood Lane, the south gable having a presence seen from the south.



View on Southwood Lane looking north, Science East Wing on the left



View on Southwood Lane looking north, Science East Wing on the left, Dyne House on the right

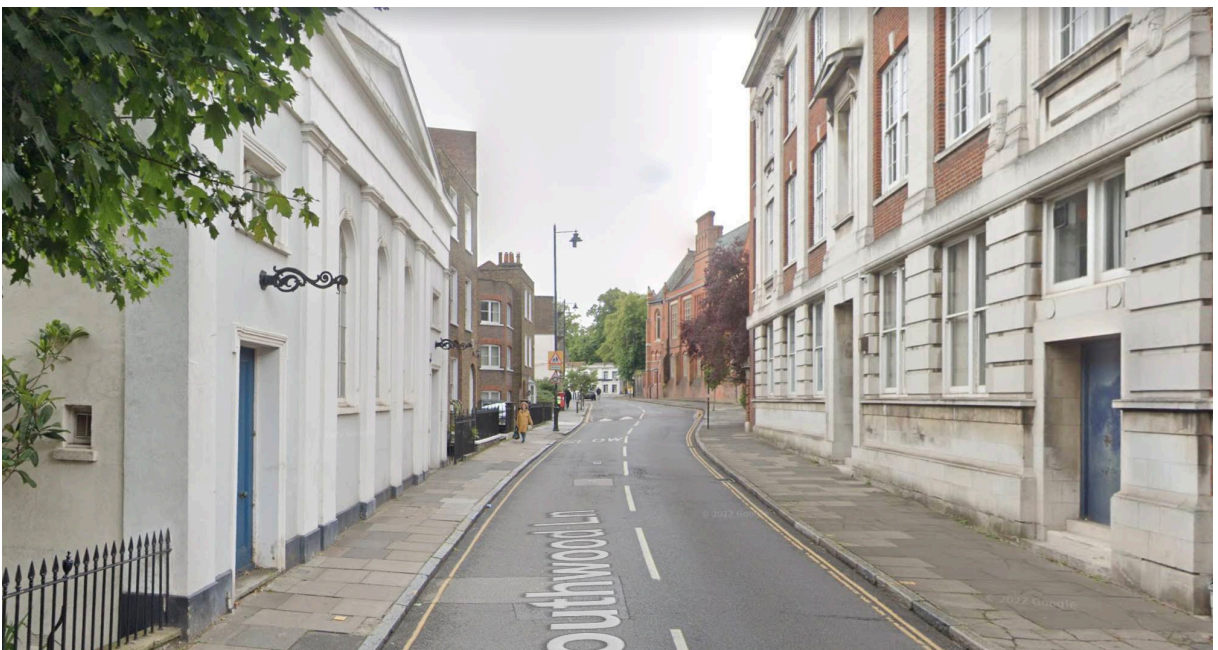
On the opposite side of Southwood Lane is the School's Dyne House - the photo above shows the current context, however this will be markedly enhanced by the new development proposals, the subject of a related planning application under the Highgate School masterplan.

On the north side of the Science Building are the Grade II listed Sir John Woolaston's almshouses, generally single storey with large steep pitched roofs, and a two storey building in the middle.



View on Southwood Lane of the almshouses

Adjacent to Dyne House are mainly Georgian terraced houses of a lower scale, and the Highgate Tabernacle which is now the School's museum.



View on Southwood Lane looking south, Science East Wing on the right, Tabernacle on the left

3.0 Site Analysis and Evaluation

3.0 Site Analysis and Evaluation

3.1 Site Analysis

Science Quad is defined by buildings on all sides, but is open to the south-east corner, facing towards Southwood Lane. The space is generally hard-landscaped with modest areas of planting. It is a formal space, due in part to the character of the Science Blocks, and has a raised terrace on the west side, divided by a brick wall and railings.

This Quad is very much a thoroughfare for the whole School, with pupils and staff crisscrossing the space as they move between buildings and lessons. There are some seating areas, but the existing character of the space is as a transient area to move across, and to accommodate servicing vehicles, with the ground plan prioritising a roundabout hard road surface.

Garner Quad has School buildings to the west and south, with a much more open aspect to the other two sides. On the east side it shares a high boundary wall with the listed pitched roofed almshouses along Southwood Lane, which are set at a lower ground level a half storey down, and have small rear yards.

To the north, the Quad finishes at a wall with gates, with the narrow lane leading behind residential houses to Castle Yard beyond.

On the west side the terrace of the Charter Building overlooks the quad. This space is used for pupil outdoor play and socialising between classes, and there are trees and landscaping to soften the environment.

The original main access to the School site from the street was off North Road via the small entrance next to Chapel Quad. Originally Garner Quad was the rear of the School, and the north side of Science building is therefore simple and unadorned brickwork, befitting its status in that context.

However, the Charter building was designed as a new more generous main entrance to the School with reception, and since its completion in 2013 pupils, staff and visitors now enter at the north of the School site, and move southwards via Garner Quad. This has changed the emphasis of the north side of Science and the character of the outdoor space, although this is not reflected in existing buildings.

3.2 Site Evaluation

The two quadrangles are important place-making amenity spaces for the School pupils, providing a focus for the “courtyard” buildings around.

The Science Quad is an important servicing area because access to the whole campus site is so limited, however its main function for the School should be to provide an amenity and relaxation area, an enjoyable crossing place for connecting routes between buildings, and a pleasant outlook from the buildings.

The Garner Quad as existing is more open and landscaped, with a different sense of enclosure. The Charter Building main entrance to the campus means that this is often the first outdoor place that pupils, staff and visitors experience, so it is important that the project enhances and elevates its significance.

4.0 Planning Policy Context

4.0 Planning Policy Context

4.1 Planning Policy

For a full and detailed assessment of the planning context of this proposal, refer to the separate detailed covering letter, planning statement and heritage statement by Bidwells LLP that accompanies this application.

The National Planning Policy Framework (NPPF) is not a 'statutory' development plan document but it does represent up-to-date government planning policy and is a material consideration that must be taken into account where it is relevant.

The development plan for the site comprises:

- Highgate School SPD (adopted in March 2021)
- The London Plan (March 2021)
- Strategic Policies 2013 (as amended 2017)
- Development Management Policies 2017
- Site Allocations DPD 2017
- The Highgate Neighbourhood Plan 2017

The London Borough of Haringey is in the process of developing a new Local Plan, however, it is at a very early stage.

After public exhibitions in Autumn 2018, Highgate School finalised the "Supplementary Planning Document" with Haringey, which was adopted in 2021.

The proposals address the five main points of the Haringey Development Charter, as set out in the following Statement sections and summarised in the Conclusions.

4.2 Planning Designations

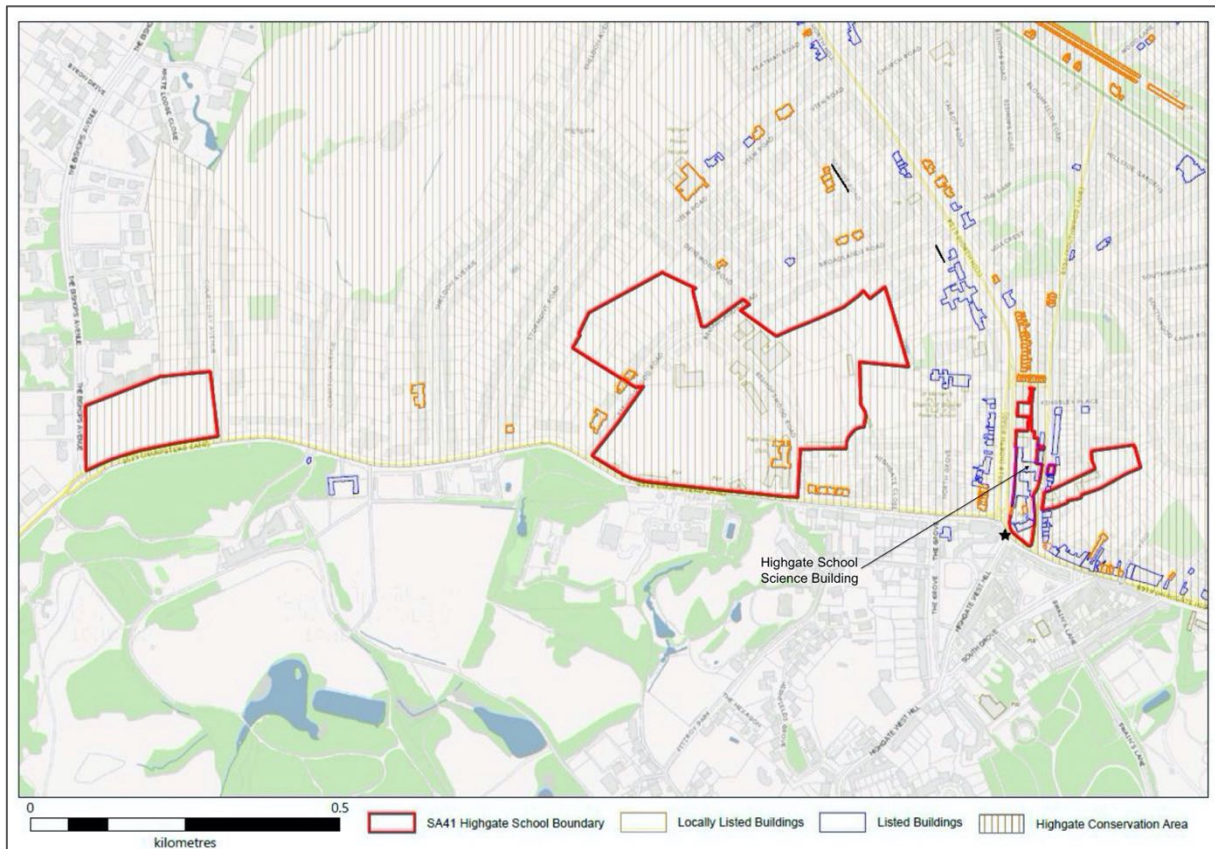
The site is subject to the following designations which are considered in further detail on the following pages:

- Highgate Conservation Area
- Metropolitan Open Land
- Allocation SA41 - Highgate School

4.3 Conservation Area & Listed Buildings

The site is included within the Highgate Conservation Area. This Conservation Area was designated on 21st December 1967. A Character Appraisal for the Highgate Conservation Area was prepared and published in December 2013.

The character of the Highgate Conservation Area is formed by the relationship of its historic pattern of development, its high percentage of buildings of architectural merit, its topography, its green spaces and distant views.



The map above shows the Highgate Conservation Area, Locally Listed Buildings and Listed Buildings, with the Science Building location highlighted.

The buildings that are the subject of this submission form part of the main “hilltop” campus of Highgate School, bounded by North Road to the west, and Southwood Lane to the east, and with shared boundaries to the north and south with other owners. The whole site is comprised of a number of buildings constructed over time at different periods, all interconnecting, from the Chapel at the southern end to the Charter Building at the northern end. Each reflects the architecture of its own time, but is in harmony with its neighbours.

Of these buildings, the Big School and the Chapel, built in 1865 and 1866 respectively, are Grade II listed and of particular historic, heritage, architectural and townscape significance.

The other buildings, notwithstanding age or quality, lie within the curtilage of the two listed buildings noted, and therefore must be accorded sensitive and careful treatment for any alterations, refurbishments or additions, as if they were themselves listed. This is the approach that has been taken in preparing these designs.

The Science Building was built in two phases from 1928-30 and at the time was a landmark building in the provision of dedicated spaces for Science and Aeronautics teaching.



Photograph taken circa 1928, with demolitions in progress for East Wing site

In recent years, commensurate with the School's outstanding reputation and record in caring for its building estate, the School has refurbished the Chapel, Big School, and the Link Block, as well as replacing poor original buildings with new works of very high quality, such as the new main entrance and teaching block known as the Charter Building, opened in 2013, and the rooftop extensions to the Science Block and Garner Building.

All of these developments have demonstrated the significant responsibility that the School has taken in conserving and improving its estate, finding the right balance between conservation and replacement to reflect the character of the campus, while also making a huge contribution to the surrounding neighbourhood.

Separate planning and heritage statements are being submitted with the application.

5.0 Consultations

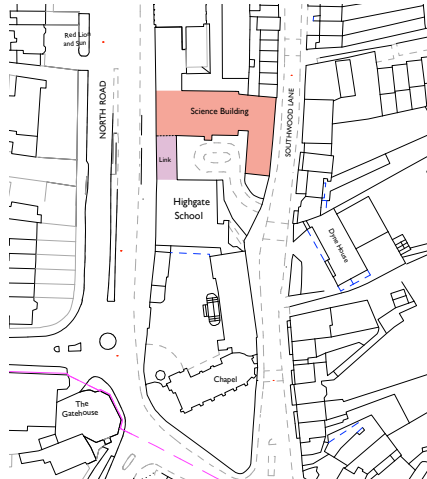
5.0 Consultations

5.1 Public Exhibitions

The Science building proposals were included in the Highgate School public exhibition, which was held in the Mills Centre on 12th March 2018, with detail on the proposed extensions and the south elevation highlighted, as these were considered to have the most impact on the public realm. Further consultations were held at a meeting with representatives from the Highgate Society and Highgate Neighbourhood Forum on 4th May 2018. A second round of consultation public exhibitions for local residents and groups was held at the Mills Centre on 20th November and 5th December 2018. Consultations comments and responses from the public exhibitions are shown in the table below:

Public Exhibition at Mills Centre, Highgate School - 12th March 2018	
Comments made:	Response
• 'Appreciates the refined science quad design'	• No response necessary
• The plans of the science block do not show the proposals for the island site, see point 10 above.	• Combined plan was presented at the second round consultation exhibition.
• The preferred option on the south elevations is the worst but undoubtedly the cheapest. The punched windows in the blank brick wall interfere with the symmetry of the existing elevation. It is a pity that this side extension could not be set back by a metre or so to leave the existing symmetrical elevation in isolation. If that cannot be achieved then the suggested option if a glazed link elevation with louvres works better with both the proposed new west elevation and the existing elevation.	• After further consideration the design was developed with a glazed south elevation with brise soleil as shown in the second round consultation exhibition.
• 'main concern: will the extension in the Charter/Garner Block quad be visible when approaching down Southwood Lane from the east – esp. lighting – and will it impact on the daylight and amenity of the westernmost Almshouses, particularly if lights are left on?	• The bris soleil fins were added and are intended to substantially reduce any lighting pollution to Southwood Lane. • The same applies to the east side of the north extension, where bris soleil have been included.
• 'Science Quad Building: generally unobjectionable, but windows in southern wall may increase light pollution. If the main frontage is glass, are windows needed in that wall?	• The bris soleil fins were added and are intended to substantially reduce any lighting pollution to Southwood Lane.

