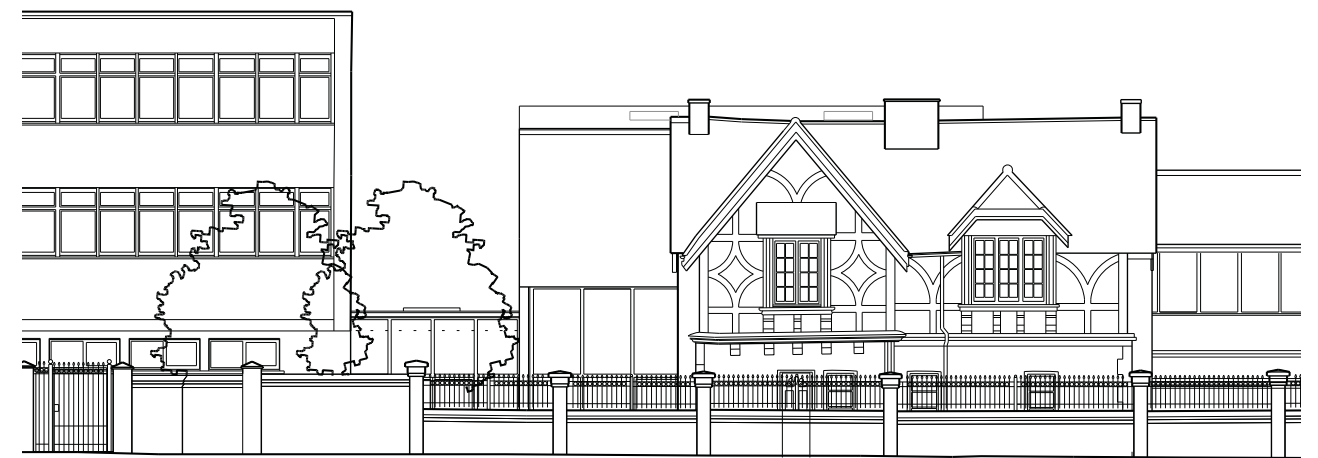


New Music and Art Building
St Catherine's School, Twickenham

Design and Access Statement

November 2023



Tim Ronalds Architects

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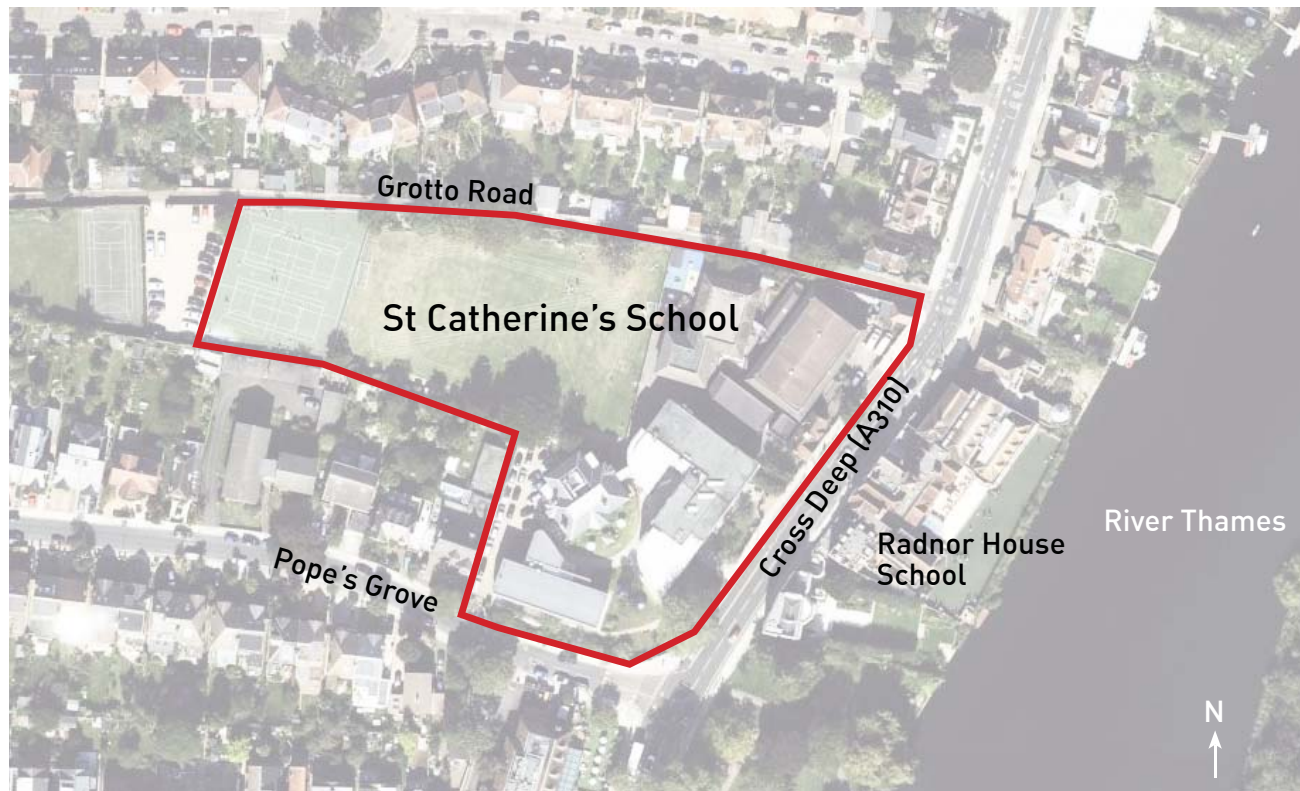
Introduction

St Catherine's School is an Independent Catholic girls' school which has been on the site on Cross Deep, South Twickenham ward, since 1919.

The School has a capacity of 455, and pupils are aged between 6 and 18 years old. There are no plans to increase pupil numbers, but there is a need to improve facilities, particularly for music and art.

This planning application relates to the demolition of two single storey 20th century structures, and their replacement with a new two storey music and art building. The development of the design has been underpinned by detailed studies of the site and surroundings, and consultation with the local planning department.

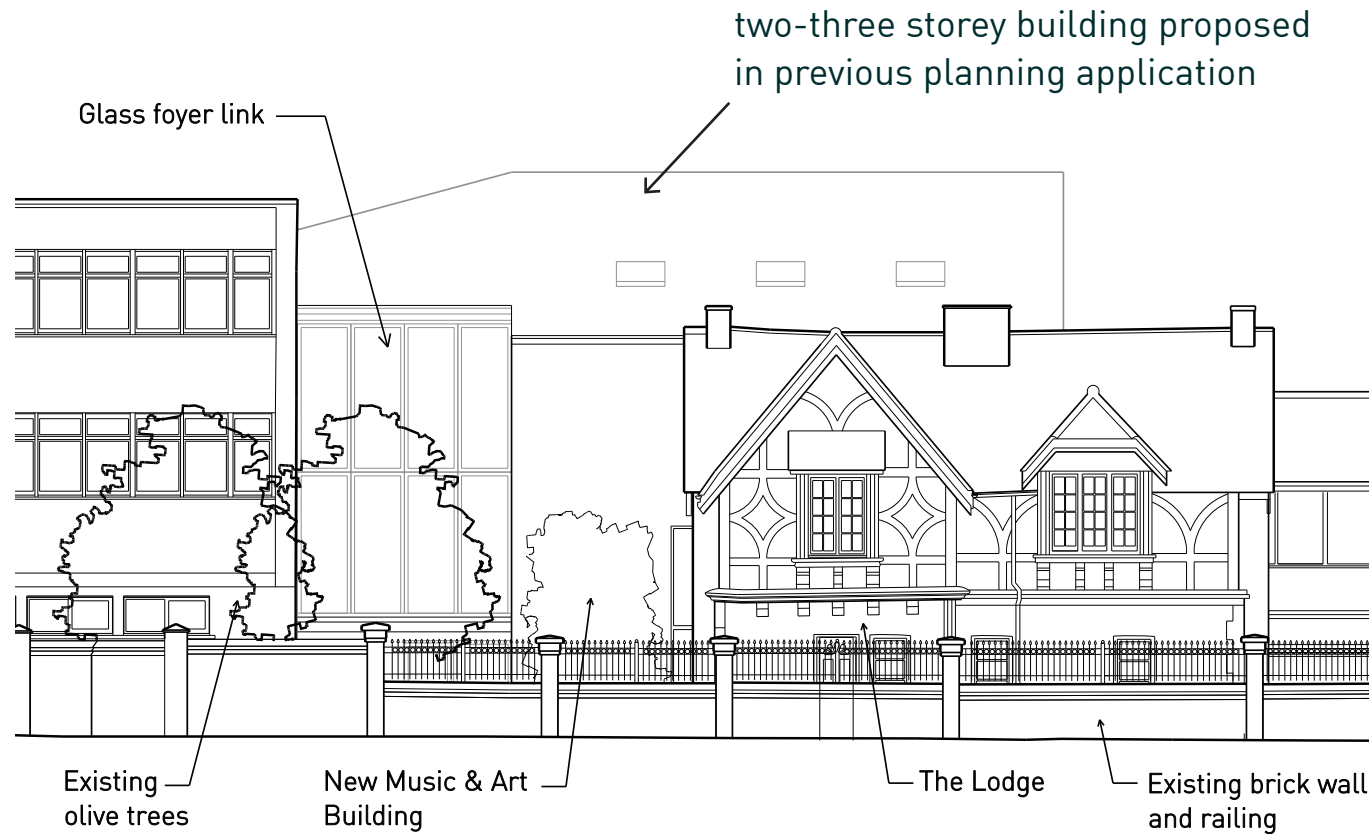
The vision for the project is to create a high quality and sustainable building that will provide much improved Music and Art facilities, benefitting pupils, teachers and the wider community. The project will be appropriate to the site and improve the setting of the local heritage assets.



Aerial photograph showing the site location



Background to the Application



2022 Planning Application - Elevation from Cross Deep



2023 Pre-Application - Elevation from Cross Deep

Previous Planning Application

We made a Planning Application for the Music and Art Building in December 2022 (22/3662/FUL). The application was refused and we received your Planning Report dated 7th March 2023. The refusal was based on the height and massing of the building, which was considered to be detrimental to the Conservation Area, the Lodge BTM and the Other Open Land of Townscape Importance.

Second Pre-Application Submission

In response, we developed proposals for a reduced scheme, which was shown in a second Pre-Application submission in July 2023 (23/P0162/PREAPP). The height of the building was reduced significantly, as shown in the elevations to the left. We received your written response to the Pre-App on 4th October, which agreed that the issues relating to height and massing had been addressed, but suggested a few further changes. We have incorporated this advice in the current design, as summarised on the following page.

Pre-App Advice and Summary of Changes

We have done further work on the design in response to your Pre-Application Advice from October 2023. Your comments and our responses are below.

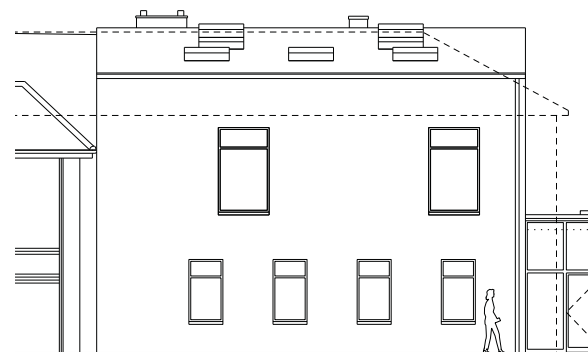
1. Consider setting the building further back from Cross Deep.

The building has now been set back 1m further from Cross Deep, to reduce the impact on the Lodge and the street scene. The new building will be well-screened from Cross Deep by trees and existing buildings:

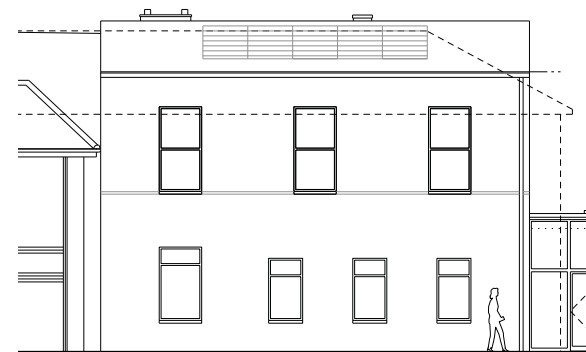


2. Revise the rear elevation

The rear elevation has been improved in response to the comments:



Previous rear elevation (as 2nd pre-app)



Rear elevation as proposed

3. Consider different roofing materials

Because of its very shallow 5° pitch, the new roof won't be visible from Cross Deep, and will only be visible from a small part of the playing fields. The pitch is too shallow for tiling, so the possible materials are membrane roofing, felt or metal roofing. Of these, standing seam zinc is the most attractive, durable and appropriate to the context.