The presentation boards shown at the exhibition of 12 March 2018 are shown below:



Area location plan, with Science Building and associated Link areas shown in colour

Existing facilities

- The existing Science Buildings are in need of refurbishment and modernisation.
- The interiors require extensive works to improve accessibility, better circulation and organisation for the Science departments. Existing building fittings and mechanical and electrical services will be removed and replaced with new to current standards.
- The building occupies an important location on Southwood Lane, with a prominent neo-classical wing facing the road.
- The building is seen as a valuable resource, one that contributes positively to the Conservation Area. This is the last existing building on the island site awaiting refurbishment.
- The two principal facades on the south and east, seen from the road, will not be altered, but will be refurbished and cleaned.



Street context: view of the Science Building from the south along Southwood Lane



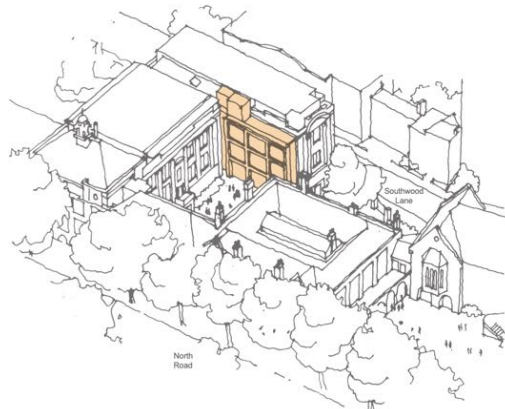
Interior view of a science laboratory



Exterior view of the south elevation in Science Quad

Highgate School Science Building Project

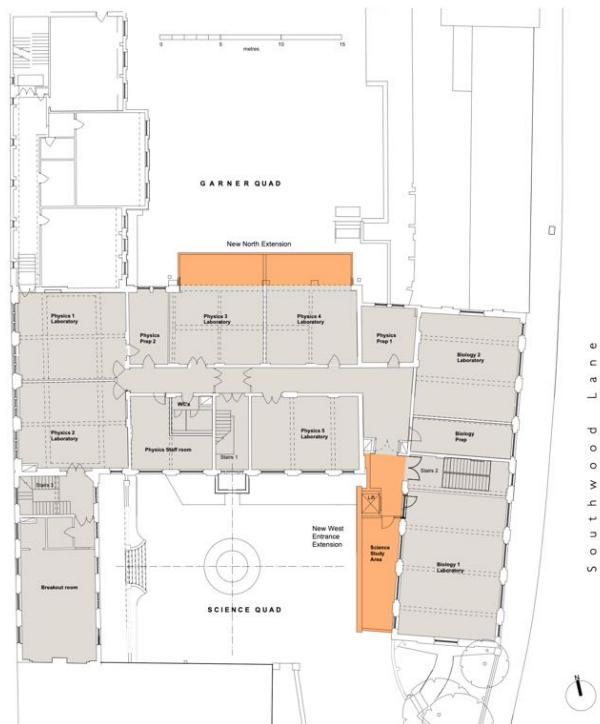
HIGHGATE



Bird's eye sketch view from south-west, with proposed Science Quad extension [highlighted in orange]

Proposed alterations and extensions

- As well as altering the interior layouts to suit the modern curriculum needs of Science departments, the proposals will also address issues of disabled access, by providing a new lift to all levels, general circulation and improving pupil and staff toilet facilities.
- Two new extensions are proposed, shown in orange on the plan on the right. The northern extension will allow Science laboratories to be planned more efficiently. The lower western extension will accommodate the new entrance with disabled lift, as well as enhancing movement around the building, removing an existing stair and offering better connections via a new stair within the east block.
- The west extension will create a new elevation to the Science Quad, which will be modern and sensitive to the context of existing buildings. The northern extension will be designed in sympathy with the plain brick facades, with external privacy louvers to prevent overlooking of adjacent properties.
- The refurbishment works will include cleaning and repairs to existing stone and brickwork, upgrading and/or replacement of existing windows to improve thermal performance, and a comprehensive renewal of all mechanical and electrical services for the buildings, to meet current Science teaching needs.



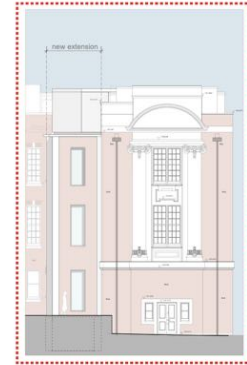
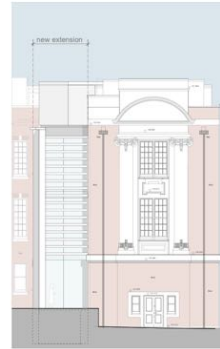
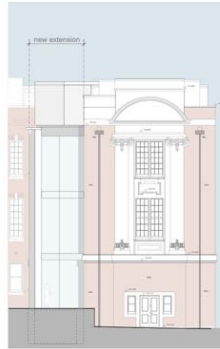
First floor plan proposed, with new extensions shown in orange

Highgate School Science Building Project

HIGHGATE

Elevations

- The south end of the new Science Quad extension will be visible from Southwood Lane, set back from the existing east wing facade.
- At this feasibility stage, different options have been designed to explore the relationship of new extension to existing, while maintaining the prominence and priority of the original facade.
- The preferred option is for the south end elevation to be faced in matching brickwork, with windows that reflect the proportion of existing. A vertical strip of structural glazing will allow the new extension to 'touch the existing building lightly', preserving the integrity of the original classical detailing.
- The west elevation is proposed to be faced in natural Portland stone, to match existing buildings, with a frame and panel articulation that expresses the importance of the new entrance, while following the same proportions as the existing building.



Three options for the south elevation of the new extension, with preferred option outlined in red



View of new extension [highlighted in orange] next to existing facade as seen on Southwood Lane from the south



Proposed west elevation to the Science Quad, with new entrance

Highgate School Science Building Project

HIGHGATE

Public Exhibitions at Mills Centre, Highgate School - 20 November & 5 December 2018

Comments made:	Response
• Concern about impact of Garner Quad extension on end almshouse – being too over-bearing and cutting out sunlight, and not having overlooking into their rear courtyard garden. Need to clarify on plan drawing the rear courtyard and roof.	• Report has been prepared on Rights of Light affecting the almshouses. • It was noted that the main north extension roof is lower than the new north elevation, being set down to improve daylighting to the almshouses. • Clarified as shown on the section that the north elevation extension parapet is lower than the existing parapet • Measures to prevent overlooking already included are translucent glazing on east side, and privacy projecting screens to upper floor windows to block views directly. • Site plan drawing was clarified after the exhibition to show ridge line and boundary wall clearly.
• Design comments on Garner Quad extension elevation, architectural fine tuning only – generally liked the elevation.	• Have made some adjustments to the elevation design following comments, to increase the width of wall at the sides of the north elevation.

• Pleased with Southwood Lane view from south, end elevation of Science extension – much better than previous	• No response required.
• Positive response to landscaping shown in Science Quad and gates area.	• Landscaping design will continue to be developed in more detail.
• Good to see Science and Island / Tunnel project on same plan – all made sense	• Both projects combined onto a single plan for the exhibition following earlier comments at 1st exhibition.
• Concern about impact during construction works on almshouses, dust, noise, Concern about how construction deliveries would impact on almshouses from Garner Quad – was allayed when noted that the site setup will be in Science Quad, with most materials carried through building and only minor use of Castle Yard access route overlooking.	• Construction management plan will be prepared and submitted with planning application, guided by construction consultants.
• Discussion on materials of Science Quad extension – visitor welcomed use of “real” solid Portland stone facings and bricks compared to use of thin “slips”.	• Clarification only that all stonework is to be traditional construction, not thin slips.

The presentation boards shown at the exhibition of 20 November & 5 December 2018 are shown below:

Summary of design changes

Building - What you said	Building - What we did
The plans of the Science Buildings do not show the proposals for the island site	Plan and sketch illustrations are included in this presentation with both schemes
Preference for option which included a glazed south elevation with louvres	South elevation developed as a fully glazed facade with external sun louvres, in harmony with the west elevation and set back from the existing south facade.
Will the extension in the Garner quad be visible approaching down Southwood Lane from the east – especially regarding lighting – and will it impact on the daylight and amenity of the westernmost Almshouses?	Perspective sketch of the principle view from Southwood Lane approaching from the east is included in this presentation. The daylight and amenity of the Almshouses, including preventing light pollution, has been carefully considered
The windows in southern wall may increase light pollution. If main frontage is glass, are windows needed?	South elevation of the extension designed with external louvres that will reduce light pollution. These will be developed in more detail as the design progresses.

Bird's eye view of Science buildings seen from south-west, with North Road at front

Key design points:

- Plans have developed since March 2018, coordinating with Island & Tunnel project
- New stairs and lift, providing full inclusivity and accessibility for disabled people to all floors, combined together in new Science Quad west extension
- Elevations for both new extensions were conceptual only at previous exhibition; these have been designed with materials and more detail
- Interior plans have been designed to provide a full range of Science teaching spaces meeting the School's current and future needs
- Surveys have been carried out on existing buildings to provide information for existing buildings fabric refurbishment and modernisation of services

Highgate School Science - Design Development

HIGHGATE

Science Quad west elevation and Overall plan

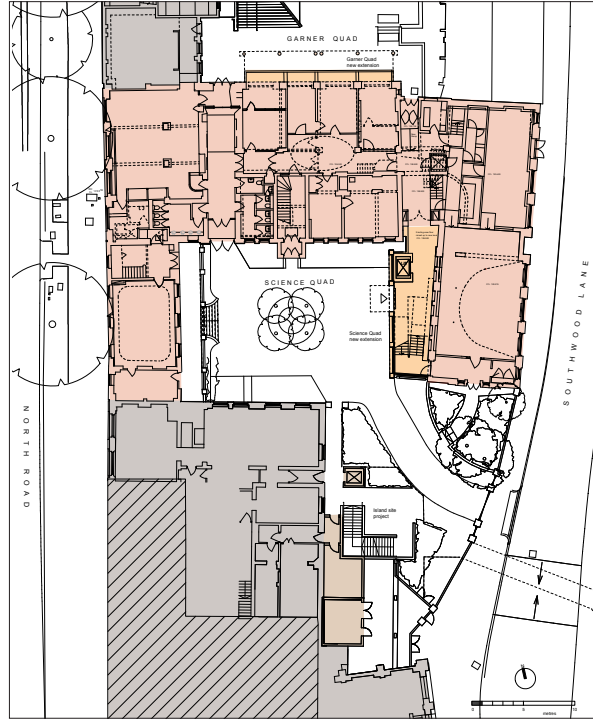


West elevation proposed of new extension facing back in to Science Quad

Key changes to proposed west elevation of Science Quad extension:

- Elevation has Portland stone "frame" with red clay brick infill panels, matching materials of existing buildings, with bronze metal window frames
- Scale of grid reflects the original classical façade behind
- Existing façade is retained internally to form the backdrop to new stairs
- New Entrance and Foyer for Science Departments with glass canopy over

Highgate School Science - Design Development



Ground floor and Site plan proposed : new extensions shown in orange tone. Island & Tunnel development shown

HIGHGATE

South elevation Science Quad extension and View from Southwood Lane



Sketch perspective of proposed south elevation to Science Quad seen from Southwood Lane



South elevation proposed with new extension

Key changes to proposed south elevation of Science Quad extension:

- End elevation fully glazed with external louvres for to reduce light pollution and solar gain, while maintaining integrity of existing building
- Detail of upper level of extension with glass roof has been refined
- New extension façade set back from front face of existing building

Highgate School Science - Design Development

HIGHGATE

This architectural section drawing illustrates the vertical integration of the new extension with the existing building. The extension, shown in yellow, is a two-story structure that aligns with the existing building's floor levels. The drawing shows the internal structure, including walls, floors, and the roofline. A dimension line at the bottom indicates the 'new extension' area.

new extension

A watercolor illustration of a multi-story brick building with a red roof and a white fence in the foreground. The building has several windows and a small balcony. The sky is blue with white clouds.

- Garner Quad extension visible from Southwood Lane over rooftops
- Elevations have screens & external louvres for privacy and light control

York stone paving (old)
 Science house
 Seating
 Proposed seating with stone tables - flush benches
 Science classrooms
 Central plant-bed + seats
 Bong house replaced: Seat
 York stone paving (road removed)
 Proposed 1/2 small trees
 Tunnels
 Proposed planting
 Seating
 Proposed planting

0 5 10 20 30 meters

Existing space softened with new textural planting and places to sit. A pedestrian space not a roundabout.



SCIENCE QUAD
SKETCH VIEWS

[illegible]

SCIENCE QUAD
PLANTING PALETTE

Sketch illustrations of project design in context



Sketch view from south-east, view from Southwood Lane, new Science Quad extension in centre



Sketch view from north-east, view along Southwood Lane, with new Garner Quad extension visible above the roofs



Sketch view from south-west within Science Quad, looking towards new Science Quad extension on the right



Sketch view from north-west within Garner Quad, looking towards new Garner Quad extension

Highgate School Science - Design Development

HIGHGATE

5.2 Local Authority and Amenity Groups

The outline of this project was shown in masterplan form [plan only] in the planning application for the SPD. In 2021 the School entered into a Planning Performance Agreement with Haringey which resulted in a series of consultation Workshops, both design and technical, with key planning and conservation officers, as well as a formal Haringey Quality Review Panel by independent consultants on design and sustainability issues.

The evolving design has responded to the comments and contributions in a positive way. After each review, as the design has advanced with response to comments, design reports have been issued that outlined the main points of critique and how the iterations have directly and positively been considered. The assistance of Local Authority officers has been gratefully received.

In October 2022, a new public exhibition of project drawings was put on display in the School's museum.

A Development Management Forum online meeting with public participation was held on 19th October 2022. There were no comments or questions put by the public regarding the Science project.

A Development Management Forum online meeting with public participation was held on 19th October 2022. There were no comments or questions put by the public regarding the Science building project.

A Pre-Application Planning meeting was held at Tottenham Town Hall on 7th November 2023.

5.3 Local Community Workshop consultations

A series of Workshops have been held at the School with members of the local community and community groups including the Highgate Society, The Highgate Conservation Area Advisory Committee, Highgate Neighbourhood Forum, Southwood Lane Residents Association, Kingsley Place Residents Association and Broadland Road Residents Association.

Workshops commenced in June 2024 and completed in June 2025, mainly facilitated by the King's Foundation as an independent party. The process has included information gathering, then presentations on design and technical matters by the School's consultants, followed by questions and discussions with all stakeholders present. The Workshops have been recorded and minuted by the King's Foundation.

The record documents for the Workshops are available separately.

At the most recent workshops with the Highgate Society and the Highgate Conservation Area Advisory Committee, a revised design was presented which sought to address some of the feedback received at earlier meetings. A number of important changes were noted to the previous design, summarised as follows:

1. Extensions in South Quad and Garner Quad:

Consultee key comments:	- create a greater setback of the proposed south extension from the existing south gable wall of East Block - several metres back was suggested as preference - widen the gap across the corners between the proposed extension and existing Central Hall block - reduce the depth of the north extension - reduce overlooking of the almshouses
Design response:	- design exercises were carried out to explore the feasibility of the main consultation suggestions - the exercises concluded that these changes could not be made without substantial and detrimental impact to the current design, which has been supported by Haringey Council - Outline revised design drawings with the changes were issued to the Council Planning and Conservation Officers and they were considered to be unacceptable and less successful, for 'no obvious gain', with 'undesirable' impact on the existing building - to reduce overlooking of the almshouses, a number of new and existing windows in proximity to the houses are to receive obscuring film at lower levels, so that the window glass brings in daylight but is not clear

6.0 Project Development

6.0 Project Development

6.1 Scheme comparison

Since the initial proposals presented in public exhibition in 2018 and engagement with Haringey planning and conservation officers in the PPA process, the design of the two key elevations, the west elevation of Science Quad extension, and the north elevation of the Garner Quad extension, has been extensively developed and refined.

The earlier, more abstract, elevation has evolved into a stronger composition that more closely responds to the historic and listed buildings on the School campus, with red brick piers and recessed bays replacing the original concept of a framed expression.



West elevation proposed design November 2018 West elevation proposed design November 2022

The QRP panel made suggestions about the architecture, which we have responded to positively. They noted:

“Summary:

.....The result is a very successful set of proposals that relate well to and enhance the existing buildings and spaces. The panel is particularly appreciative of the way that the scheme restores the form and function of the two quadrangles. The approach to sustainability is welcome, although some further analysis of the potential for overheating in the Science Quad extension is necessary. Finally, the panel suggests that some modification to the alignment of the southern elevation of the Science Quad extension may help to refine the visual impact of the building as viewed from Southwold Lane.

Building form and relationship to context:

The panel feels that the Science Quad extension is a sensitive modern addition that is wholly appropriate for a science building. It appreciates the openness of the building, which allows views onto the activity within. The subtle but extensive glazing also has the potential to create a beautiful interior environment.

This extension will, however, require careful detailing, as it will restrict the public view from Southwold Lane into the square and onto the Edwardian façade of the main building. The panel suggests that

aligning the southern elevation be to the main building (at right angles to its western façade), rather than to the main gable end of the eastern wing, may be beneficial.:

The proposals were amended to re-align the angle of the south wall of the Science Quad extension to follow the geometry of the main Centre Block. After the QRP review the design of the elevation continued to evolve in discussions with Haringey planning and conservation officers.

5.2 Opportunities and Constraints

The analysis of the site context and existing buildings, combined with the project brief and initial concepts for the site development, suggested the following opportunities and constraints:

5.2.1 Opportunities

- Create a new strong identity for Sciences at Highgate School, with new entrance and foyer
- Provide additional pupil toilets and showers
- Improve accessibility and inclusivity by providing a fully compliant disabled and fire evacuation lift in conformity with London Plan 2021 guidelines.
- Provide new disabled refuge spaces to all floors.
- Improve inclusivity in layout and in detail.
- Enhance the contribution of the building to the Conservation Area
- Enhance the appearance and condition of the existing buildings, with new proposed extensions being harmoniously integrated with the campus architecture
- Refurbish and refit to give it a new extended usable life, renovate the stone, brick and window finishes
- Improve the performance of the building fabric where feasible to make it more sustainable and lower energy, lower-carbon footprint, without harming appearance, character or fabric.
- Provide modern and distinctive extensions to expand facilities and provide distinct benefits
- Reinforce the architecture of the existing campus by references within the modern extension.
- Improve the external spaces, bringing greater biodiversity and soft planting, and encourage areas for seating and socialising.

5.2.2 Constraints

- Need to respect the character of the Conservation Area and street views from the public realm.
- Need to respect the amenity of neighbours and neighbouring buildings.
- Respect the positive qualities of the existing Science building
- Design the extensions to integrate with the architecture of existing buildings, but without mimicking the architectural style.
- Need to acknowledge the particular importance and setting of the existing buildings, which themselves are connected to listed buildings.
- Respect the scale and composition of the existing buildings.
- Respect the facing materials of the existing buildings of the campus.

7.0 Design Concepts

7.0 Design Concepts

7.1 The Brief for Science Building

The School's brief for the Science Building included both the refurbishment of the existing retained building and the replacement of all building services combined with a complete new re-fit internally. Accessibility and inclusivity also needed to be addressed as part of the modernisation.

The existing building contained many laboratories that were too large or too small for modern science teaching and class sizes, so an ideal target size for laboratories was agreed with departmental staff and leadership teams, a size that will give good flexibility into the future. The administration and staff areas on the ground floor also needed upgrading.

In addition, entrance to the Science Department was via two or three routes off existing stairs, but none having the identity of a main entrance, and the department was lacking a strong identity as a result. The department needed to have a prominent entrance foyer which could act as a space that promoted and encouraged science education within the School.

The brief from the School included the following spaces:

- 4 No. Physics Laboratories
- 4 No. Chemistry Laboratories
- 4 No. Biology Laboratories
- 5 No. Shared / General Laboratories
- Staff offices
- Technician Preparation and Store spaces
- Administration offices
- Staff Common Room and associated spaces
- Astronomy observatory at roof level

7.2 Scale and Massing

As the existing building is retained, in large part the scale of new extensions is in deference to the original. The scale of two proposed extensions has been carefully designed to respect the existing building, and to provide delight at the smaller scale of detail.

The extensions are appropriate to the adjacent elevations. The Science Quad extension has a strong stone cornice line at the level of existing – however a glass vertical and pitched roof at the top sits above the existing cornice in order to have a comfortable relationship that avoids clashes between the elements.

The Garner Quad extension is lower than the existing parapet so that it is subordinate to the whole existing collection of elevations on the north side, and distinguished as a new element.

For the Science Quad extension, there will be a more detailed scale in the stone details and in the brickwork, to give additional shadow and texture to the façade.

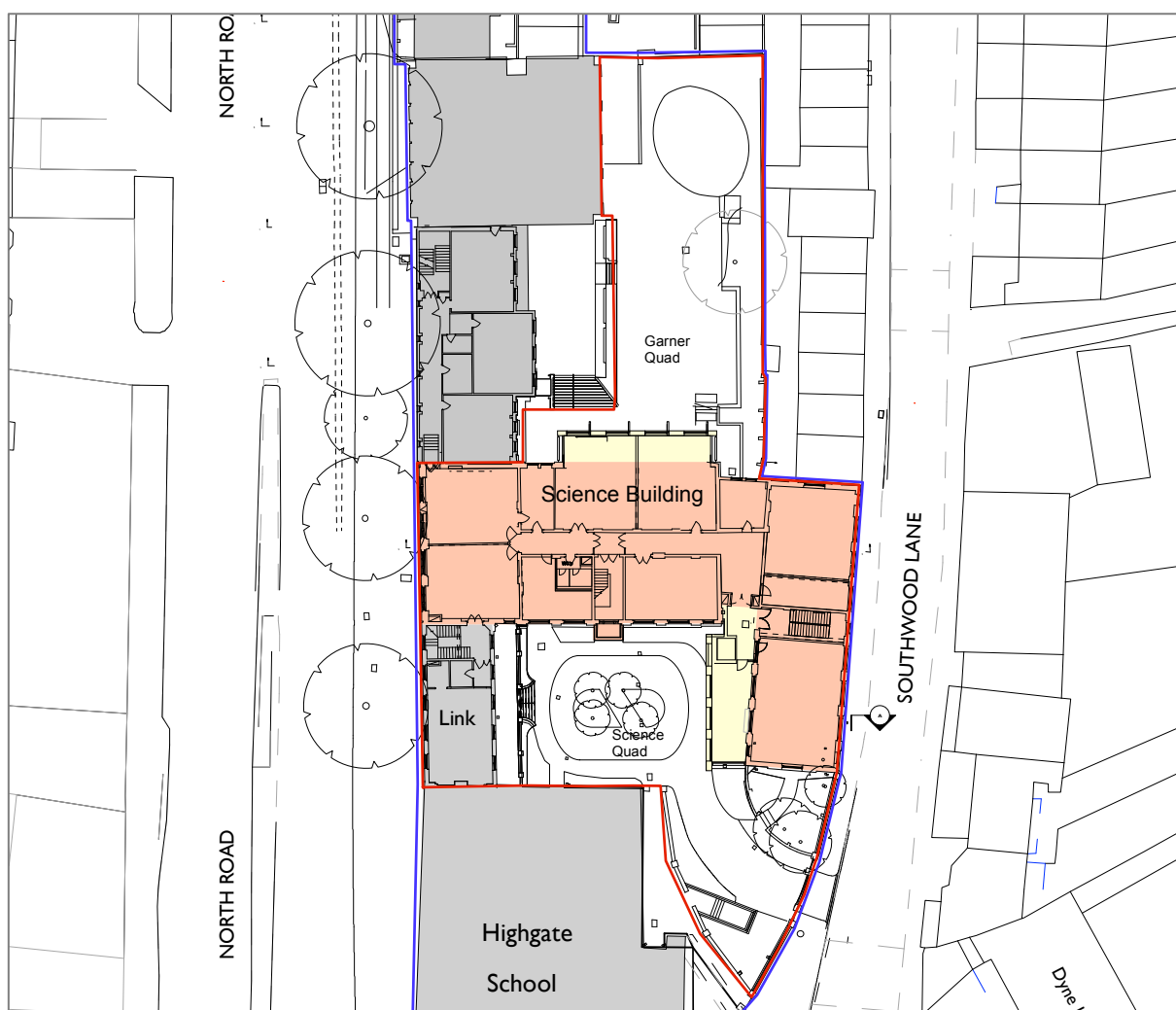
8.0 Design Proposal

8.0 Design Proposal

8.1 Summary of Main Aims of Design

The proposal is to add two new extensions to the existing building, extending towards Science Quad and Garner Quad, on the west side of the east block and north side of the centre block. These modest extensions enable extremely beneficial alterations to be made to improve accessibility, inclusivity, identity, layout and for efficient planning of interior spaces.

In townscape terms, neither extension is seen directly face on from the public realm, but rather both are seen as glimpses or angled views from particular locations along Southwood Lane. Within the quadrangles of Science and Garner the extensions will have more impact, creating modern and vibrant new elevations that respond to the particular context of each and support the existing buildings.



Part site plan with two extensions shown in yellow – refer to project drawings for all details

The Science Quad extension addresses important current issues with disabled access, main entrance, main new stairs, movement and identity. It will resolve the problems of circulation from floor to floor and arrival at key departments, providing more generous circulation areas.

The Garner Quad extension provides space adjacent to existing laboratories that enables them to be re-planned, creating more laboratories of the required medium size compared to existing. The extension is mainly on two upper floors, while at ground floor the offices have small extensions with an open external covered colonnade area, so that the Garner Quad external amenity space is maintained.