View of proposed building from playing fields



Zinc standing seam roofing

4. Consider rooflights flush with the roofing surface

The rooflights have been adjusted to be as flush as possible on this shallow roof pitch. The rooflights will not be visible from Cross Deep.

5. Introduce subtle variation to the brickwork to avoid it completely blending in with the Lodge.

The proposed brick will be a red brick which is more subdued in tone than the existing bright red bricks on the Lodge. The new brickwork will have some variation in colour, and a warm, natural appearance.

The Design Team



Southwark Inclusive Learning Service (SILS3), London



St Edward's Music School, Oxford

The team is led by Tim Ronalds Architects, with Max Fordham as environmental engineers and Eckersley O'Callaghan as structural engineers.

Tim Ronalds Architects have a reputation for highly successful arts and education projects. The practice has won 23 RIBA Awards in recent years, and has many years of experience working in sensitive heritage settings. Photographs of three of our projects are shown here, and more information about the work of the practice can be found at www.timronalds.co.uk.

The team includes:

Architect	Tim Ronalds Architects
Services Engineer	Max Fordham
Structural Engineer	Eckersley O'Callaghan
Quantity Surveyor	Bristow Consulting
Acoustic Engineer	Ramboll
BREEAM Assessor	Stroma Built Environment
Heritage Consultant	RPS
Ecologist	Engain
Arboricultural Consultant	Quaife Woodlands
Transport Engineer	Caneparo



The Malthouse Theatre, King's School Canterbury

The Need for Development

St Catherine's School needs more and better spaces for teaching, especially for music, art and languages.

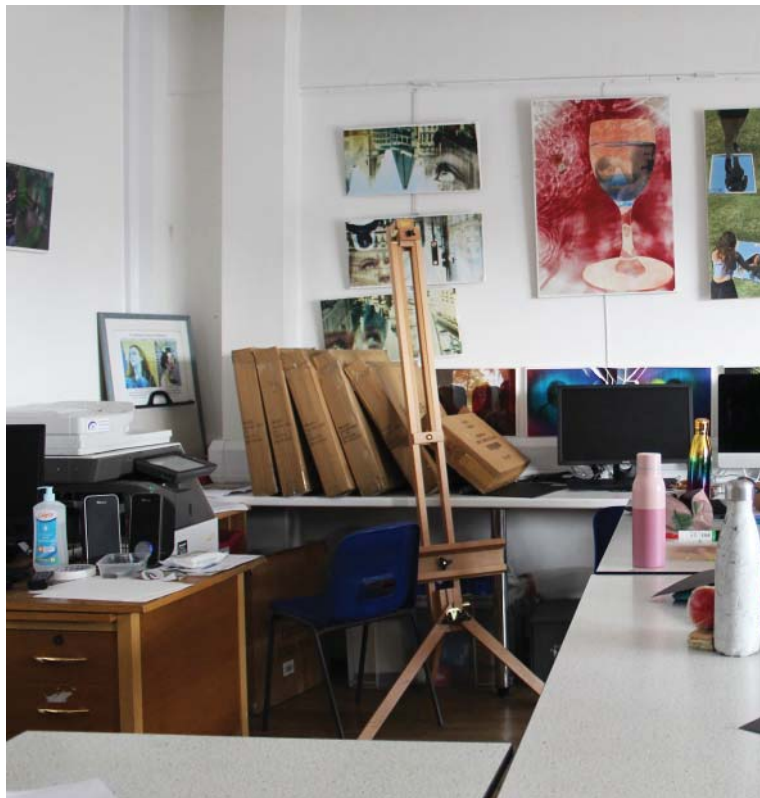
The existing Music Building is dark and in need of modernisation. The acoustics are poor and the ceiling is too low for performances. The adjoining rooms are too small for teaching and group practice. Larger, improved Music spaces are required to cater to the students' needs and create a suitable space for performances and events.

The current Art facilities are not adequate to support the growing popularity of Art and Design at the School. There is currently only one Art classroom and one Photography room. Multiple classes cannot take place simultaneously, and Sixth Formers lack designated space to undertake independent work. There is a lack of space for Textiles, which is an increasingly popular subject in the School.

The existing Lodge extension contains a classroom which is too small, and it is cold and draughty.

The external spaces in this area also need improvement. The alleyways around the existing Music Building and Lodge extension are narrow, unattractive and difficult to supervise.

For more detail, refer to the Educational Needs Statement, in Appendix 1 of the Supporting Planning Statement.



Existing art classroom at St Catherine's School



Existing music room

Design Policy Context

A separate Supporting Planning Statement details the policy context.

The Richmond upon Thames Local Plan (2020) includes policies LP1-4, relating to Local Character and Design Quality, Building Heights, and Heritage Assets. These are particularly relevant to the proposals, as the site is located within CA8 Twickenham Riverside Conservation Area, and there are a number of Listed Buildings and Buildings of Townscape Merit (BTMs) to consider. LP1 emphasises that all development is to be of high architectural and urban design quality. Relevant Supplementary Planning Documents are 'Buildings of Townscape Merit SPD' and 'Design Quality SPD'.

The site is within a Grade II Listed Historic Garden / Park, although the listing states: "The garden survives only as part of the archaeological record." The school's playing fields are designated Other Open Land of Townscape Importance. Relevant Local Plan Policies are LP7 Archaeology, and LP14 Other Open Land of Townscape Importance.

Local Plan Policy LP10 relates to Local Environmental Impacts, and the aspects which are most relevant to the project are Air Quality, Noise and Construction.

Local Plan Policies LP15, 16 and 21 relate to Biodiversity, Trees and Flood Risk and Sustainable Drainage. These are all relevant to the proposals. Flood risk is an issue because the site, although low flood risk, is in an Area Susceptible to Groundwater Flooding.

Sustainability is key to the design. Relevant policies are LP22, relating to Sustainable Design and Construction, and LP20, relating to Climate Change Adaption. The Sustainable Construction Checklist SPD is also a useful document.

The project is for an existing school, and Local Plan Policy LP29 relates to Education and Training. LP29 states that the Council will encourage the provision of facilities for education, including maximising existing educational sites through redevelopment to meet identified educational needs.

The London Plan includes a number of policies which are relevant to the application. Policy D12, Fire Safety, is a key one that is addressed in the application.

The guidance in these policies has been carefully considered and incorporated into the design proposals. Please refer to the Supporting Planning Statement for further detail on the relevant policies, and how the proposals respond to the policies.

Site Analysis

Land Uses

St Catherine's School is located in Twickenham, approximately 12 miles South-West of central London. The surrounding area is predominantly residential, and the immediate area contains another school and a hotel.

To the East of the site lies the River Thames and the Ham Lands, a 72-hectare Local Nature Reserve.

Residential streets to North, West and South of site

St Catherine's School and playing fields



River Thames

Radnor House School (including 'Pope's Villa')

Ham Lands Nature Reserve

Hotel

Radnor Gardens

Townscape Analysis



Cross Deep, North of the site, with view to the tower of 'Pope's Villa'.

The site is located on Cross Deep, within the Twickenham Riverside Conservation Area. Approaching the site from the North, you pass through a residential area, with no views of the river from the road. The focal point of the view is the tower of 'Pope's Villa' - now part of Radnor House School.

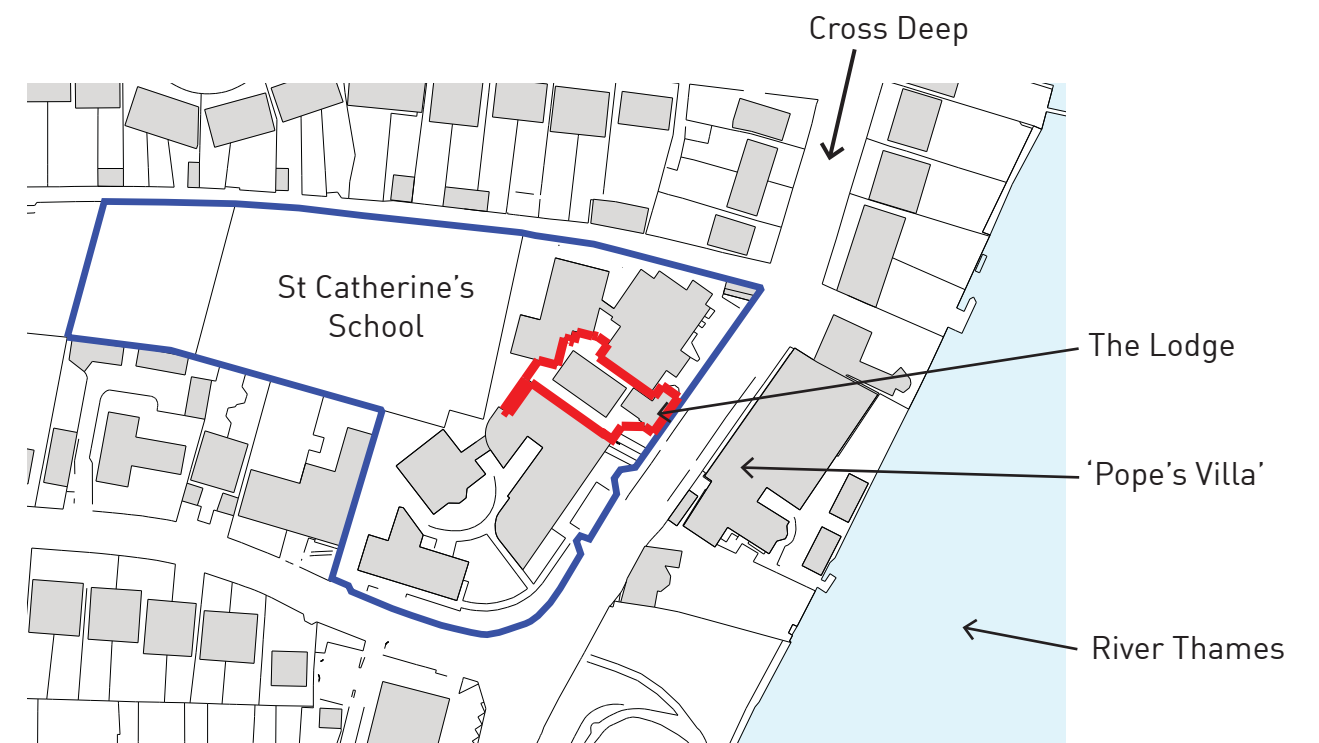
'Pope's Villa' was built in 1845 on the site of poet Alexander Pope's original riverside mansion, which had been demolished in 1808. This replacement 'Pope's Villa' was designed by Henry Edward Kendall Jr, who also designed 'The Lodge' on the opposite side of Cross Deep. These two buildings are key features of this part of Cross Deep and have similarities in their neo-Tudor detailing. Both are locally listed as Buildings of Townscape Merit.



Radnor House School - including the building known as 'Pope's Villa', viewed from Cross Deep.



The Lodge, dating from the mid 1800s.



Location Plan, with site outlined in red, and School grounds outlined in blue

Townscape Analysis continued



Music Building



Hall



The Lodge



St Joseph's

Science Building, with the Lawn Building behind. St Joseph's extension is on the right.



The Lodge is part of St Catherine's School, and is now surrounded by 20th century school buildings that have been developed incrementally in a range of styles and materials.

To the North of The Lodge is the **Hall**, a two-storey building in red brick with a hipped roof, dating from the 1950s. West of the Hall is the **Prep School**, also dating from the 1950s and in a similar style. The Prep School is barely visible from Cross Deep but can be seen from Grotto Road, a small side road.

South-West of the Hall is the **Music Building**, a single storey brick building from the late 1980s. This can be glimpsed from Cross Deep but is mainly hidden by the surrounding buildings and trees.