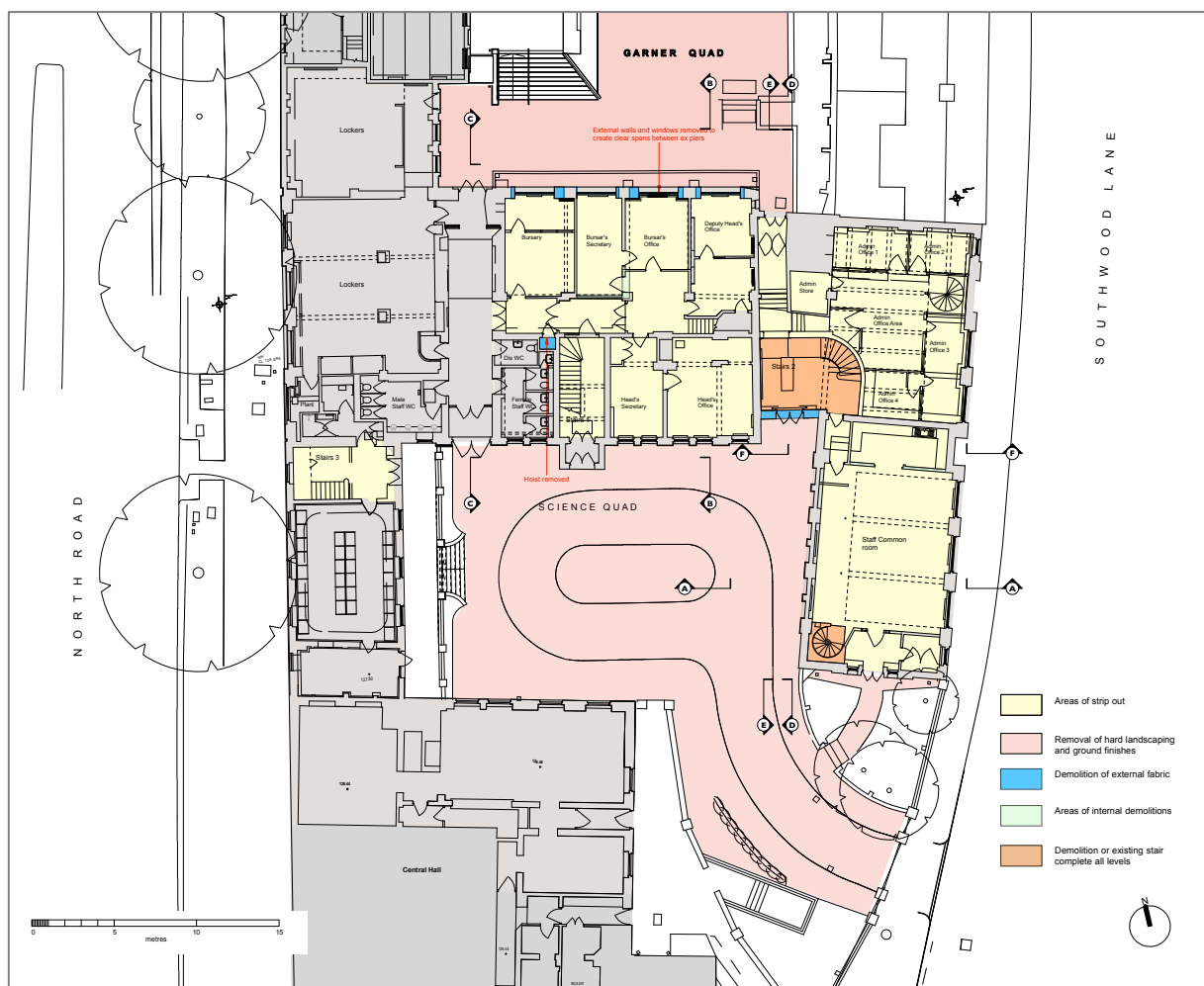
The intent is to:

- Change the character of development in the Science and Garner Quads
- enhance the setting of listed buildings and buildings of historic interest
- modernise the existing building while adding contemporary high quality additions

8.2 Demolitions

In general the existing building is all being retained, however there are targeted demolitions to allow for the new extensions and improvements. These partial demolitions include:

- existing internal stair in the southern corner of centre and east block
- spiral stair at the south end of east block
- particular internal walls to allow re-planning of interior
- external ground surfaces for new landscaping proposals

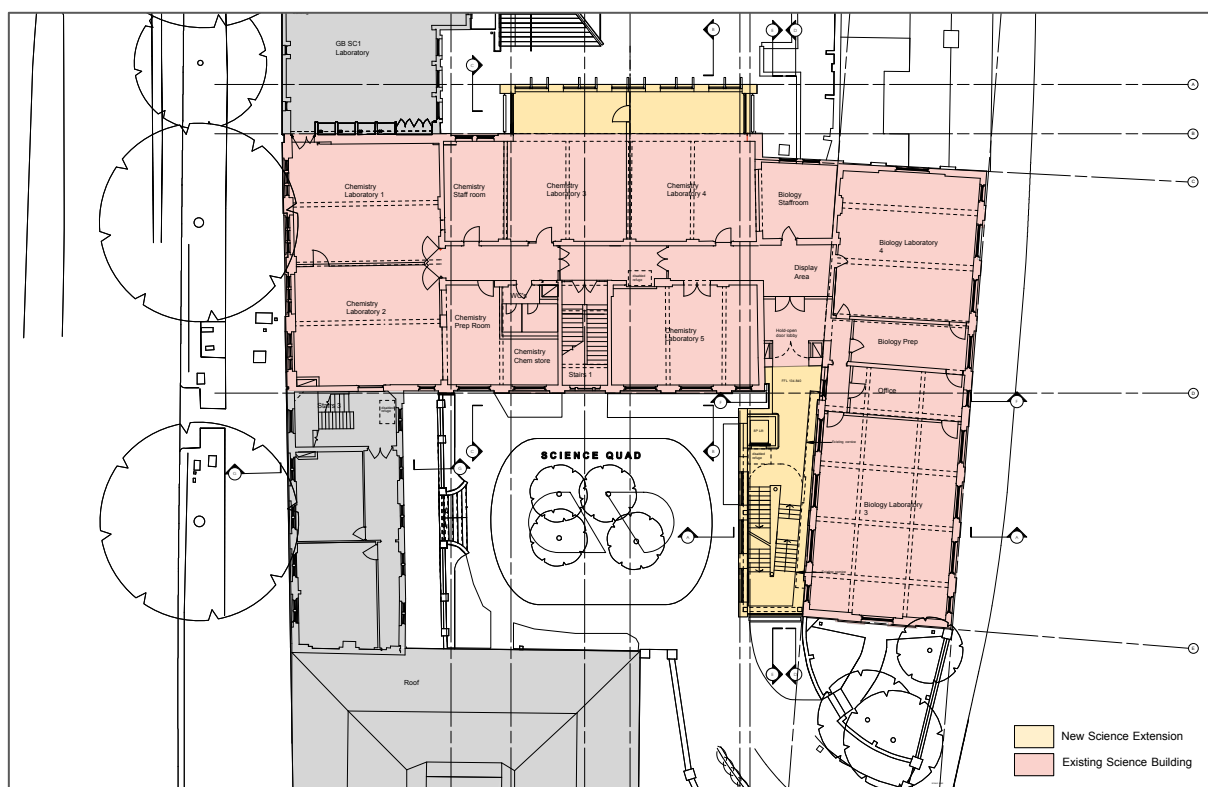
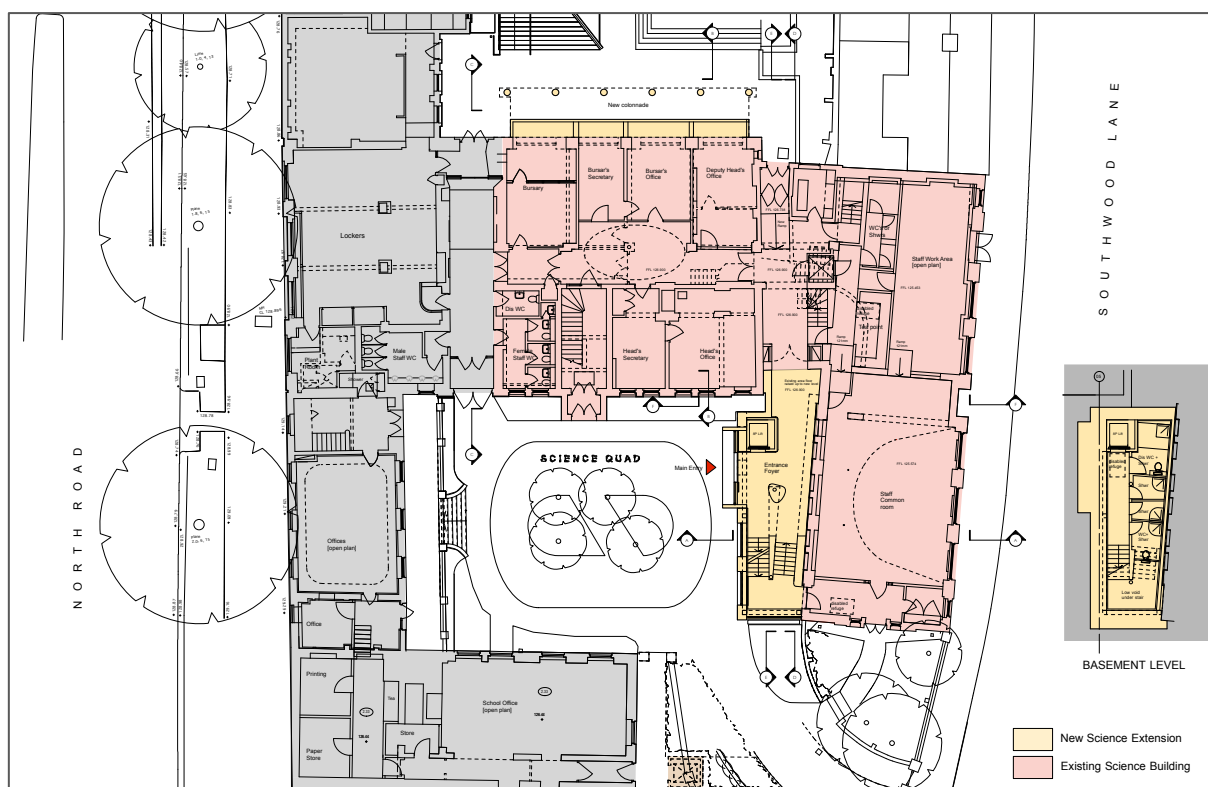


Concept plan for demolitions, refer to the project drawings for all final details

8.3 Proposals

8.3.1 Detail Plans

The detail plans below are for ground floor and second floor, with the existing Science facilities shown in red tone, and new extensions highlighted in yellow tone.



8.3.2 Science Quad extension

The Science Quad extension proposed is a 4 storey plus basement extension on the west side of the East Wing. The purpose is to provide a new main shared entrance and foyer to the Science departments, with a new main access and fire escape stair and fully Part M compliant disabled and fire evacuation lift to all floors. The extension will transform the visibility and identity of Sciences at the School.

The extension will also allow a significant re-planning of the internal layout at each floor, by changing the focus of access from the Centre Block to the new extension.

In plan the extension facades are aligned with the Centre block geometry, to provide a formal shape to the Science Quad.

In discussions with Haringey planning and conservation officers, an analysis of the architectural merit and significance of buildings and the setting of the extension within the wider whole School campus was undertaken to assess how it could best relate to existing buildings in composition, materials and form. In a sense all of the campus buildings are in the curtilage of listed buildings [specifically with regard to the cited listed buildings of Big School, and Chapel], and there is a consistent archetypal architecture of red brick, slated roofs, white windows and elevational composition of piers and recessed panels.

The existing Science Block has some merit, but in the context of the whole School campus and relation to the listed buildings, the Edwardian classicism style is anachronistic – none of the other buildings use this style and the classical elements such as the double height ionic fluted column piers and rusticated base emphasise a grand scale that is at odds with other buildings. Red brick is the prevailing material on the campus, however the Science building only uses this as background infill panels on the Science Quad side – the main dominant material for the classical elements is Portland stone.



Aerial view of the whole campus from the east

By contrast the north [rear] of the Science building facing Garner Quad is simple and functional, but more in keeping with the general campus context. In the older buildings on campus, including the listed buildings, the stone used is a warmer Bath Stone, not the whiter Portland stone, and it is used sparingly for decorative effect, particular stone dressings and panels, or in fine contrasting bands on the Chapel.

In addition, the Science building “grand scale” – monumental in terms of the double height columns - is problematic in the context of Southwood Lane. The Science building has a symmetrical façade facing

south, but the east wing continues this same classical theme and is inconsistent with the façade on the opposite side of the Quad formed by the Link Building.

Therefore, when looking at the significance of the parts, the strongest relationship to reinforce the campus setting is not with the Science block itself, but with the red brick buildings, such as the Link building on the east side of the Science Quad. At this point the concept design moved away from earlier explorations of a Portland stone framed façade, towards a more substantial masonry façade with cut-out openings on a simple grid, but still as a modern interpretation.

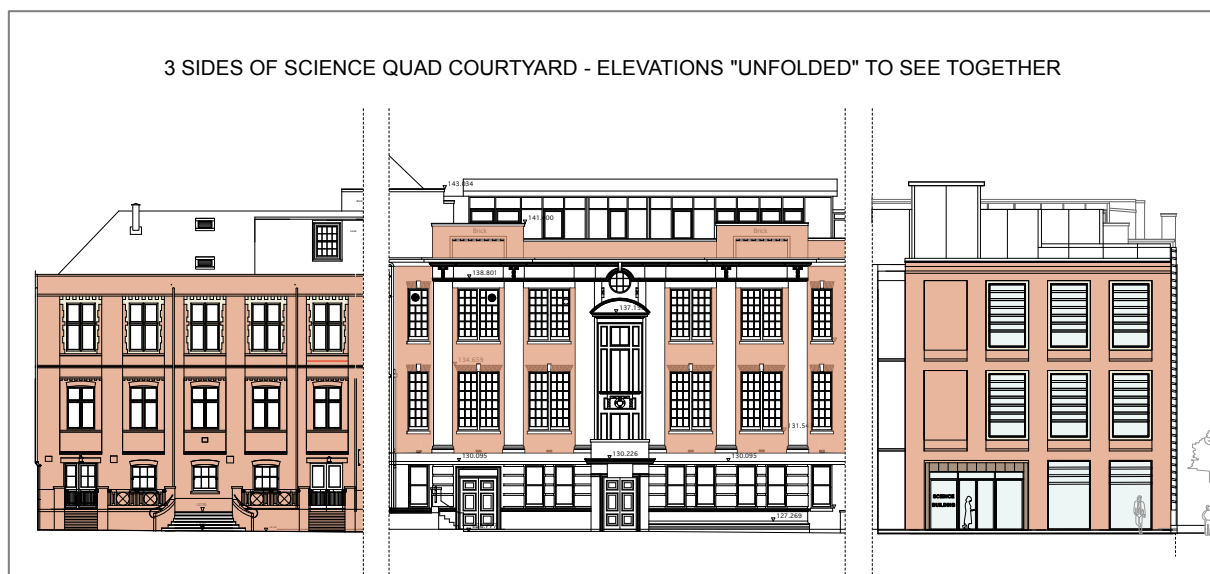
The amended elevation supports the principle of the façade as a part of the wider red brick context. The elevation is composed in bays with recessed panels, with an implied colonnade at ground floor. The whole elevation has greater visual weight than the earlier designs, being based on masonry heaviness rather than a lighter stone 'frame'. Bath stone is used to frame the window openings as dressings. The windows with bris soleil elements offer more tantalising glimpses through to the stairs and the host building face within.



West elevation of Science Quad extension as proposed, with new Science entrance

The west extension elevation is also quite open and transparent, with large windows that offer a subtle revealing of the original classical façade that is retained inside the stair hall, with new stairs in front.

In terms of the whole Science Quad, which has 3 closed sides and one side half open, the new extension in red brick will bring more integration and sense to the courtyard. With the new east façade aligned geometrically and architecturally with the east Link Building, the two sides serve to frame the Centre Block classical façade, giving order and sense to the Quad.



Three sides of Science Quad as proposed, with new extension on the right

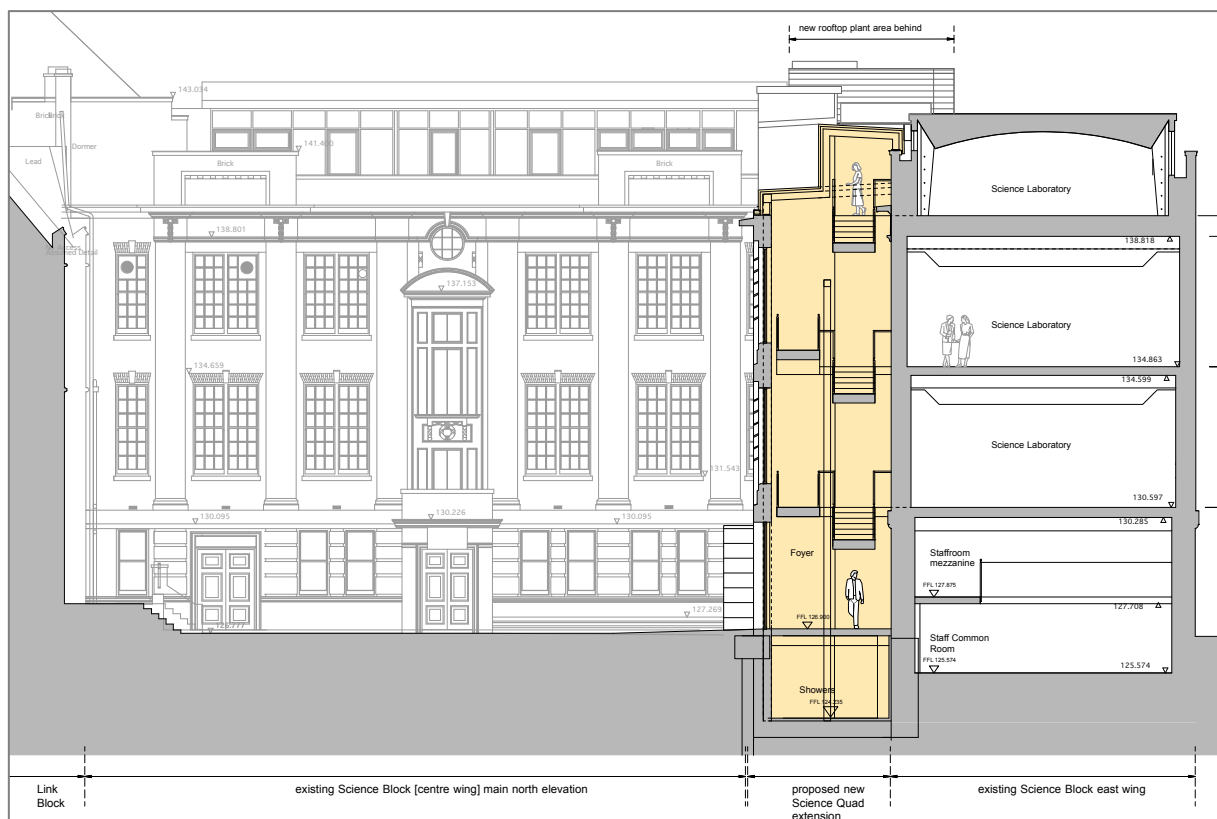


Perspective sketch illustration, west elevation of Science Quad extension in context

At the top of the masonry wall, an “attic storey” of patent glazing glass roof caps the composition. Like the concept behind the extensions of 2007, this is distinct from the main elevation and contrasting to the heavy masonry –the language of lightness and the atrium.

The height of the top of the lift core roof is determined by the London Plan and Fire Regulations, which require a fire evacuation lift for means of escape.

It is the glass that makes the connection back to the existing façade, as this enables the new extension to only “lightly touch” the existing building, preserving the detail. The glass to masonry connection has several precedents to form an acceptable junction between old and new, such as in the Royal Academy courtyard or the British Museum courtyard development. It is important that the original details of the classical façade are retained with minimal impact, and the glass roof achieves this, with metal framing kept to a minimum. The glass meets the existing façade above the level of the original cornice, so that there is no conflict with the ornamental classical capitals of the piers.

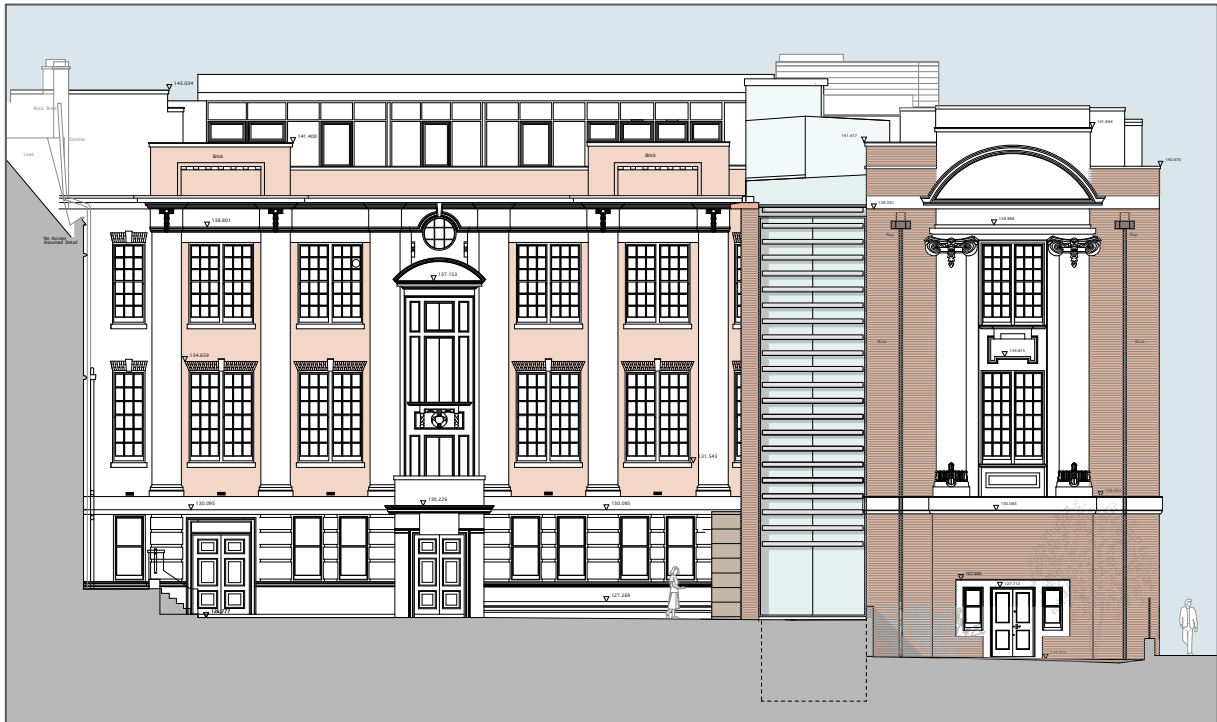


Section east-west of Science Quad extension as proposed, shaded in yellow

In the interior, the floors and stairs are kept apart from the existing classical façade, in particular the ornate decorative classical detailing of stonework, only ‘touching’ at the brick ends of the elevation. The conceptual separation will be carried into the detail design.

This same principle is used to separate the new façade from the existing, and this is apparent on the south elevation, where the new façade is seen as “detached” and a full height glass screen completes the connection to the original wall – again the line of connection is into a face of plain brickwork and beyond the end of the stone cornice, thereby preserving the ornamental stone details. An additional detail of horizontal bris soleil blades provides protection against solar gain, reduces light pollution, increases privacy for neighbours, while creating an outer layer of further detail and scale to this façade. The QRP

panel recommended that the south façade should be aligned with the Quad geometry, and this approach has been adopted in the final proposed design.



South elevation of East Wing as proposed, with glazed south end of new extension



Perspective sketch illustration, Science Quad extension seen on Southwood Lane from the south

The QRP panel also noted that: *“The panel feels that the Science Quad extension is a sensitive modern addition that is wholly appropriate for a science building. It appreciates the openness of the building, which allows views onto the activity within. The subtle but extensive glazing also has the potential to create a beautiful interior environment.”*

The layout of the Science Quad extension internally will be simple in principle and an exciting experience for pupils and users, with the new stairs rising up through the bright space to access all floors, and views back out to the Science Quad. The new lift is situated on the north side to connect well with Centre Block, and necessary fire lobbies are added at the junction with the existing building.

8.3.4 Garner Quad extension

This extension on the north side of Centre Block is on three floors, with a modest extension at ground floor and fuller extension at first and second floor. This allows the ground floor amenity space to be kept available for pupils, with the circular column supports providing an area of open colonnaded area and covered shelter. The height of the extension is designed to correspond with an important stone “flat cornice” line on the eastern side of the existing north elevation, below the main parapet, while not extending as high as the main existing parapet.



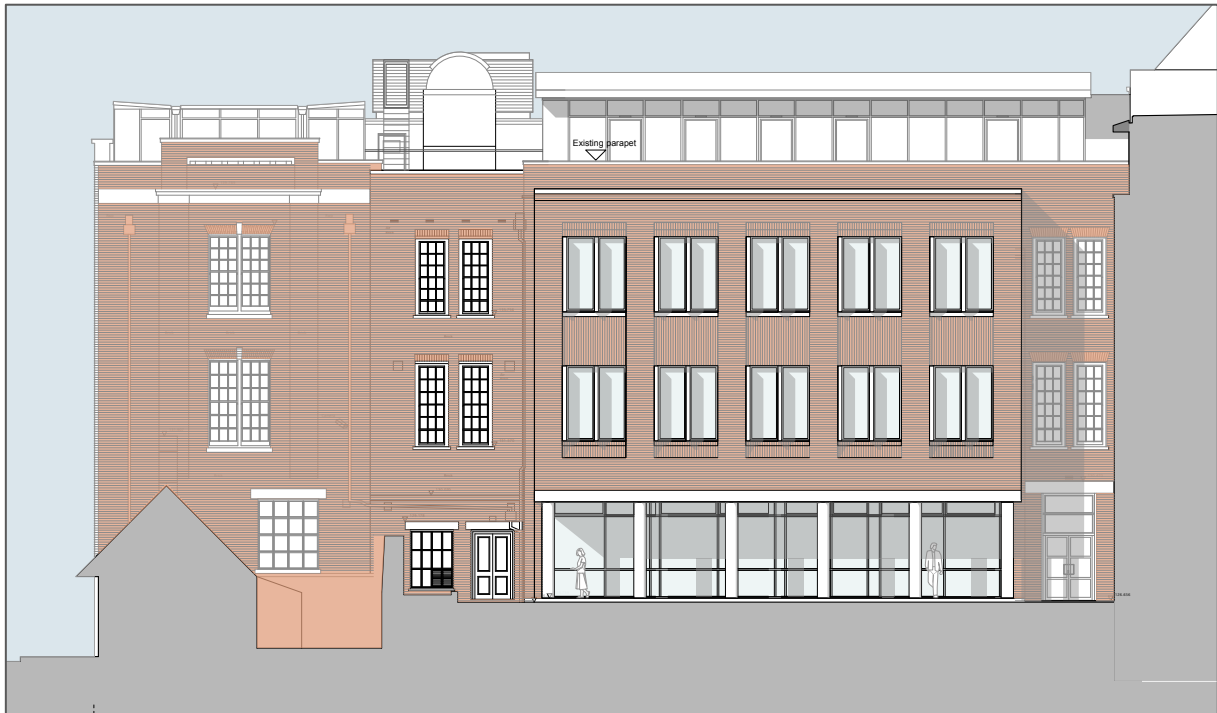
Section through Centre Block, with proposed extension shaded yellow

The existing north façade of Centre Block has the character of a rear [back] elevation, faced in a consistent brick finish, but lacking any of the important Portland stone detailing or ornamentation of the south side. The window openings are generous and well-proportioned but without any special emphasis.

There are entrances at ground floor on the east and west sides that provide access right through to Science Quad.

The new extension aims to lift the quality of this elevation commensurate with the changing context and new approach via Charter Building. In many ways the Garner Quad is now of greater hierarchic importance compared to Science Quad, certainly for visitors to campus.

The façade has strong relationships to the Science Quad extension, but they have different settings and functions. The brick bay widths correspond, so there is an affinity of scale.



Proposed north elevation of extension to Science Centre Block facing Garner Quad

This new extension is designed to provide a new “frontal” elevation addressing Garner Quad. The columned colonnade at ground floor signifies this shift in importance, with a column finish either in white fair-face/precast concrete or stone.

The colonnade provides some privacy screening to the offices behind. The formal and symmetrical composition is important in establishing this heightened hierarchy in the campus context, compared to the original north elevation. This is still a modern architectural addition.