St Joseph's, built in 1959, is the largest and most dominant building on the school site. It is a three-storey block in modern style, with a flat roof and finished in white render and grey cladding. In the 2010s, a large extension was added.

The **Science Building** at the South of the school site is a two-storey building with white render and a flat roof. It dates from the 1960s and was extended in the 2010s.

From the corner of Popes Grove and Cross Deep, you can see the **Lawn Building**, which is set back behind the Science Building and St Joseph's. The Lawn Building is a two-storey Victorian building in buff brick, dating from 1860.

Townscape Analysis continued

There is no cohesive style to the St Catherine's School buildings. One of the most dominant buildings on the streetscape is the three-storey St Joseph's block - similar in height to the buildings on the opposite side of Cross Deep. The Lodge is also a key feature; it's appearance making a connection with Pope's Villa opposite.

Another important building close to the site is **Ryan House**, situated south of 'Pope's Villa'. This early 19th century, three-storey stucco house (with earlier core) is the remaining part of a mansion built after Alexander Pope's house was demolished on the site. Half of the mansion was destroyed by bombing in the 1940s, but Ryan House retains the character of a grand riverside villa, and is Grade II listed.

To the South of Ryan House is Radnor Gardens, an attractive park with views of the River Thames. These gardens were formed following bomb damage to the riverside properties that were located here. Radnor Gardens make a significant contribution to the streetscape, opening up views from Cross Deep to the Thames and the adjacent green spaces.

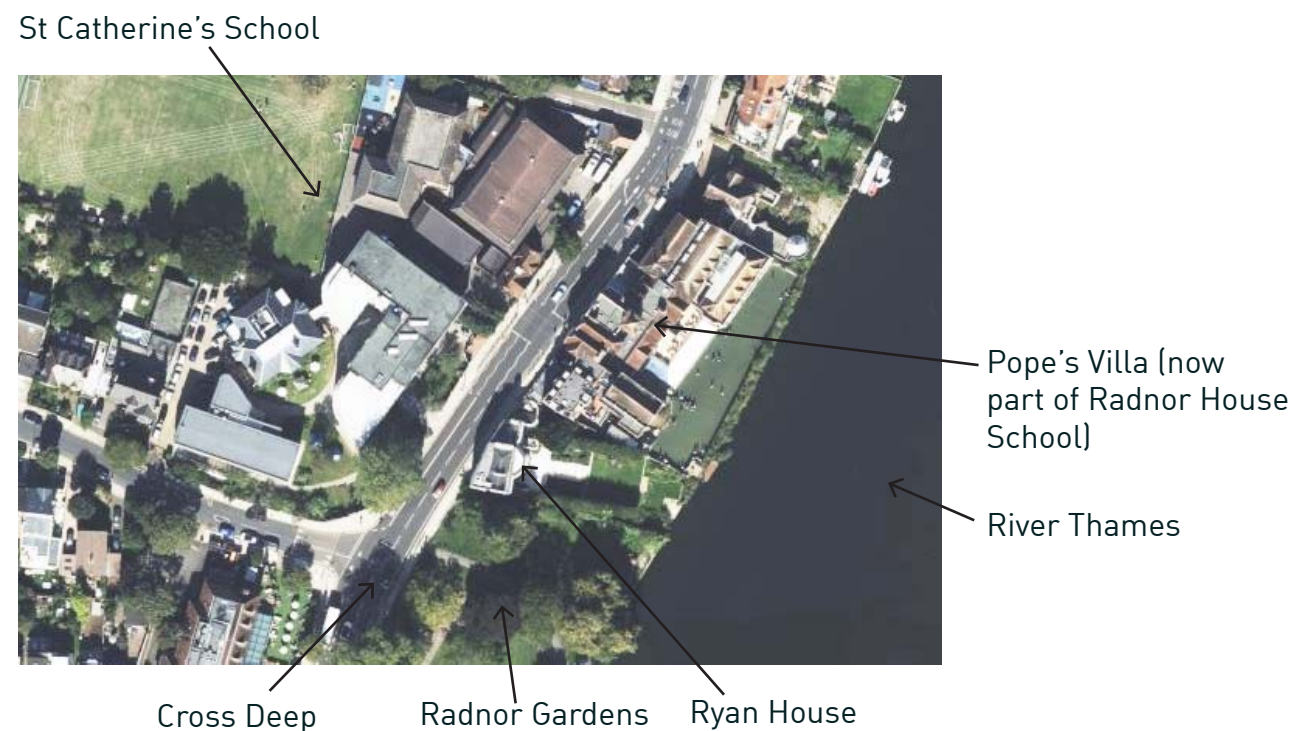
More details on the heritage of the buildings can be found in the Heritage Statement included in this Planning Application.



View of St Catherine's School from Cross Deep, with Ryan House visible on the right.



Ryan House and Radnor Gardens, viewed from Cross Deep.

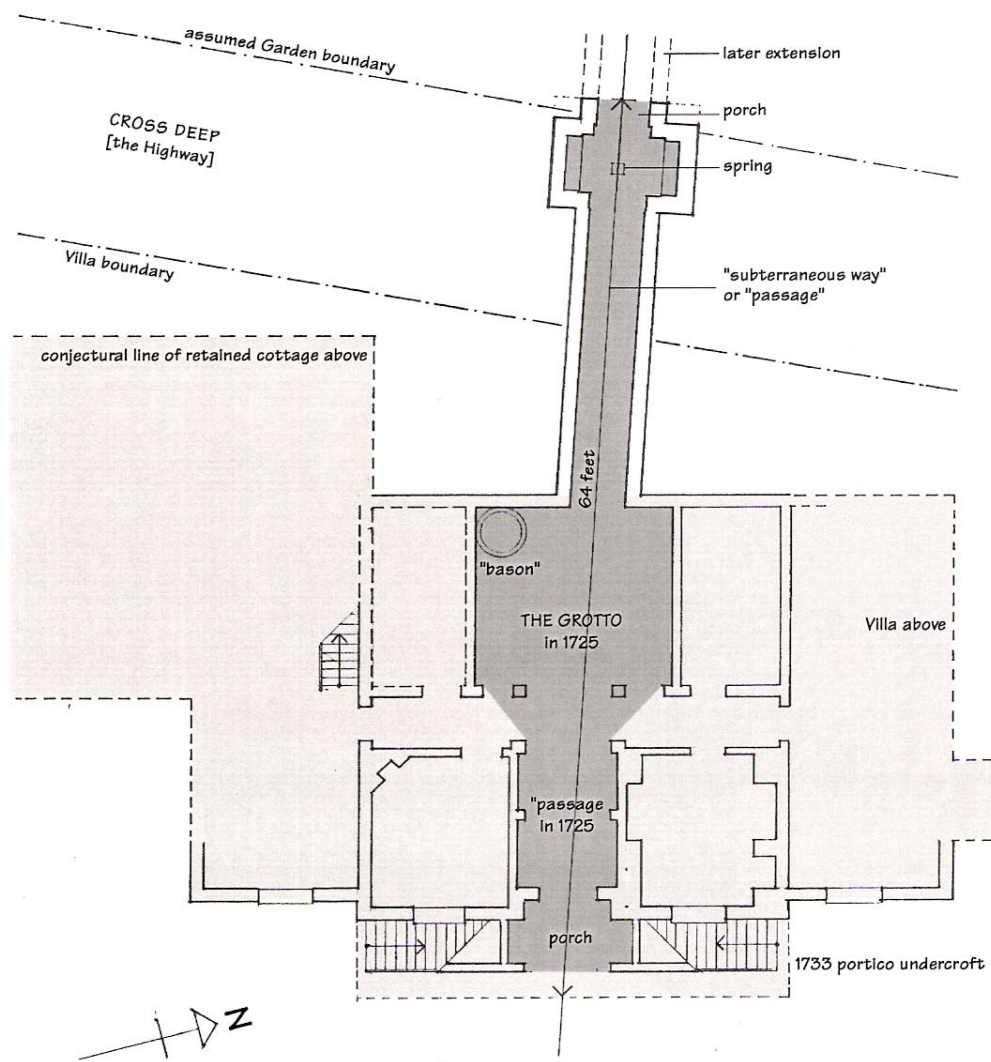


Pope's Grotto

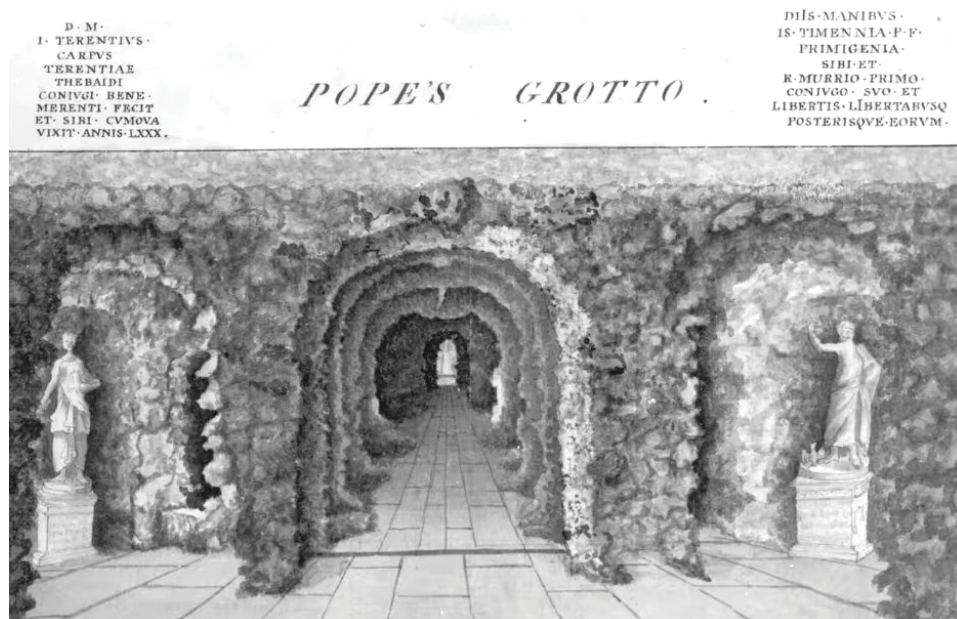
The preceding pages consider the townscape character, but some of the important historical features near the site are hidden from street view.

Pope's Grotto was created by Alexander Pope, the 18th century poet, in the basement of his villa. The first version was completed in 1725, along with an underground passage beneath Cross Deep, which connected the grotto to his gardens. The grotto survived when Alexander Pope's villa was demolished, and still exists in the basement of Radnor House School.

The tunnel was extended when the road was widened, and steps down to the tunnel are within St Catherine's School grounds, close to the site. The tunnel and grotto are Grade II* listed.



Sketch plan of Popes Grotto (popesgrotto.org.uk)



A drawing of Pope's Grotto by S. Lewis, from 1786 (source: Pope's Grotto Preservation Trust)



Recent photo of Pope's Grotto showing the restored south chamber (source: Pope's Grotto Preservation Trust)



Steps and entrance to the tunnel to Pope's Grotto

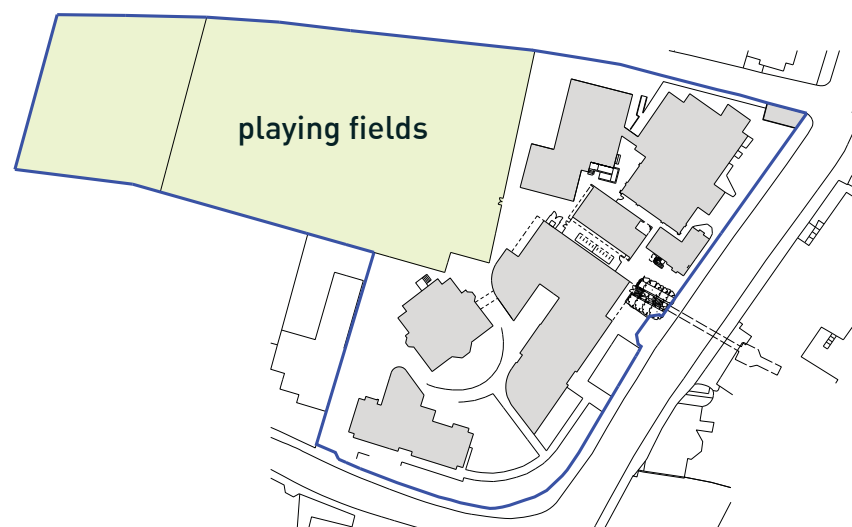
Pope's Garden



Extract from Historic England's List Entry
'Popes Garden' (green), School site (blue)

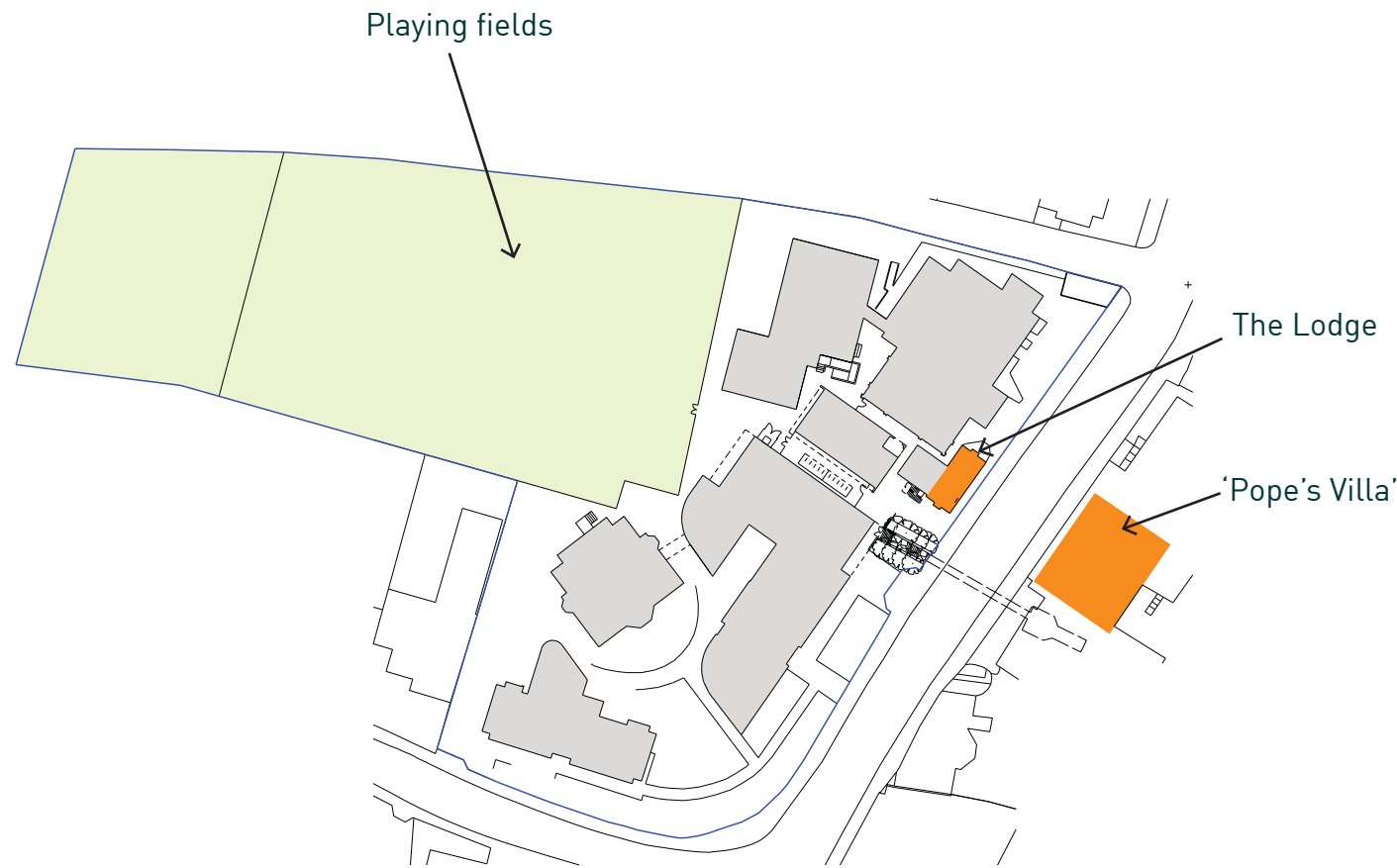
Much of the School falls within what was, in the 18th century, '**Pope's Garden**', and is now a Grade II Listed Historic Garden / Park. The garden has not survived above ground, and Historic England Listing states: "The garden survives only as part of the archaeological record." Part of this land has become the school's playing fields, which are designated 'Other Open Land of Townscape Importance'.

More detail on Pope's Garden can be found in the Archaeological Statement included in this planning application.



School site plan as existing

Views from Playing Fields



Site plan as existing, with BTMs highlighted in orange

Views from the playing fields (designated Other Open Land of Townscape Importance) are dominated by the existing school buildings. From some points, the top of 'Pope's Villa' BTM is visible, as shown in the photos below, and this tower is an important landmark in the local area. The Lodge roof is also partially visible from some points, but its walls are hidden by other buildings, so it isn't easily recognised.

'Pope's Villa' behind the Prep School



Photo from north side of playing fields

'Pope's Villa' The Lodge

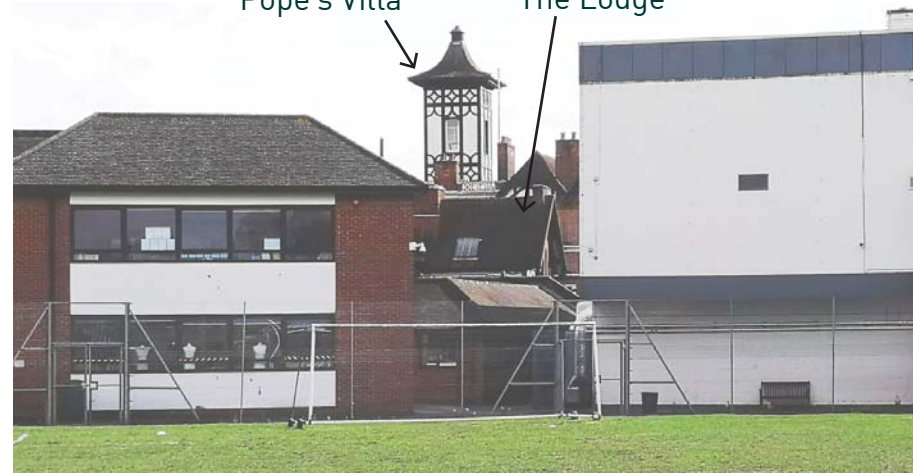


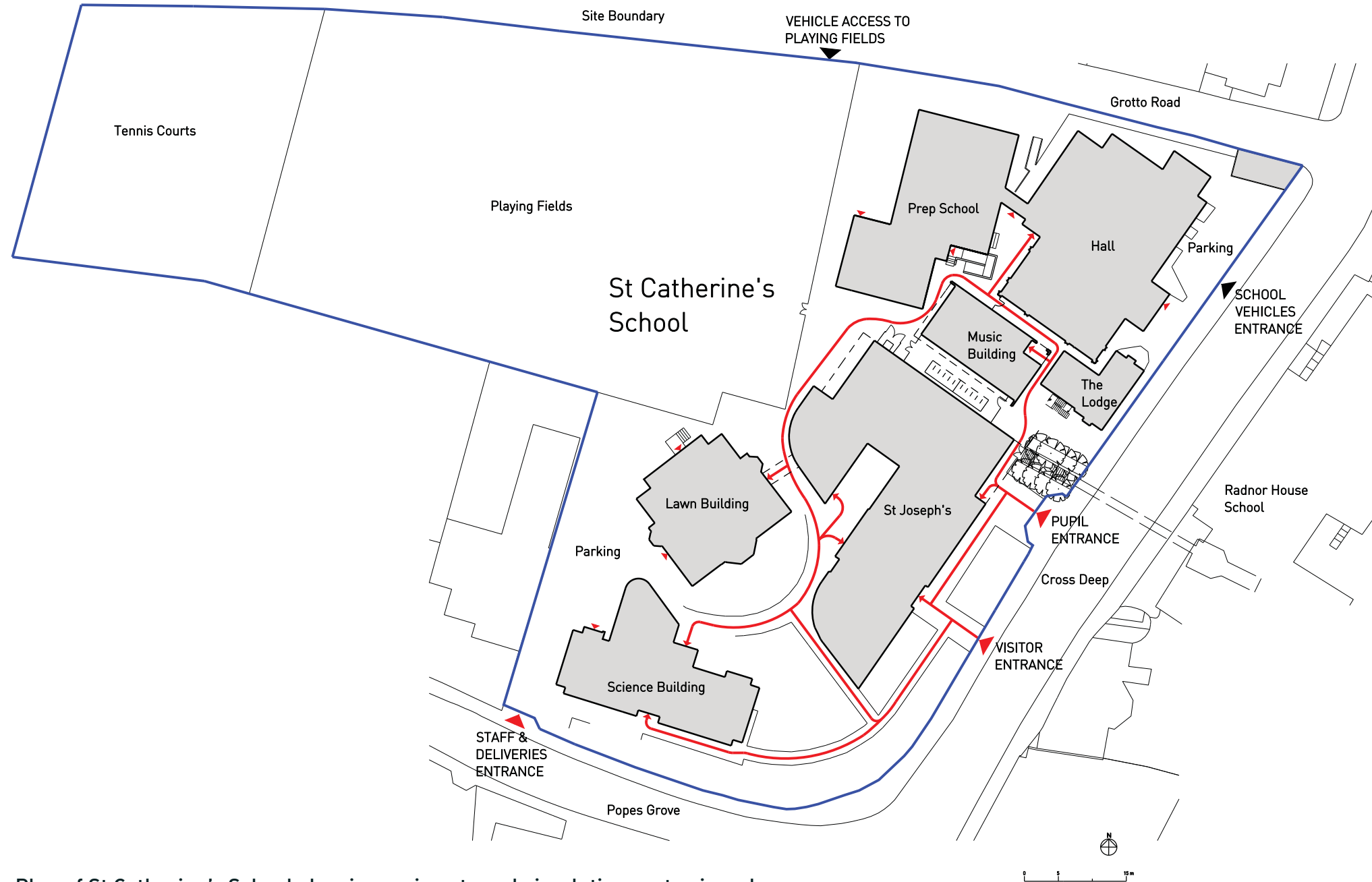
Photo from near middle of playing fields

'Pope's Villa' behind St Joseph's



Photo from south side of playing fields

Analysis of School Site - Access and Routes



Plan of St Catherine's School showing main external circulation routes in red

The school buildings form a cluster at the east side of the grounds. The main pedestrian visitor entrance is located on Cross Deep, with the main pupil entrance slightly further north, close to the steps to the Pope's Grotto tunnel. A third pedestrian access is at the south west corner, off Pope's Grove, next to the main vehicle entrance to the site.

Staff, visitor and delivery vehicles enter from Pope's Grove to access a small car park West of the Lawn Building and Science Building. There is also a vehicle access gate into the playing fields, from Grotto Road.

The plan left shows the main pedestrian routes within the school site in red.

Analysis of School Site - Access and Routes continued



Photo 1: Hard and soft landscaping at the south of St Joseph's, with the Lawn Building behind.

The pedestrian routes at the south of the site are spacious and well defined, with hard and soft landscaping.

North of St Joseph's, the external spaces are unsatisfactory. The tarmac alleys around the existing music building are narrow and difficult to supervise, and there is a lack of soft landscaping.