The new windows are similar in proportion and scale to existing, composed in pairs to suit the bay composition as the existing windows, but they are also detailed with projecting polyester powder coated metal screens. These screens are proposed for the privacy of neighbours to prevent overlooking from the upper floor laboratories, and are similar in nature to those on the existing Charter Building – seen in the photograph below – however the orientation of the new extension north elevation will make them more effective in cutting off views to the east. The east elevation of the north extension will also have external louvres in front of windows, and obscuring film applied to existing and new window glass in proximity to the almshouses, for privacy of neighbours. This will improve privacy for neighbours compared to existing.



Photograph of existing Charter building rear privacy screens

8.3.5 Roof level observatory and screened plant area

At the northern front of the existing roof is a proposed astronomy observatory for Science education – the location of the Science building on Highgate Hill offers an ideal opportunity for exploring the heavens at night. The observatory itself will be a prefabricated dome in weatherproof GRP with a white finish, for 2-3 persons, with rotation and shutters for the telescope. The telescope mechanism can be set so that the telescope cannot be looking downwards towards neighbouring properties, to protect their privacy.



Perspective sketch illustration, north elevation of Garner Quad extension in campus context

The facility will be accessed from 3rd floor with a short metal stair to the observatory door. The roof terrace will have new white metal guarding and glass balustrade for additional safety.

Behind the proposed observatory, on an existing flat roof, is proposed a new open plant enclosure screened by ppc metal louvres, accessed by white metal steps. The purpose of this results from the sustainability requirements of the London Plan 2021, to move the building to all-electric power and heating, which generates the need for six air source heat pumps that need the ventilation of an open air environment. Four location options were explored, including the attic roof space of the Link Building, which would have required extensive alterations to the slate roof] or at ground floor in Garner Quad, which would bring the units much closer to the residential boundary and reduce amenity space. After analysis this rooftop location is proposed as having least impact on neighbours or context. The location of the screened plant will only be seen at distance from the public realm from Southwood Lane north, as it is set back from the east front and south front. The observatory in front will tend to be the main focus.



Existing view of Science building from Southwood Lane - from north



Existing view of Science building from Southwood Lane - from south

Closer to the building, the perspective view below shows that the observatory will still be visible, but much less so the plant area behind. Tucked in between two existing roofs, it is considered that this plant area will blend in with the general roofscape.

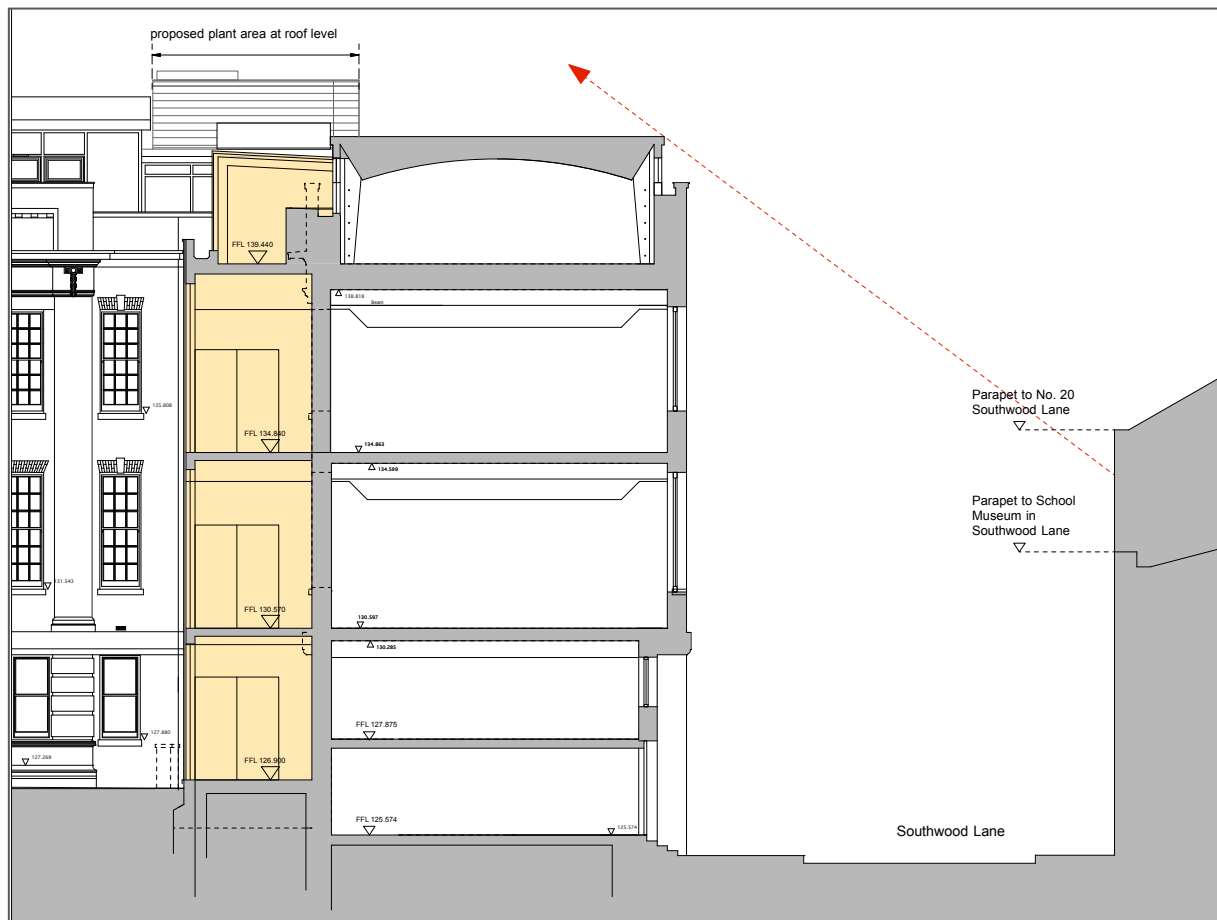


Perspective sketch illustration, north elevation of Garner Quad extension from Southwood Lane from the north



East elevation with rooftop plant area & observatory behind east block, north extension on right side

The plant area and observatory are shown in the east elevation above, but in real terms the residences opposite will not see them due to viewing angles, as shown in the section below.



Part section FF with rooftop plant area & observatory behind east block – refer to main drawings

The benefits of the air source heat pumps to environmental sustainability objectives are substantial and allow the existing gas supply for heating to be eliminated, with consequent carbon footprint reduction. The QRP panel noted that “*The panel commends the scheme for adopting an all-electric energy strategy, which it feels sets a good precedent for other buildings in a heritage setting*”.

8.3.6 Street context of new extensions

Both of the extensions impact mainly on private space within the School curtilage, and are only seen in angled or narrow views from the public realm.

The Science Quad extension is seen only on its southern elevation from Southwood Lane. In the Computer Generated Image below, the new proposals for the “Island Site” project are also shown on the left side – refer to that planning application for all details on the development. In this view the glazed south elevation of the extension is seen, screened with bris soleil blades, with a view in to the new main stairs and landings inside.

The view of the Garner Quad extension is from the east. Walking south along Southwood Lane, this extension will come into view over the top of the roofline to the listed cottages as shown on p.41.



CGI perspective view of south elevation from Southwood Lane



CGI perspective view of east and north elevation from Southwood Lane, with observatory at roof level

8.3.7 East Link Block

There are some modest alterations proposed to the Link Block, but mainly at roof level. The existing building has a pitched roof with an attic space that has low headroom to the perimeters east and west sides, and a low height access door off the stairs. Currently this attic space is not used so this represents a waste of valuable indoor space at the Hilltop site.

The proposal is to create a new plant space in the attic which will free up more valuable space elsewhere for teaching and amenity use. Internally, the floor will be strengthened and the interior of the attic lined and fire protected, with a new fire lobby off the stairs. In order to create standard height door access, the existing dormer roof is proposed to be extended southwards over the new fire lobby.

For mechanical services, there are proposed to be two small ventilation louvre additions to the pitched roof on the east side [facing Science Quad], for compliance with services regulations. There will be no alterations on the west side of the roof, which is more visible from public areas on North Road.

8.3.8 Interior and exterior works to existing buildings

The existing buildings, as noted above, are generally in sound condition but require exterior refurbishment, re-pointing of all masonry walls and cleaning of stone. Lead flashings will be checked and replaced if necessary. A detailed survey will be carried out on all elevations to schedule out the renovation work.

The classrooms on the south of the East Wing in the roof extension suffer from solar glare and heat gain, so it is intended to provide new external bris soleil louvres to address this, matching in with existing polyester powder coated finishes.

The existing building has a combination of timber and metal windows, which are in poor to very poor condition, and are proposed to be replaced with new to match visually, with the same size of transoms and mullions, with double glazed glass units. The windows replacement is all intended to maintain appearance equal or similar to existing, while substantially improving air-tightness and overall thermal performance of the building, with reduction in solar heat gain.



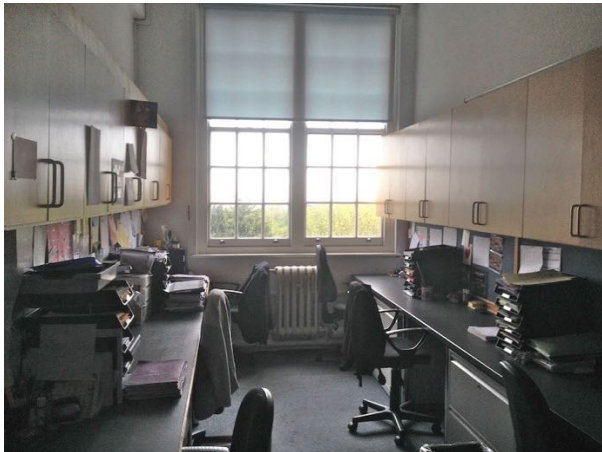
Interior windows in laboratory



Interior main corridor

The changes to plan layout will result in demolition of some walls and formation of new openings, however in principle the new layout retains the basic circulation diagram of the building with a central corridor and rooms to each side - most structural walls are unaffected.

Interior joinery doors and skirting will generally be stripped out and replaced with new, as they are of moderate quality and little heritage value. The intention is for the interiors to have the character of new, modern Science laboratories and associated spaces.



Interior of a Science Prep Room



Interior of a Science Laboratory

In most existing spaces new ceilings will be installed to conceal M&E services, and to provide significant improvement in acoustic performance, as the existing spaces with exposed concrete soffits do not comply with existing Building Regulations with respect to sound absorption within spaces, and transmission between spaces, with a negative impact on teaching audibility.

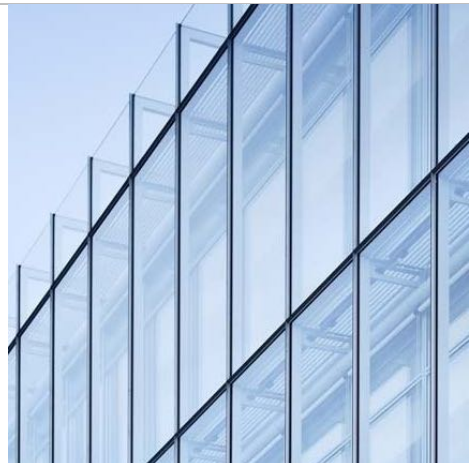
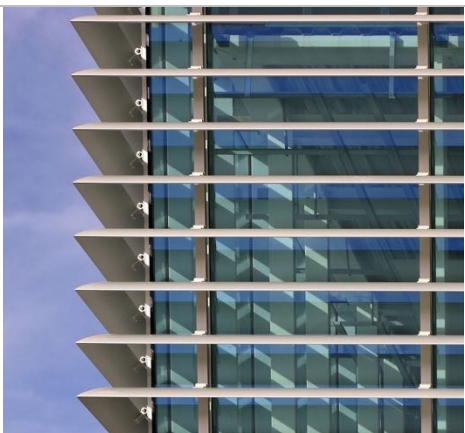
Particular features and details within the buildings will be retained where appropriate, such as the arched openings in some rooms.

The third floor is a relatively recent roof extension and so refurbishment works are more limited.

The stairs in the Link Block and Centre Block are to be retained and refurbished.

The staircase on the corner of Centre Block and East Wing is to be demolished to open up this key corner in the circulation. A new staircase is to be formed in new Science Quad extension which will be much more spacious and easier for movement, with wider flights between handrails, and associated directly with an evacuation lift in the same enclosure. This will improve the fire safety for the southern part of the East Wing at upper levels.

8.4 Local Materials

Dressings / features: Bath stone 	Walls : Match closely as feasible clay facing brick 
New Windows : PPC aluminium windows/curtain walling 	Replacement Windows : Timber matching existing sections 
Bris soleil : PPC aluminium louvre blades 	Roof: Flat roof waterproofing system, dark grey 

High quality local materials are proposed which will integrate with the existing buildings while giving expression to modern additions. Natural stone and natural clay facing brickwork will aim to match as closely as possible.

The metal and timber windows are to be replaced with similar sections in terms of transom and frame widths, but will be selected to accommodate double glazed window units for energy saving performance.

The areas of new large glazing areas will be in polyester powder coated aluminium curtain wall, with fine sections, and this will be extended to the roof patent glazing for the Science extension.

The bris soleil to side elevations is intended to be polyester powder coated metal, as will the high level plant area louvre screen. The privacy screens on the north extension will also be in polyester powder coated aluminium.

Areas of flat roof will have a good weathering finish such as single ply membrane, in dark grey colour.

Areas of flat roof will have a robust and long-lasting waterproofing finish such as built up three layer reinforced, elastomeric bitumen torch applied sheet, in dark grey colour, combined with drainage membranes where used with green roof systems.

The observatory is intended to be supplied as a specialist prefabricated module, finished in white metal or GRP, and installed on a new plinth at roof level.

8.5 Landscaping and Trees

The external spaces are the subject of a full hard and soft landscaping and planting design, prepared by Robert Myers Landscape Architects. A separate set of drawings accompanies the planning application and includes the redesign of both Science and Garner Quads, with generous new planting and trees.

The aim will be to create well-planned and enjoyable planting around the boundaries of the site, where permissible under the mature trees, to enhance the experience of the view from the street and provide a green landscaped counter-point to the building forms.

Where trees have been taken down out of necessity, replacement trees are proposed in greater numbers.