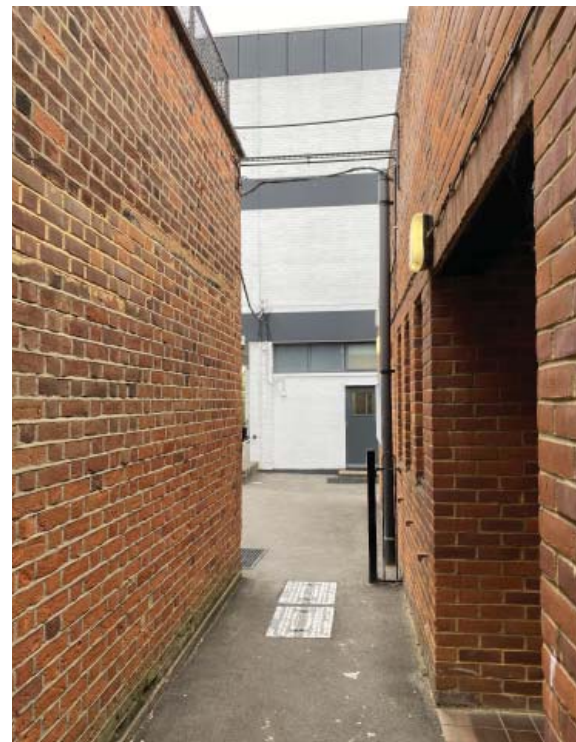
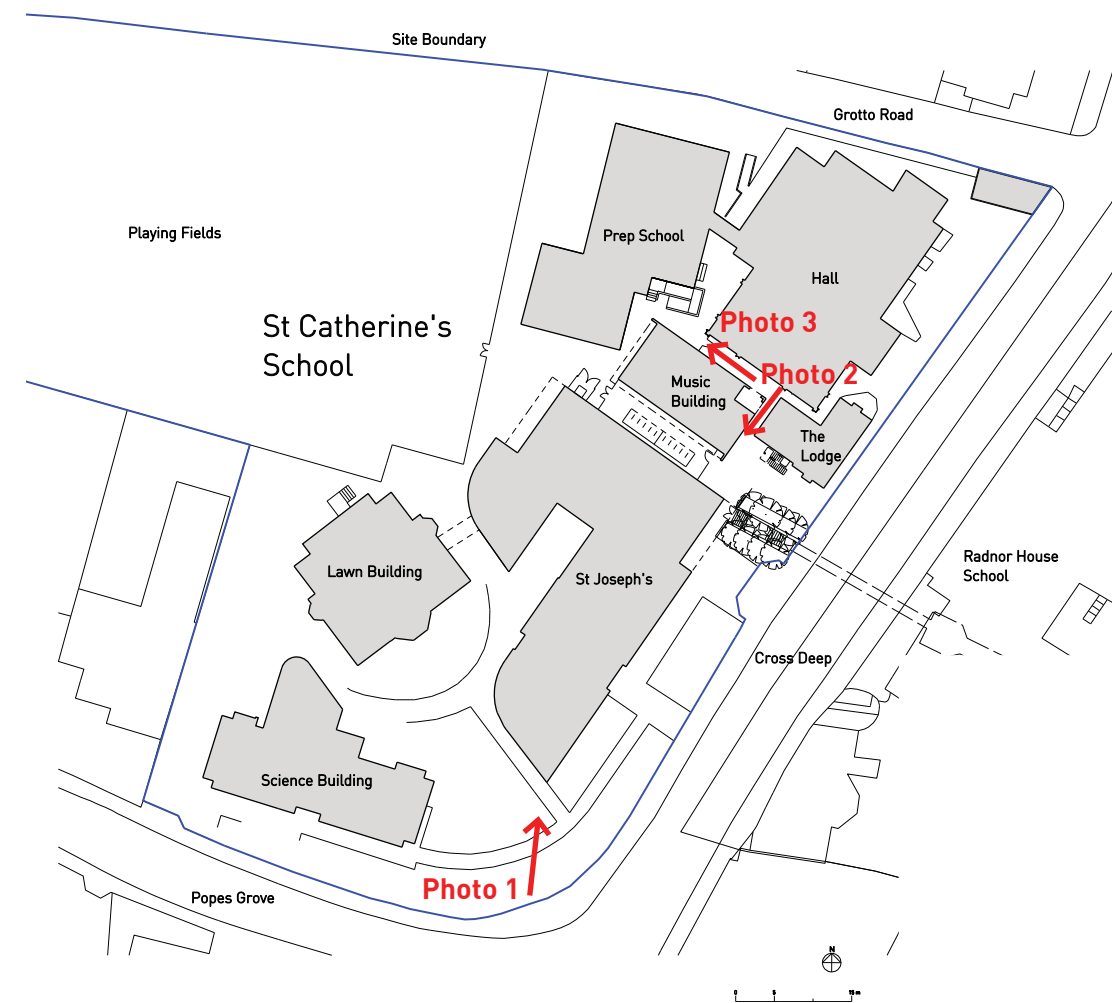


Photo 2: Alleyway between the Music Building and the Lodge extension, looking south towards St Joseph's.



Photo 3: Alleyway between the music building and the Hall, looking west towards the Prep School.



Plan showing location of photos

Opportunities and Constraints

Constraints Analysis

Any development within the school grounds needs to consider impact on the heritage assets shown below.

The playing fields are 'Other Open Land of Townscape Importance'. Much of the School grounds are a Grade II listed Historic Garden / Park (the garden survives only as part of the archaeological record).



The Lodge is a 'Building of Townscape Merit'



'Pope's Villa' is a 'Building of Townscape Merit'



The Lawn Building is a heritage asset



Pope's Grotto, and the tunnel to access it, are Grade II* listed



Ryan House is Grade II listed

Radnor Gardens are 'Metropolitan Open Land'

The Proposed Site



Existing Plan, with the proposed site outlined in red, and School grounds outlined in blue

Development on the school site is very limited - the existing buildings are closely packed, and building on the playing fields (OOLTI) is not an option. The only opportunity for the School to develop its facilities is by extending or replacing an existing building.

As the School needs to improve their music spaces, we explored whether the existing single-storey Music Building could be extended and refurbished. Unfortunately this is not a viable option - the building is outdated, the existing layout is unsuitable, and the position of the building creates narrow alleyways around it.

The single-storey 20th century extension to The Lodge is also dated and unsightly. It is too small to be a useful classroom, and it is cold and draughty.

We therefore propose removing the existing Music Building and the Lodge extension, and replacing them with a better building and improved outdoor spaces.

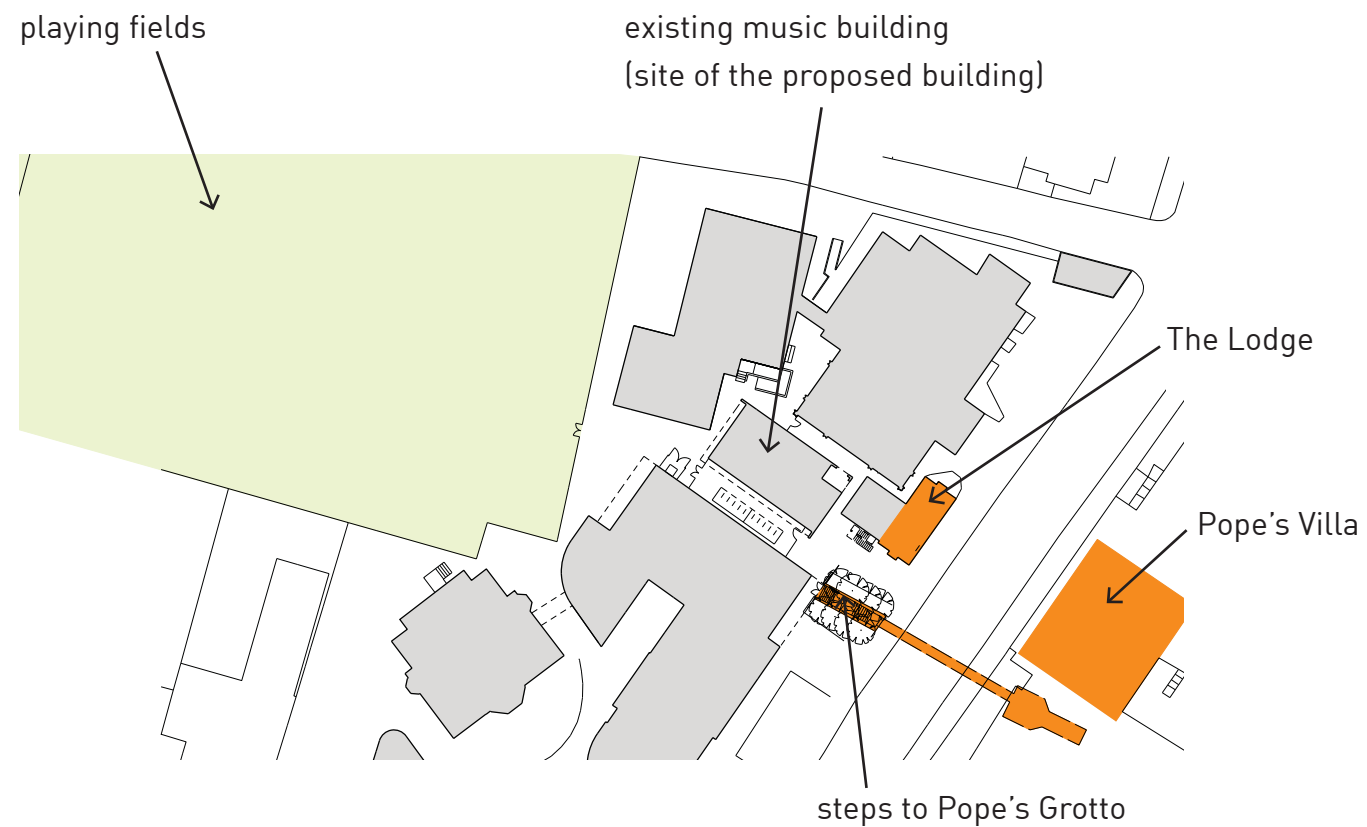


The Music Building with St Joseph's behind, and the Prep School to the right.



The 20th century extension at the rear of the Lodge

Constraints of the Proposed Site



To summarise, the key constraints are:

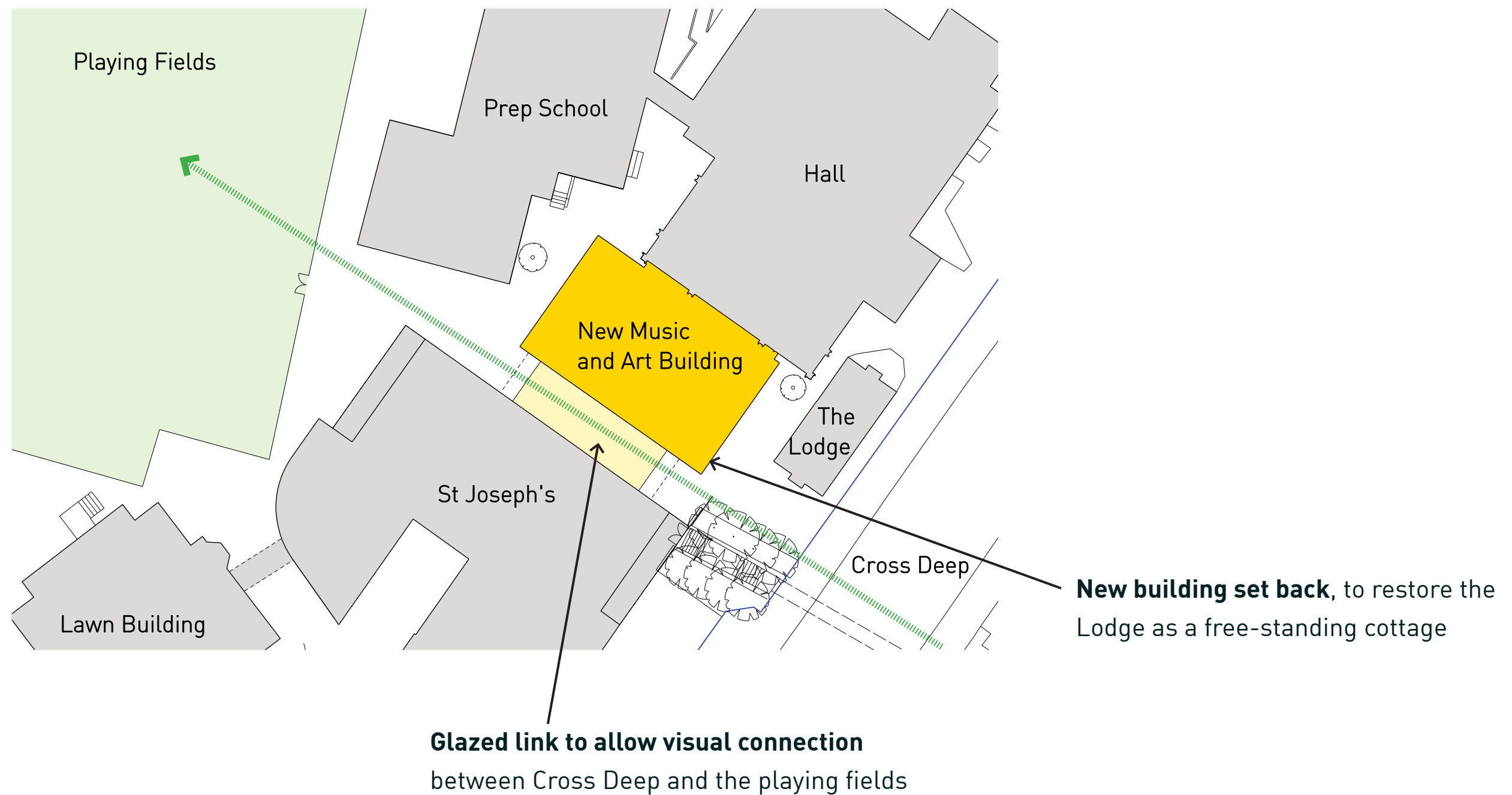
- The proposed building should be set back from the Lodge (BTM) and have the appropriate mass, height and appearance to respect the setting of the BTM.
- The building should not negatively impact on the setting of the steps to the Grade II* Listed Pope's Grotto.
- The building should not negatively impact on the OOLTI, and should not block views between the playing fields and Cross Deep.



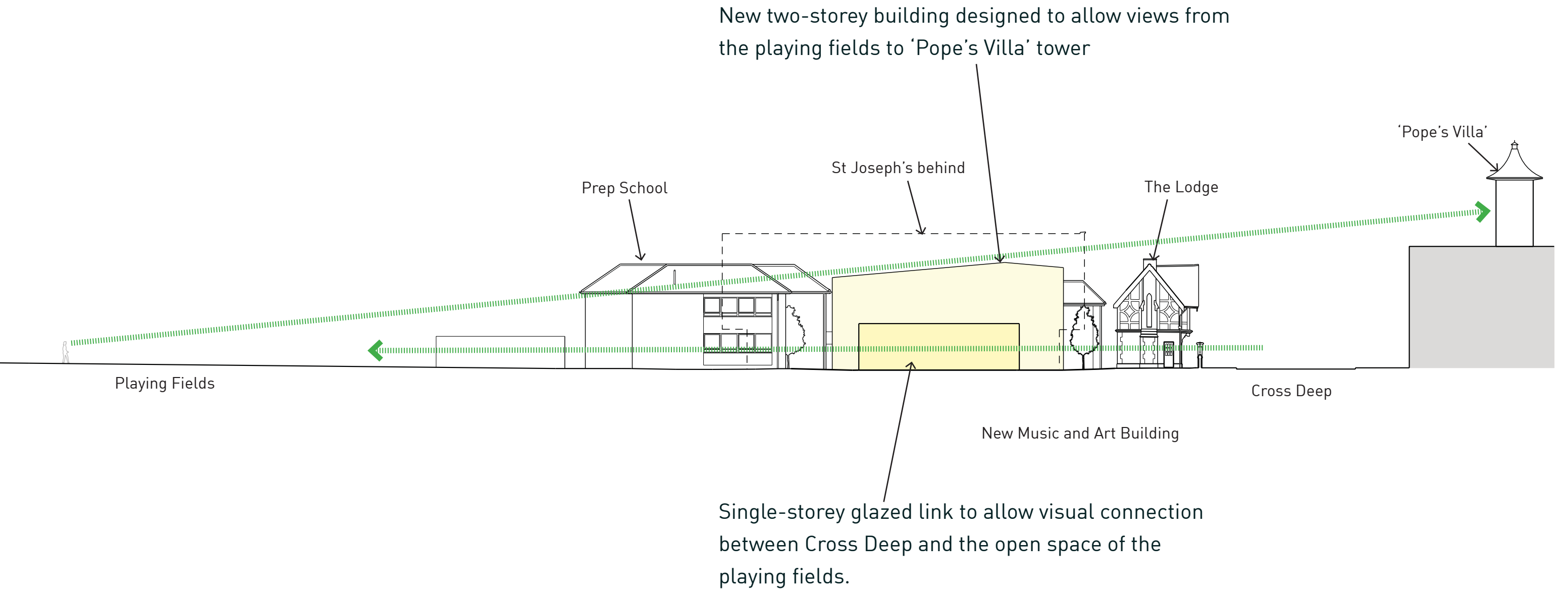
Photo of the site from Cross Deep

Design Concept

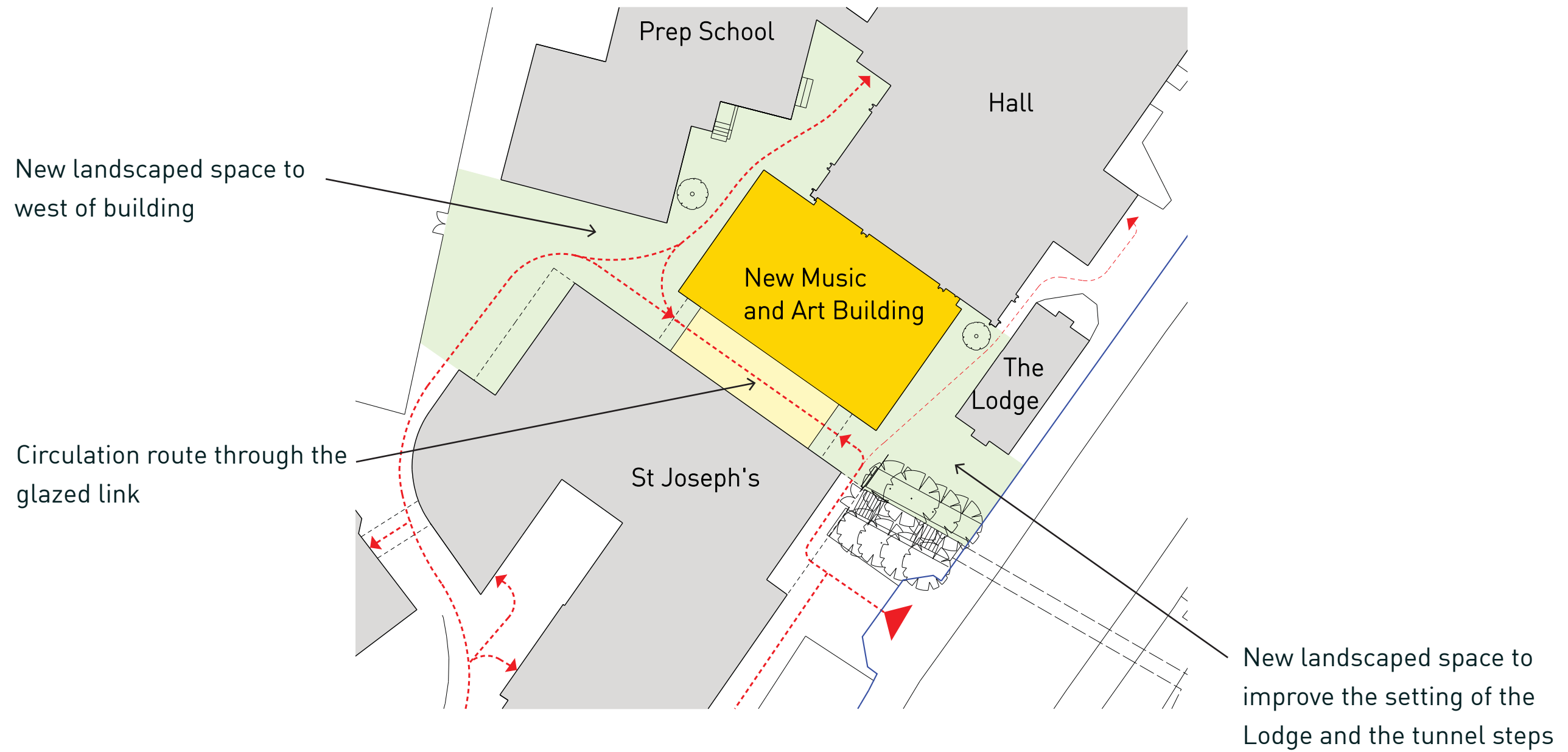
Position of new building



Design Concept - Height and Massing

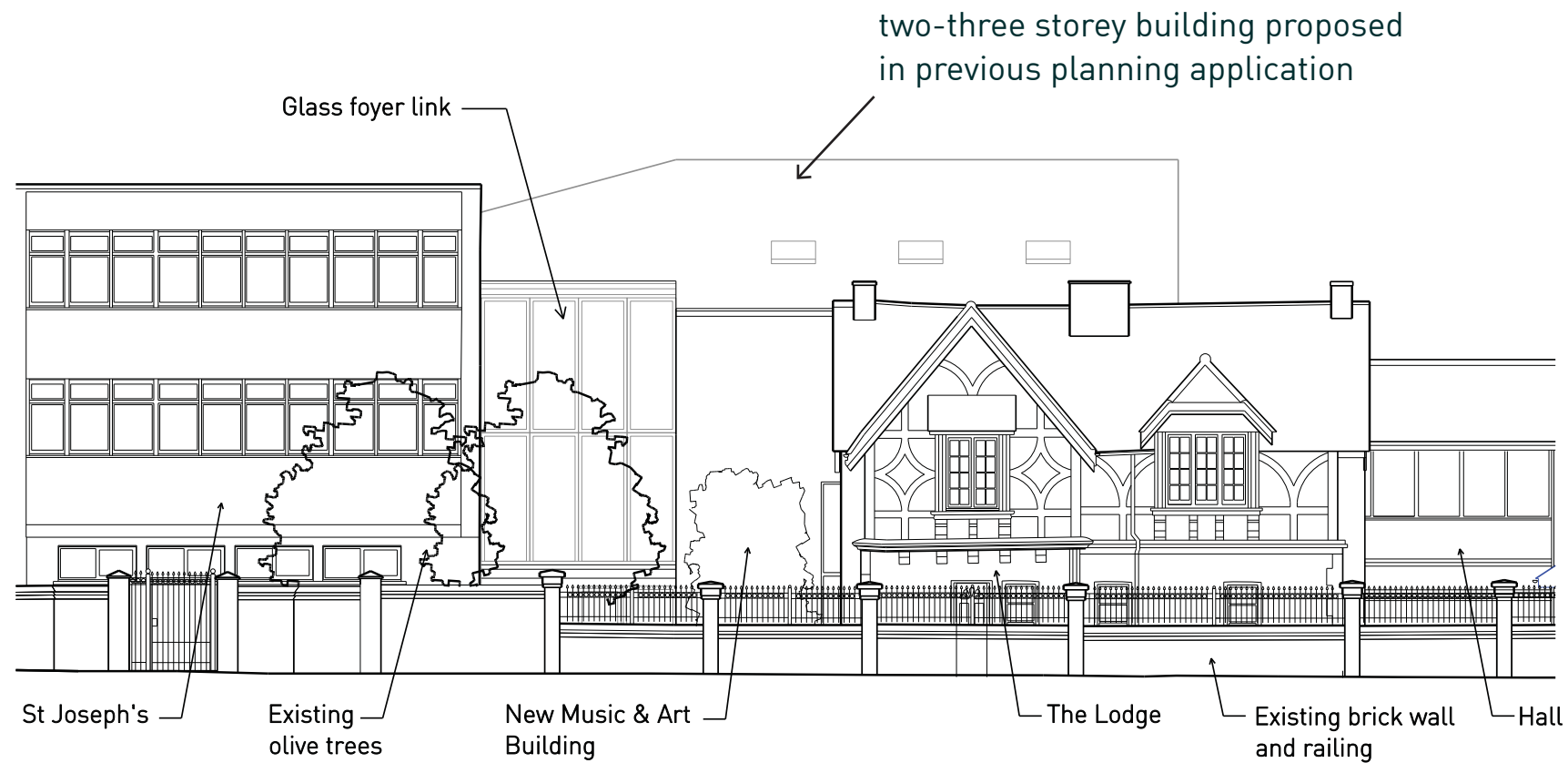


Design Concept - External Spaces

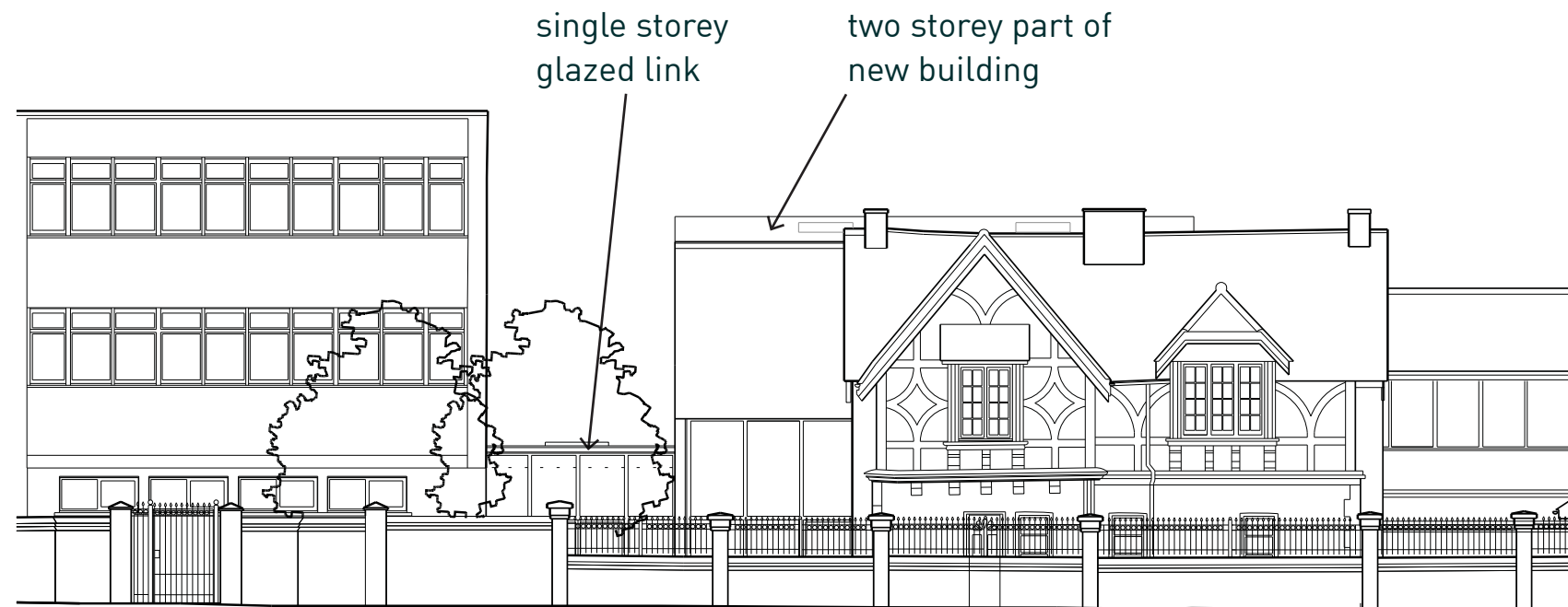


The Proposals

Height and Massing



2022 Planning Application - Elevation from Cross Deep



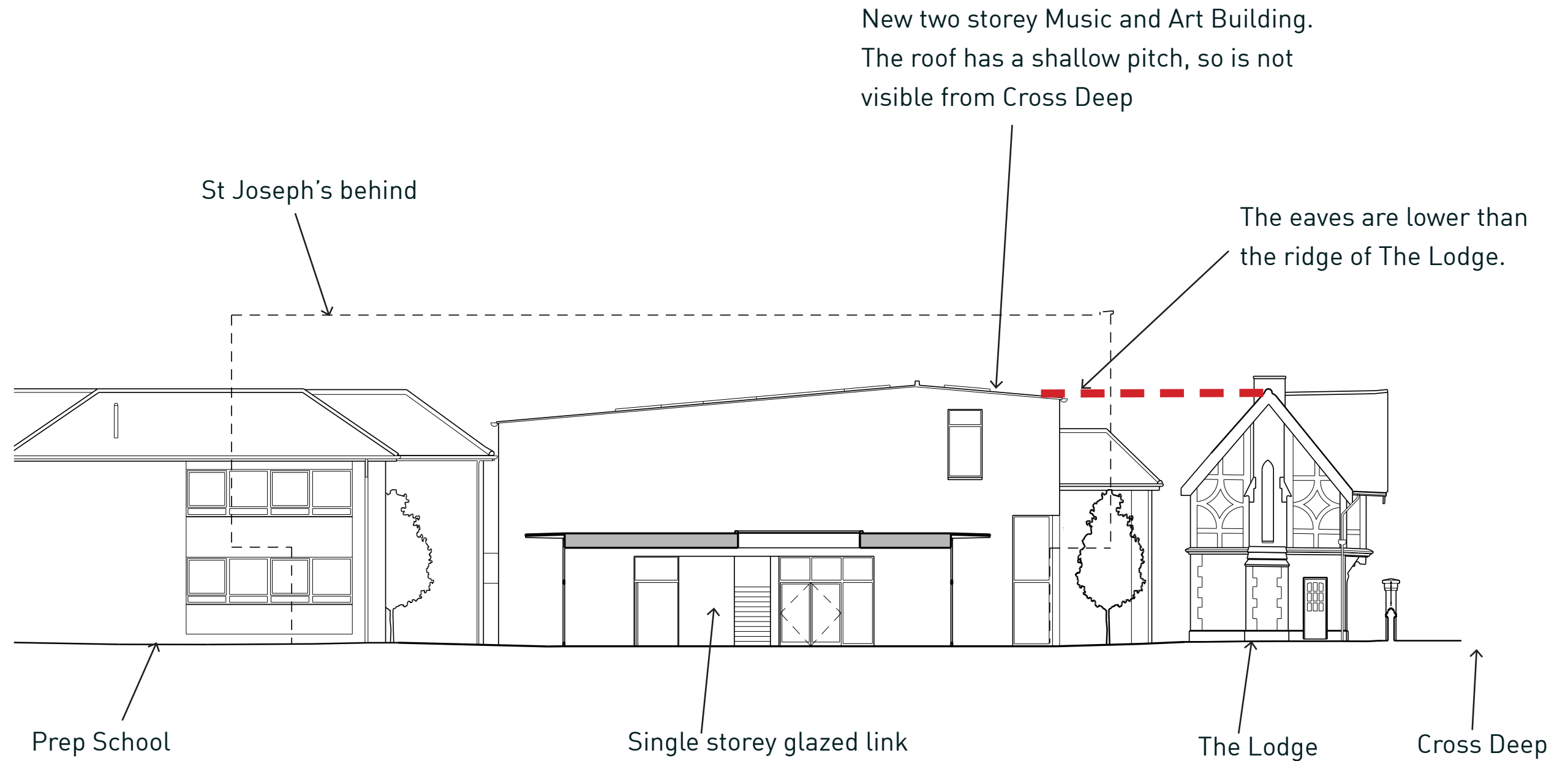
Current Proposal - Elevation from Cross Deep

The height has been significantly reduced since the previous planning application, as shown in the elevations, left.

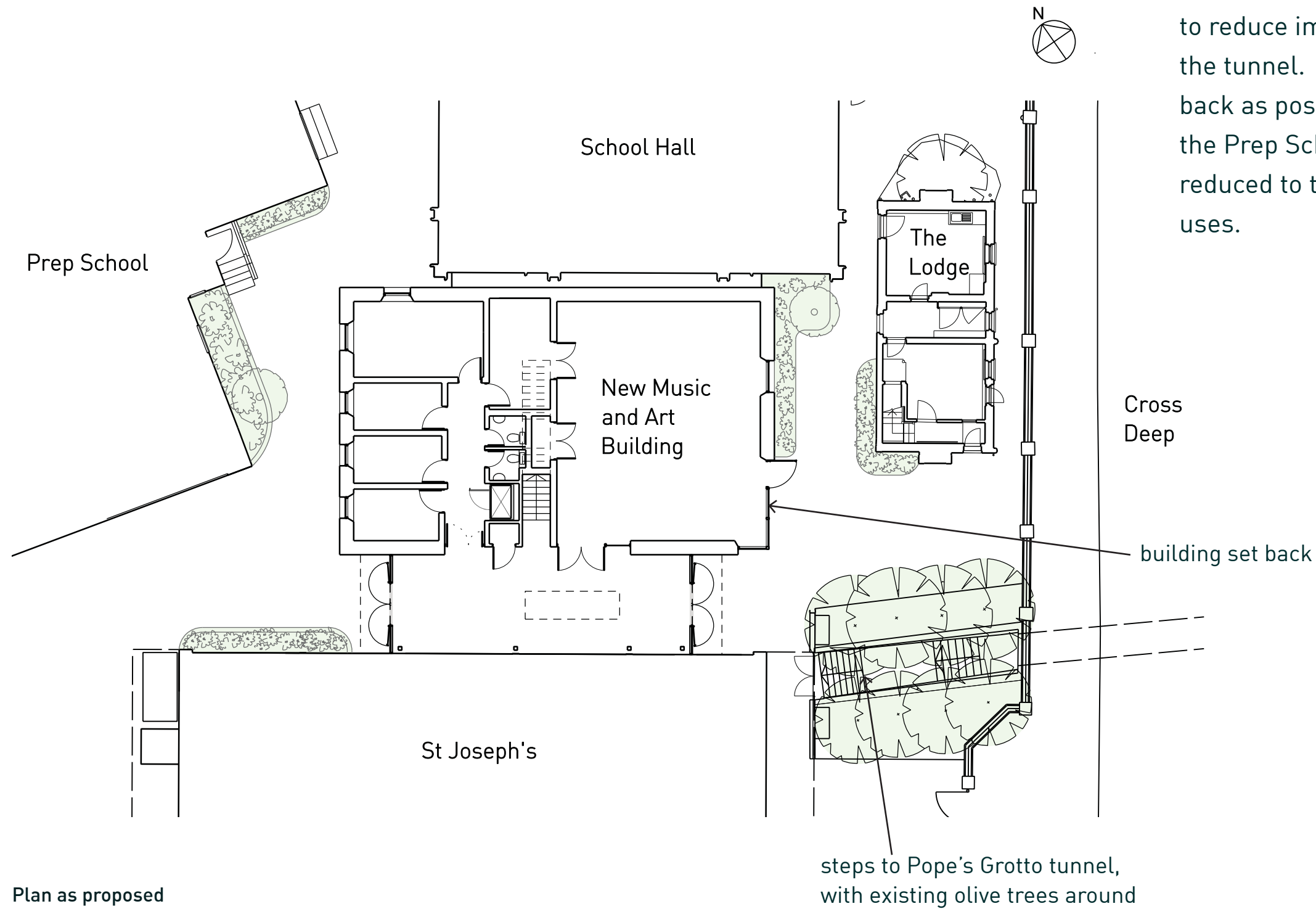
The single storey glazed link allows views through from Cross Deep to the playing fields.

The main part of the building is now similar in height to the Lodge.

Height and Massing continued



Height and Massing continued



Since the recent Pre-App, the proposed building has been moved 1m further from Cross Deep, to reduce impact on the Lodge and the steps to the tunnel. The building has been moved as far back as possible, without making it too close to the Prep School. The classroom sizes have been reduced to the minimum size suitable for their uses.

Plan as proposed

Height and Massing continued



Existing view from Cross Deep



View from Cross Deep, showing the design proposed in the 2022 planning application

These images show the reduced impact since the previous planning application. The building has been set back, and the single storey link allows visual connection to the open space beyond.



Proposed view from Cross Deep

Single storey glazed link, creating a visual gap between buildings

New building set further back behind the Lodge

Height and Massing continued

The proposed building is much smaller than St Joseph's, and set back. Approaching along Cross Deep from the south, the proposed building is largely screened by the existing evergreen olive trees.



Existing view from the South along Cross Deep.



Proposed view from the South along Cross Deep.

Height and Massing continued

Approaching the site from the North, the front of the new building is just visible above the Hall. The proposed building has a similar ridge height to the Lodge, and is significantly lower than St Joseph's. Because of the shallow pitch, the roof is not visible from Cross Deep.



Existing view from Cross Deep, looking South West towards the new building.