The QRP panel noted on the landscape design:

“The proposals successfully restore the quadrangles, in form and function.

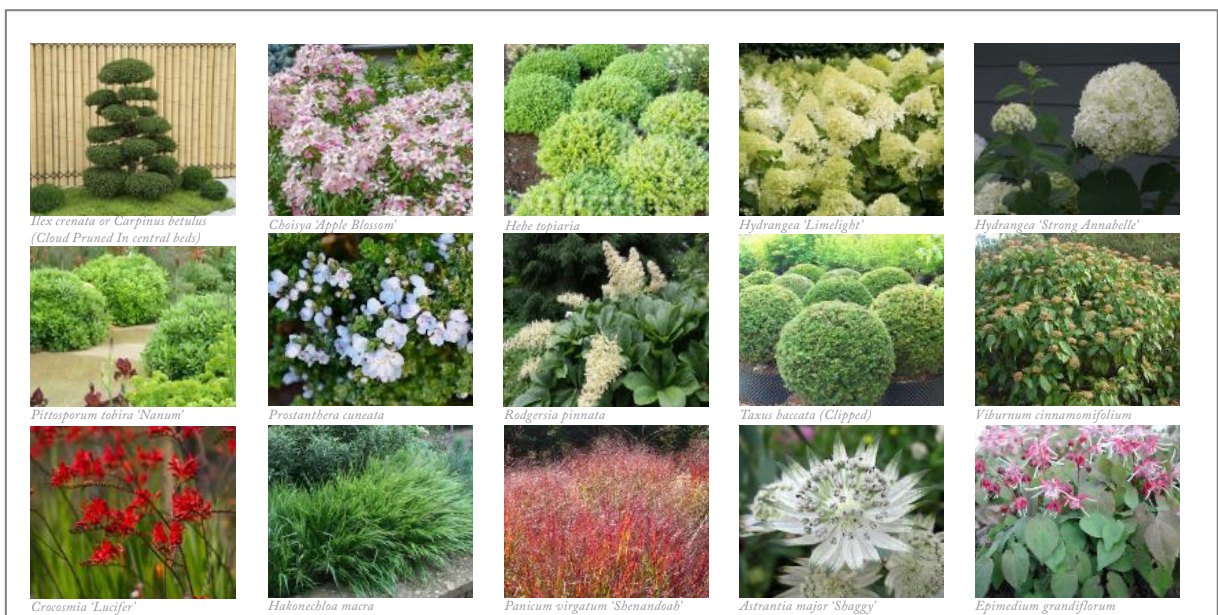
The proposed landscape also provides a collegiate environment to the squares, and creates a strong sense of identity. The restored symmetry of the Science Quad, in particular, enhances the space and clarifies the primacy of the main entrance.”

The aim of the project design from the outset has been to avoid tree loss if possible by the careful siting of the building extensions and structures. In the final design some trees will be removed to improve the tree stock and landscape areas. The new landscape design includes for an increase in tree numbers by the provision of new native trees.



Proposed landscape design to the two Quads – refer to Landscape Architect drawings

A separate Arboricultural Impact Assessment by an independent arboriculturalist accompanies this planning application, with guidance on the protection of retained trees during construction.



A separate Landscape Report outlines the design and philosophy of the planting and tree replacement.

8.6 Ecology and Biodiversity

There is little impact on ecology and landscape as a result of this project.

The new extensions do not affect existing limited planted areas significantly, but new landscaping will improve the quality of planting. In the Science Quad, a new central circular planted area is proposed which will become the main external feature, relating both to existing and to new buildings. It is proposed to have new tree planting here for additional emphasis and softening of the courtyard, and new hard landscape ground finishes of high quality will enhance the quality of the courtyard.

In the context of a tight urban development of historic buildings with major daily movement of people across the Quads, the opportunities to improve biodiversity are naturally limited.

An Ecology Report of the site by ecology consultants accompanies the planning application. They conclude that there is no impact foreseen on habitat or a range of protected species, with a further survey of bird nesting required prior to the works.

9.0 Accessibility and Inclusivity

9.0 Accessibility and Inclusivity

9.1 Accessibility

The Science Building after alterations and extensions will be fully wheelchair accessible and Part M compliant, whereas the current situation is that there is accessibility to both main floors via external entrances, but no internal lift.

The new extensions will be designed for a flush finish with all the adjacent floors, for level access. The lift in the connected Charter Building gives access into all the Garner building floors, but there are steps up to the Science spaces at first floor. The current staff room facilities at lower ground and mezzanine are not accessible. The second new lift will address this and make all areas in Science wheelchair accessible.

There are already disabled toilets at ground and third floor, which will be retained. The new Science Quad basement will provide a new disabled toilet and shower facilities to encourage cycling to work.

The new Science entrance in the new extension will not only provide level access into the Science building, but also the through route to the Garner Quad will be made wheelchair accessible, with existing steps removed and a small ramp included.

Throughout the new extensions and wherever possible in the re-fitting of the existing Science buildings, areas will be upgraded to comply with Part M. Paths around the building will be graded to ensure that the approach is Part M compliant. Stair will be designed in accordance with Part M regulations for visual and tactile contrast at threshold areas to steps, with visually contrasting safety nosings.

New doors will accommodate a regulation clear wall space on the lever side in compliance with Part M, and will conform to current Part M standards in terms of clear width, direction of opening, and contrast of fittings. Fire doors will be fitted with self-closing devices.

All rooms will be upgraded in terms of acoustics performance, both for sound separation and absorption, with new suspended ceilings being introduced to key teaching rooms, staff rooms and prep spaces.

Wall colours will assist visually impaired in finding good contrast to make spaces more easily legible.

9.2 Traffic, Transport and Cycling

There will be no impact on traffic as a result of these proposals as they do not result in any increase in pupil numbers or change to the drop-off and collection at the School.

Occasional service vehicular access to both Science and Garner quadrangles will be retained as existing.

Due to the historic setting and tight urban site, there are no proposals to provide additional cycle parking as part of this project, due to lack of available free outdoor space. However the School has looked at increasing the covered cycle parking across the whole estate and this is described in a separate Transport, Green Travel and Traffic Report with this application by an independent traffic consultant.

The report has concluded:

The development proposals are consistent with local, regional and national planning policy, including the Highgate SPD. No adverse impact on the local highway or public transport infrastructure are anticipated by the proposals, as a result of there being no additional trips related to the proposed development. The proposals are instead anticipated to have a beneficial impact by creating a better and more inclusive street environment.

9.3 Fire Strategy

A fire safety assessment of the proposals has been carried out by an independent qualified fire consultant. A Fire Safety Statement is included as a separate document in the planning application, which demonstrates compliance with the Building Regulations and the London Plan 2021. The extensions do not impact on existing fire access into the site from the public highway.

9.4 Refuse Collection

The existing access gates off Southwood Lane and off Castle Yard provide service access direct to the Quadrangles. These access points will be used for all servicing of the building.

A dedicated new Bin Store is to be provided in the plans for the “Island Site” project, which is the subject of a separate planning application. This will provide upgraded areas for the storage and collection of waste and recycled products.

The School has a waste management regime and sustainability policy document for their whole estate, which is always under review and improvement. The policy has organizational targets to achieve year on year increases in recycling as proportion of waste, continuous year-on-year reductions in waste arising per FTE staff and students, and a reduction in printer paper consumption per pupil/staff headcount year on year.

The School has a contract for waste collection from all their bin storage locations on a regular basis. Waste from offices and classrooms is separated at source into Dry Mixed Recyclables (DMR) and General Waste (GW). DMR are collected via green bins. The School’s cleaning contractor collects the content from the bins. These are emptied into 1100L paladins. General Waste is collected into bins throughout the School, and collected by the contractor. The bin store being rebuilt with the Island Site development [separate application] will provide an enhanced storage and collection point.

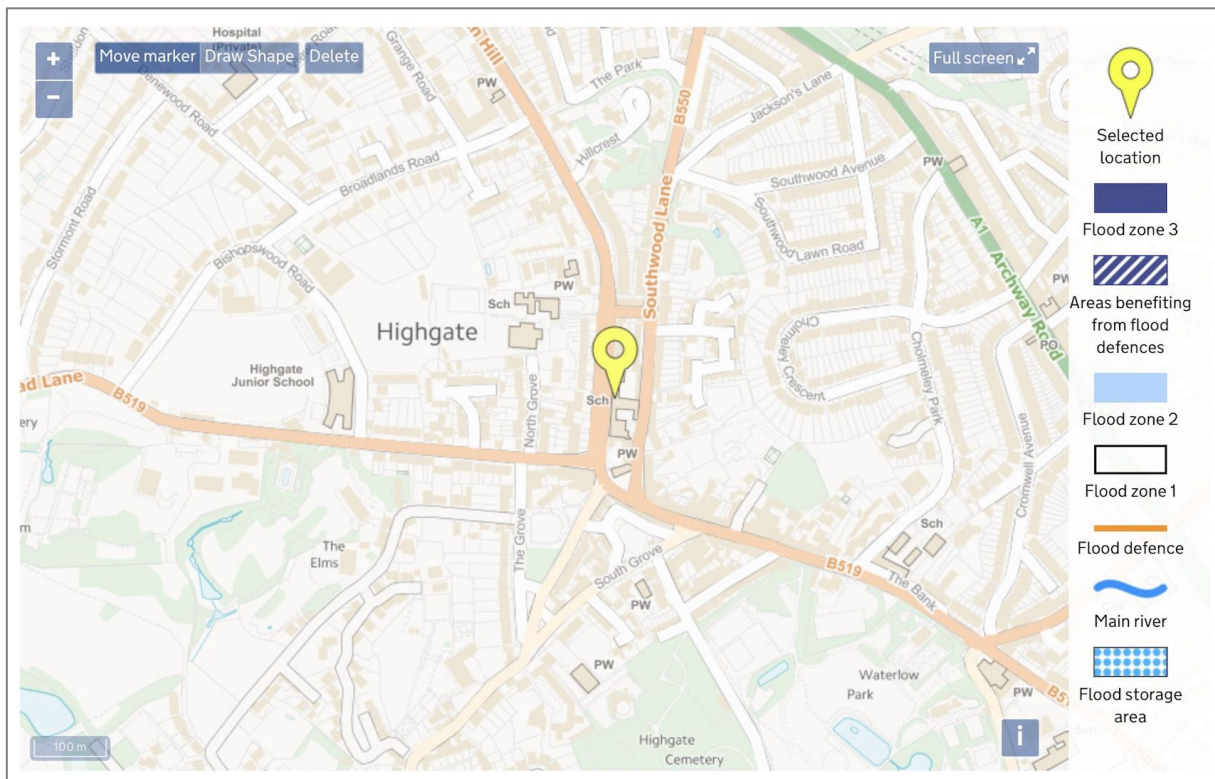
General waste is then collected. The School has limited visibility of the waste stream once it leaves the school but waste is generally sent to NLWA at Edmonton for further sorting, for “energy from waste”, or to Landfill.

Dry Mixed Recyclables are collected and then taken for treatment and sorting. The School is establishing the way that DMR is treated and disposed of in order to improve knowledge of downstream destination of waste, to identify whether the School can amend relationship with waste contractors for further improvements.

A separate Waste and Servicing Report accompanies the planning application.

9.5 Flood risk

The Environment Agency flood map for N6 4AY demonstrates that no special flood protection is required on this site, and no assessment should be needed for this application.



Environment Agency Flood map of postcode area N6 4AY

A Flood Risk Assessment and Surface Water Drainage Strategy Report is included as a separate document with this application by a structural/civil engineering consultant, which has also commented on the low level of risk.

An attenuation tank is to be provided within the Science Quad which, combined with permeable path finishes and increased areas of soft landscaping, will serve to reduce or slow down surface water outfall to the main sewer system.

10.0 Sustainability

10.0 Sustainability

10.1 BREEAM

A BREEAM pre-assessment is included as a separate document in the planning application. The target is Excellent, with a minimum target to achieve Very Good.

10.2 Sustainability in Design

Walls and roof to the new extensions will be insulated at least to current Building Regulations standards. Energy loss in heat will also be minimised by careful detailing of the fabric and junctions to provide good airtight seal and minimal cold-bridges. The glazed elements of the Science Quad extension will have solar-control glass to minimise heat build-up by solar radiation.

All timber, including hardwood timber used externally, will be sourced from sustainable and managed plantations.

The energy saving thermal performance of the existing Centre block and West Wing buildings will be improved by the replacement of leaky existing single glazed windows with new double glazed well sealed windows. Existing construction will be improved also for airtightness.

The spaces will as existing generally be naturally ventilated by opening windows, with support from mechanical ventilation systems where required. Low energy lighting fittings will be used throughout the interiors. Electricity will be metered and monitored to test performance in use. Materials for the new building are to be selected from sustainable sources.

A number of sustainability measures have been adopted in the design including:

- Provision of underground attenuation of rainwater
- Where possible spaces will be naturally ventilated by opening windows
- Generous new windows to the new extensions will provide good daylight and reduce dependency on artificial lighting to the principal spaces including the entrance and stairs, foyer and upper floor laboratories.
- Low energy fittings will be used throughout the interiors.
- Electricity will be metered and monitored to test performance in use.
- Materials for the new building are to be selected from sustainable sources.
- Timber to be used in the construction will be required to be from managed forests.

A separate Sustainability Report is submitted with this application, as well as a Demolitions Audit and Whole Life Carbon Report. The retention and refurbishment of the existing building will in itself be an important sustainability benefit for the campus.

For the new extensions, Circular Economy measures and construction layering will be carefully considered in the detailed design, so that these parts can be de-constructed at the end of building life, with materials, resources and elements being re-used and retaining their value.

10.3 Building Services

A separate Energy & Sustainability Statement by a Building Services consultant accompanies this planning application which includes a description of the proposed building services systems. Existing services systems are being stripped out completely and replaced with new, more energy efficient systems.

The reports also involve an analysis of the possible beneficial use of renewable technologies, conservation of resources, efficient water systems and plumbing, rainwater harvesting and other measures.

The building services and heating will be all electric, with the inclusion of air source heat pumps in the external plant area, so gas power for heating is being removed.

The roof space of the existing Link Building, which is currently unused, is proposed to be used for other plant and equipment.

10.4 Urban Drainage and Attenuation

The project will contain only a small number of additional new toilets for staff and pupils, with other existing toilets being refitted in existing locations; new foul drainage connections will be made into the local sewer system, as shown on the planning drawings. New showers at basement level in the Science Quad extension will encourage cycling to work.

To serve new Highgate School Development new drainage will need to be constructed. New drainage will meet the requirement of The London Plan and Haringey Council for sustainability and best practice design. Sustainable Urban Drainage Systems in the form of permeable pavements, swales, bioretention systems will be carefully selected and implemented whenever possible.

Peak flow-rate into the sewer will be significantly reduced by implementing flow controls and attenuation SuDS: the flow-rate will be restricted to greenfield rate and volume, significantly minimising the impact on existing infrastructure and reducing risk of flooding downstream of the development.

11.0 Technical Characteristics

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11.1 Amount

The **existing** GIA internal areas of the 3 interlinked buildings are as follows:

○	Ground floor GIA	=	500 sqm
○	Mezzanine floor GIA	=	160 sqm
○	First floor GIA	=	683 sqm
○	Second floor GIA	=	684 sqm
○	Third floor GIA	=	701 sqm
○	TOTAL GIA EXISTING	=	<u>2728 sqm</u>

The **proposed** GIA internal areas of the 3 interlinked buildings are as follows:

○	Basement floor GIA	=	39 sqm
○	Ground floor GIA	=	582 sqm
○	Mezzanine floor GIA	=	160 sqm
○	First floor GIA	=	788 sqm
○	Second floor GIA	=	789 sqm
○	Third floor GIA	=	766 sqm
○	TOTAL GIA PROPOSED	=	<u>3124 sqm</u>

Increase in gross area proposed overall = **396 sqm**

The area within the Red Line for planning site = 1500 sqm

11.2 Crime Prevention

The development will be designed to “Secure by Design” standards. The new windows, doors and building security services will improve physical security of the existing building, while new extensions will be constructed to the highest modern standards.

The Science Building is only accessed from within the School campus, which itself is controlled by a number of measures including external walls and railings, security supervision of control entry points, and access control to doors off the street. The Science Building has only one existing door point to the street on the east side, but this has long been blocked in behind internally, and retained only for the architectural feature of the doors.

A CCTV system will cover the entirety of the building external perimeter, monitored from reception or management offices.

The site as a whole is part of an area that is already bounded by railings. These may need to be taken down temporarily in places for the construction process, but at completion will be restored into position. The security of the buildings and site will be reviewed in discussion with the Metropolitan Police.

A separate Secure by Design Statement for this project is included as part of the planning application, and engagement and consultation has been made with the Metropolitan Police.

11.3 Archaeology

A desktop Archaeological Report has been prepared for this site as part of a wider study for the School land on the North Road “Island site” of the School campus, and this accompanies the planning application.

The report has concluded as follows [extract]:

Due to the site’s location within an Archaeological Priority Area, known history of the site, likelihood of encountering 17th–21st century finds and features associated with the previous land use and school complex, and in light of the loss of potential archaeological remains and stratigraphy through excavation associated with the proposed development, some form of archaeological mitigation may be deemed necessary. This could take the form of an appropriately worded condition attached to an approved planning application, rather than any pre-determination action.

11.4 Amenity

The Science Quad extension has only minor impact on neighbouring properties, as it is well within the School site and causes no overshadowing to other neighbours.

The Garner Quad extension and its relationship with the immediate neighbours to the east, the almshouses, has been studied by the Rights of Light consultant [Anstey Horne] and the impact shown to be minimal, as the height of the new extension is approximately 900mm below the parapet level of the

existing Science Block, and this in turn is overshadowed by the existing overhanging roof of the roof extension which is approximately 2.4 metres higher.

Similarly, with overlooking or artificial light spillage, the Science Quad extension has only minor impact. The Garner Quad extension will reduce the impact compared to existing, as any potential overlooking is mitigated by specific design measures, including the projecting privacy panels to the east side of all new upper level windows, which screen the almshouses from view and give them privacy, and by the bris soleil louvres on the east side elevation which will also prevent overlooking and minimise light spillage to below. In addition obscuring film will be applied to existing and new window glass in proximity to the almshouses, for privacy of neighbours. This will improve privacy for neighbours compared to existing.

Neither extension will create additional noise impact on neighbouring properties compared to existing.

The new air source heat pump and air handling unit plant area at roof level is located remote from neighbouring properties and is designed with acoustic attenuation in equipment and/or perimeter screening to ensure that generated noise is below the Local Authority proscribed limit at boundaries and adjacent properties.

A separate Noise Impact Report prepared by an independent Acoustic Consultant is included in this planning application that demonstrates that the installation can comply with Local Authority acoustic requirements.

11.5 Structure

Soil tests have been carried out and the structural engineer has confirmed the required structure for the new extensions, as well as a more detailed study for the proposed basement to the Science Quad extension – refer to the separate document for the Basement Impact Assessment by the structural engineering consultant. The report confirms:

..... in accordance with Haringey Council's Development Management DPD, that the proposed subterranean extension will not cause harm to the built or natural environment and local amenity, including to the local water environment, ground conditions and biodiversity.

The new extension structures are likely to be of steel frame construction with rc concrete or steel deck and concrete floors, with piled foundations. For the basement construction a system of contiguous piling with rc concrete lining wall is likely to be selected.

The existing buildings have been visually inspected by a structural engineer: the façades appear to be in serviceable condition, with some areas requiring re-pointing, and internally only small cracks have been found requiring repair.

The new staircase in the Science Quad extension should be straightforward to form owing to its location within a steel framed building. The intent is for the stair flights to be supported only off the new structure, so that there is no bearing upon the walls of the classical facade of the existing building. A secondary steel frame comprising steel flights on a supporting post structure, with in-situ concrete treads flights will

be viable. Internally new steel beams will be installed where required for alterations that affect structural load-bearing walls.

11.6 Construction Management Plan

An outline Construction Management Plan is included with the planning application as a separate document, prepared by specialist construction consultants.

The buildings will need to be vacated by the School users for the duration of the project, anticipated to be for one academic year. During this period School operations will be decanted into temporary facilities to ensure that Science education and Administrative functions are all maintained and operational throughout. The temporary facilities are the subject of a separate but associated planning application for a site off Bishopswood Road.

The current thinking is for the site construction set-up to be based around Science Quad, with some deliveries and collections off Southwood Lane to the east. The Science Quad can be accessed directly off Southwood Lane to the east, with ornamental brick and stone piers and walls, and cast-iron gates and railings defining the boundary. The limited width of the gate opening means that at least one pier will probably need to be taken down to allow for better construction access – if so the metalwork, walling and pier materials will be carefully de-constructed and stored when taking down, and rebuilt to match existing at the completion of the project. It is the intention for the development to be carried out in a single phase.

The site will have solid hoardings, to the high standard that has been adopted for all recent major Highgate School projects, to maintain a good appearance particularly to the public realm. The hoardings will make the site secure and separate from the street. Hoardings internally will also separate the site from areas in School use.

Site management, storage and welfare cabins will be positioned on the site.

Tree protection will be provided in accordance with the Arboricultural Report prepared as part of the planning submission.

Working hours are typically to be as Haringey informative for construction work which will be audible at the site boundary, restricted to the following hours:-

8.00am - 6.00pm Monday to Friday

8.00am - 1.00pm Saturday

and not at all on Sundays and Bank Holidays.

Early approaches to the Local Authority will explore what medium term parking restrictions might be implemented to improve vehicle movements and the safety of pupils and road users.

There may be a need for craneage in these works. However, it may be possible to design the construction elements as modular to reduce the component size for lifting and minimise crane use.

The location of site cabins and welfare will be determined by the Contractor in accordance with their working methodology and CDM Regulations 2015.

Calculations on vehicle and skip numbers, and all other necessary detail for the Council, will be provided by the Contractor after appointment.

12.0 Summary and Conclusions

12.0 Summary and Conclusions

12.1 Summary and Conclusions

There is a pressing need for the School Science facilities to be brought up to a modern standard, commensurate with the importance of Science in national education priorities.

The existing building requires refurbishment and alteration to prolong its useful life and to provide a layout of spaces that meets current and future requirements. The new layout will create more laboratories of the ideal teaching size. Existing building services have to be completely replaced with new in all laboratories and associated spaces, all of which have intense mechanical and electrical services demands.

At the same time the existing buildings, though adaptable and of good architectural quality and character, do not have inclusive access, entrances and circulation corridors are restricted, and the size and number of rooms do not suit the current curriculum needs.

These proposals will provide a significant and long term refurbishment of the existing buildings, protecting their status and their value to the School and urban context for many years to come. Internally their services will be renewed, the layout of spaces will be better suited to modern Science educational teaching, they will function more efficiently and the circulation spaces will be more generous and welcoming for users.

The development of two targeted extensions will transform the buildings in different ways. Both are of high quality design and materials, that will integrate with the existing campus, while creating a new identity that reflects their time.

The Science Quad extension will form a new main entrance and a strong optimistic identity for Science departments, with improved arrival and stairs to upper floors. The new extension will provide easier and more enjoyable circulation up through the building, and new shower facilities will be centrally located in the basement. The new lift and stairs will improve accessibility and inclusivity, enhancing the whole experience of moving around the building. Externally the extension reflects the compositional and material qualities of the existing buildings in the whole School campus, and respects their architectural character, while at the same time confidently expressing a modern contemporary architecture. The appearance is well-proportioned, harmonious and sensitive to context.

The Garner Quad extension provides valuable space just where it is needed, to re-plan and re-organise laboratories and teaching spaces to the maximum benefit of the Science curriculum, and to provide modest expansion of offices at ground floor.

Raised above the ground on a formal colonnade, the extension leaves outdoor amenity space free for pupils, while creating a new façade within the quadrangle that acknowledges the new importance of the route from Charter Building southwards through the site. This extension too responds to the existing elevation and materials, and establishes its own architectural identity while protecting the amenity of neighbouring properties. The extension proposals are of high quality design and materials, and respectful of original buildings on the site, and enhance the character of the buildings in the Conservation Area.

12.2 Haringey Development Charter

In summary, the proposals as described in this Design and Access Statement have addressed the five main points of the Haringey Development Charter:

1. The new proposals have developed from an appraisal of the whole North Road site and its architecture, to work towards a design solution that complements the best archetypal historic buildings, including but not exclusively the original Science building itself. Through dialogue with Haringey planning and conservation officers the specific elevational design for new extensions has acknowledged the pre-eminence of the red brick Victorian architecture over the Edwardian classicism of the Science block, as the primary reference, contributing to the evolution of the whole campus ensemble of interlinked buildings. The west extension also retains the existing classical brick and Portland stone façade as an interior elevation to the new Foyer and stair hall.
2. The existing Science building facades will be carefully refurbished and cleaned as part of these proposals. The new extensions, carefully scaled and designed, combined with excellent new external hard and soft landscaping and trees, will transform the nature of the Quads as being primarily intimate spaces for people rather than servicing. The new extensions will support the historic context and raise the quality of the environment both within the site and as seen from Southwood Lane, making a positive contribution to the Conservation Area and the setting of listed buildings.
3. The process of design evolution has involved extensive consultations over a 5-6 year period with the local community, local amenity groups, with Haringey planning and conservation officers, and with independent QRP assessors. This has included public exhibitions for which feedback has been received, recorded on a dedicated website and responded to as the design has been developed. The School entered into a PPA agreement with Haringey that resulted in extensive design, sustainability and technical workshops, and a QRP panel review. After each review, as the design has advanced with response to comments, design reports have been issued that outlined the main points of critique and how the iterations have directly and positively been considered. A Development Management Forum in October 2022 with public attendance raised no queries or concerns regarding the proposals. The assistance of Local Authority officers has been gratefully received.
4. Highgate School has an excellent track record in the delivery of architectural works of very high quality – in recent years this has included careful and sensitive refurbishments to the North Road site historic Chapel, Big School [converted to Library use], Central Hall, at Bishopswood Road the Mill Centre, the MSC Pool building and Dining Hall kitchens, as well as the new build Charter main entrance building, the new Junior School and the Pre-Preparatory extension. The selected materials for this project are of high quality, robust and of excellent appearance. The School has an in-house team of very experienced Project Managers and treats all the projects with the same professional and knowledgeable process from inception to completion and beyond. All of the recent developments have demonstrated the significant responsibility that the School has taken in conserving and improving its estate, finding the right balance between conservation and replacement to reflect the character of the campus, while also making a huge contribution to the surrounding neighbourhood and context.
5. This project has adopted a positive sustainable approach by retaining most of the existing building as a resource to be refurbished, then extending its life and functionality by means of new extensions. New energy efficient building services and fabric will significantly enhance the thermal, environmental

and sustainable qualities of the building. The provision of new lifts, wider stairs, specialized bathroom and other facilities for all users will greatly improve inclusivity and accessibility. The School has adopted its own Environmental Sustainability Initial Strategy Plan [January 2021], a clear policy for its own operations and for development projects prepared by independent experts to complement measures required by the London Plan 2021, Building Regulation and Local Authority requirements. The project team has monitored the design evolution to achieve the very best standards of compliance. As the Head has written: *“As a school, we are determined to be part of the solution and we feel optimistic about joining the fight to build a better future for us all and our planet.”*



12.3 Conclusions

The proposed works will modernise this important School Science Building by the refurbishment, alterations and extensions, and significantly extend the life of the retained elements of the existing building. Science teaching will be encouraged in the School as a result. Proposals will also provide significant improvements to accessibility, inclusivity, energy efficiency, fire safety, flood risk, with minimised carbon footprint for the whole development. The installation of new lift access will provide a more inclusive and accessible Science facility for all. The proposals will successfully achieve the intended aim to create a transformed Science Building development which will make a positive contribution to the Highgate Conservation Area.