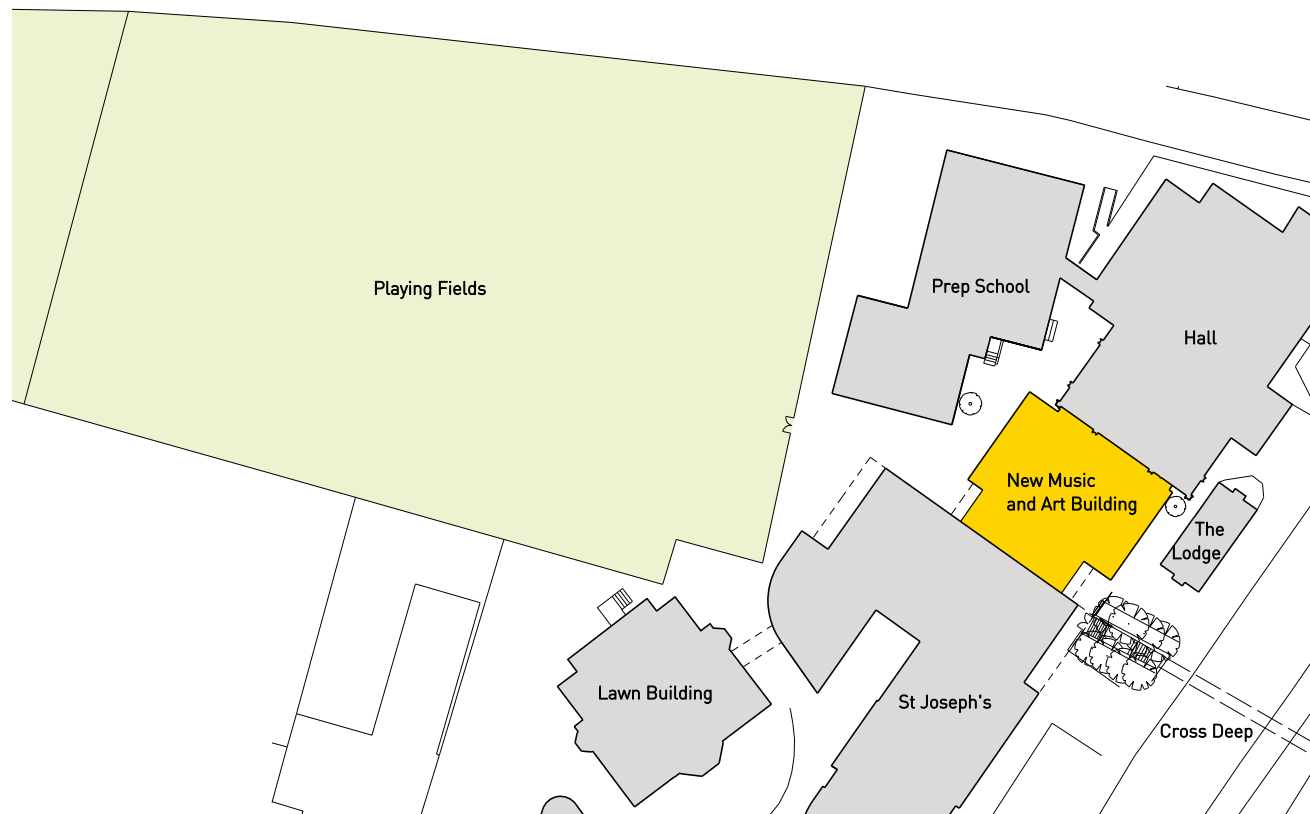
Proposed view from Cross Deep, looking South West towards the new building.

Height and Massing continued

The impact of the proposed building on the school playing fields, which are 'Other Open Land of Townscape Importance' (OOLTI), has been carefully considered in response to comments in the Planning Report from March 2023.

The height of the building has been reduced to two storeys, with a single storey link, to reduce impact on the OOLTI and to avoid blocking views across the site. The roof shape has been designed so that the tower of 'Pope's Villa' can still be seen from the playing fields.

Where the new building can be seen between the Prep School and St Joseph's, it will only be partially visible, as shown on the view on the next page.



Site Plan as Proposed



Long Section from Playing Fields to 'Pope's Villa', as Proposed

Height and Massing continued



Existing view from the playing fields

The image below shows the proposed view from the playing fields. The tower of 'Pope's Villa' can still be seen over the new building, and there will also be views over and through the single storey glazed link, allowing visual connection to Cross Deep.

Distant views will not be negatively impacted by the proposed building, and there is little impact on the open character of the OOLTI.



Proposed view from the playing fields

New Music and Art Building

Height and Massing continued



Existing view from Grotto Road, looking south



View from Grotto Road, showing the design proposed in the 2022 planning application

When viewed from Grotto Road, at the north of the site, the proposed building is now largely concealed from view.

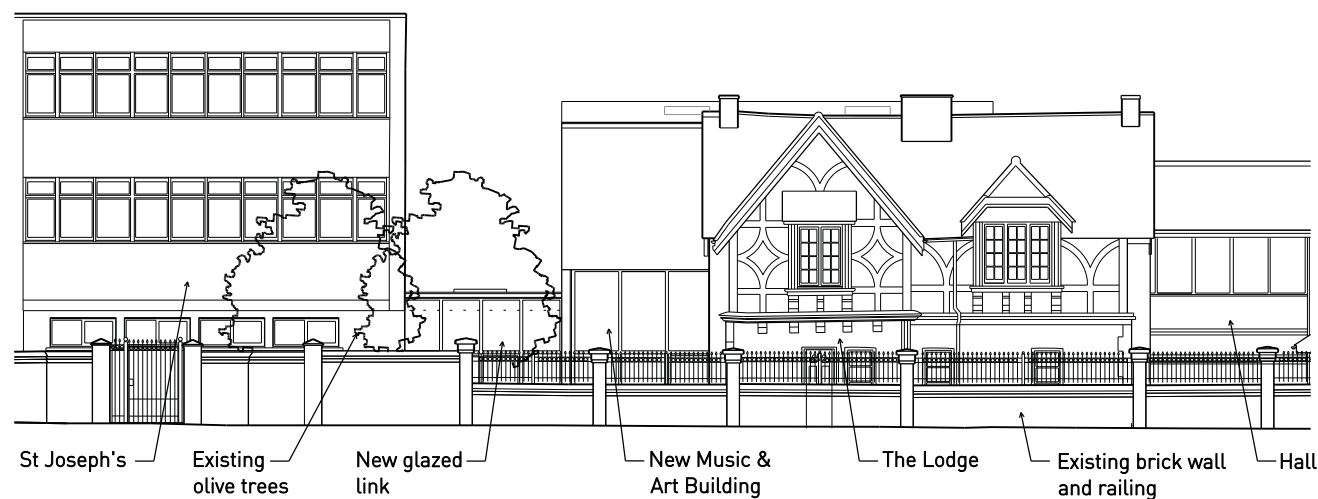


Proposed view from Grotto Road to the North

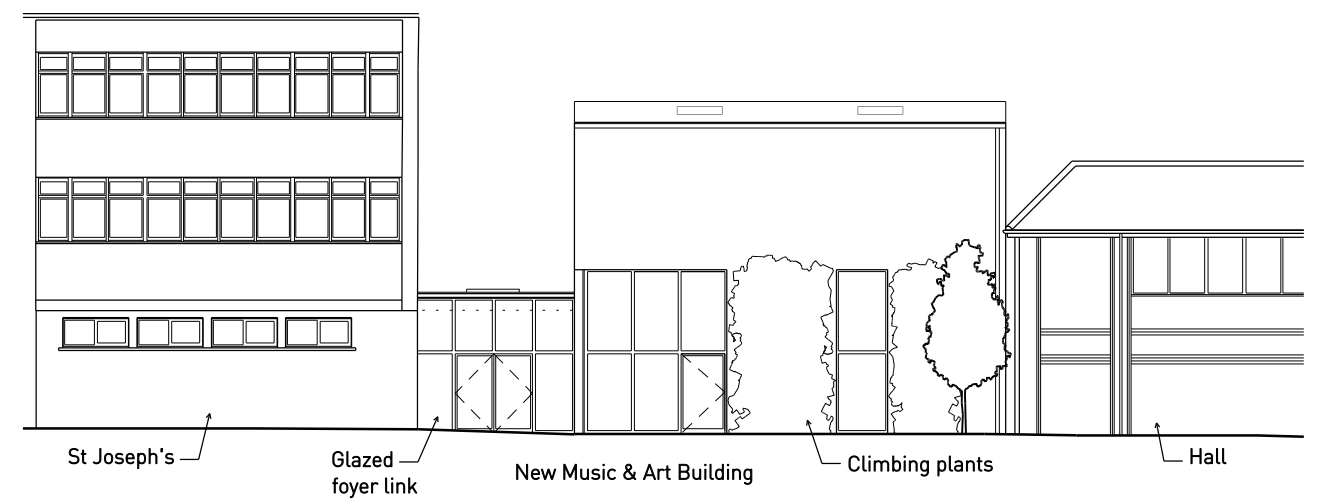
Front Elevation

The front elevation is designed to be subservient to the Lodge. Ivy will be grown up the new brick wall on trellises, creating a green wall which is attractive to wildlife.

The link will be glazed, to make it as transparent as possible, and allow views through to the playing fields.

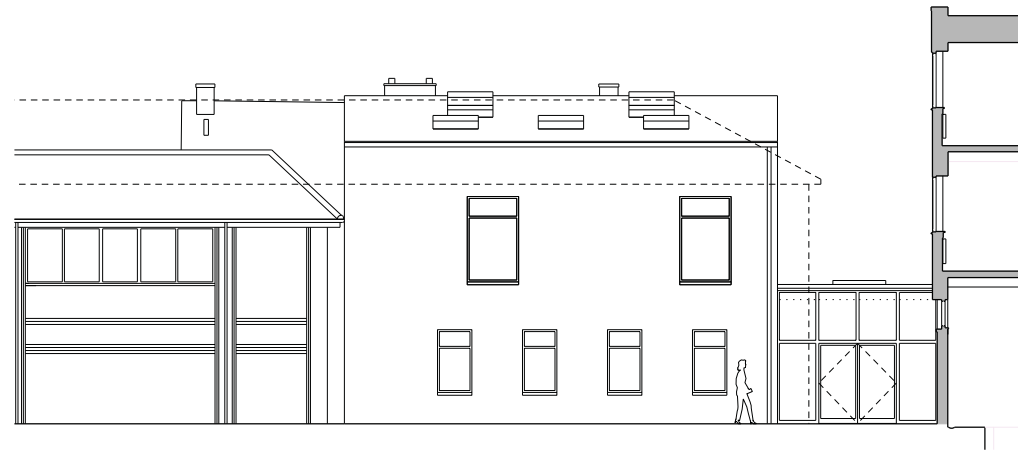


Street Elevation from Cross Deep



Front (East) Elevation

Rear Elevation



West Elevation as previously proposed (2nd pre app)

The west elevation has been revised, in response to the advice received at second pre-app stage.

The first floor art room windows are now symmetrical, and the ground floor window positions have been adjusted to be more evenly spaced across the elevation (with a slightly larger window for the music classroom).



Proposed West Elevation

Materials

The proposed material for the walls is red brick, which will be more subdued in tone than the existing orange-red bricks on the Lodge. The intention is for the brickwork to compliment the Lodge, rather than to exactly match it. The new brickwork will have some variation in colour, and a warm, natural appearance.

Windows will be powder-coated metal.

The paving material at the front of the building will be a natural stone paving, such as York stone, which will improve the external area between the steps to Pope's Grotto and the Lodge.



The Lodge with red brickwork



Red brick walls (exact brick to be confirmed)



Proposed view from Cross Deep



York stone paving (exact paving to be confirmed)

Roofing Materials and Rooflights



Shallow pitch standing seam zinc roof with rooflight



Proposed view from the playing fields. The zinc roofing material is appropriate to the context.



Extensive green roof proposed to foyer link roof

We have considered the options for roofing materials, as suggested in the recent Pre-App advice. The Lodge roof is tiled, but the proposed roof pitch is much too shallow for tiling, at 5 degrees. Possible materials for a shallow pitch roof are membranes, felt or metal. Of these options, standing seam zinc is the most attractive and durable. Zinc has a relatively matt finish, which will not stand out and is suitable for the setting.

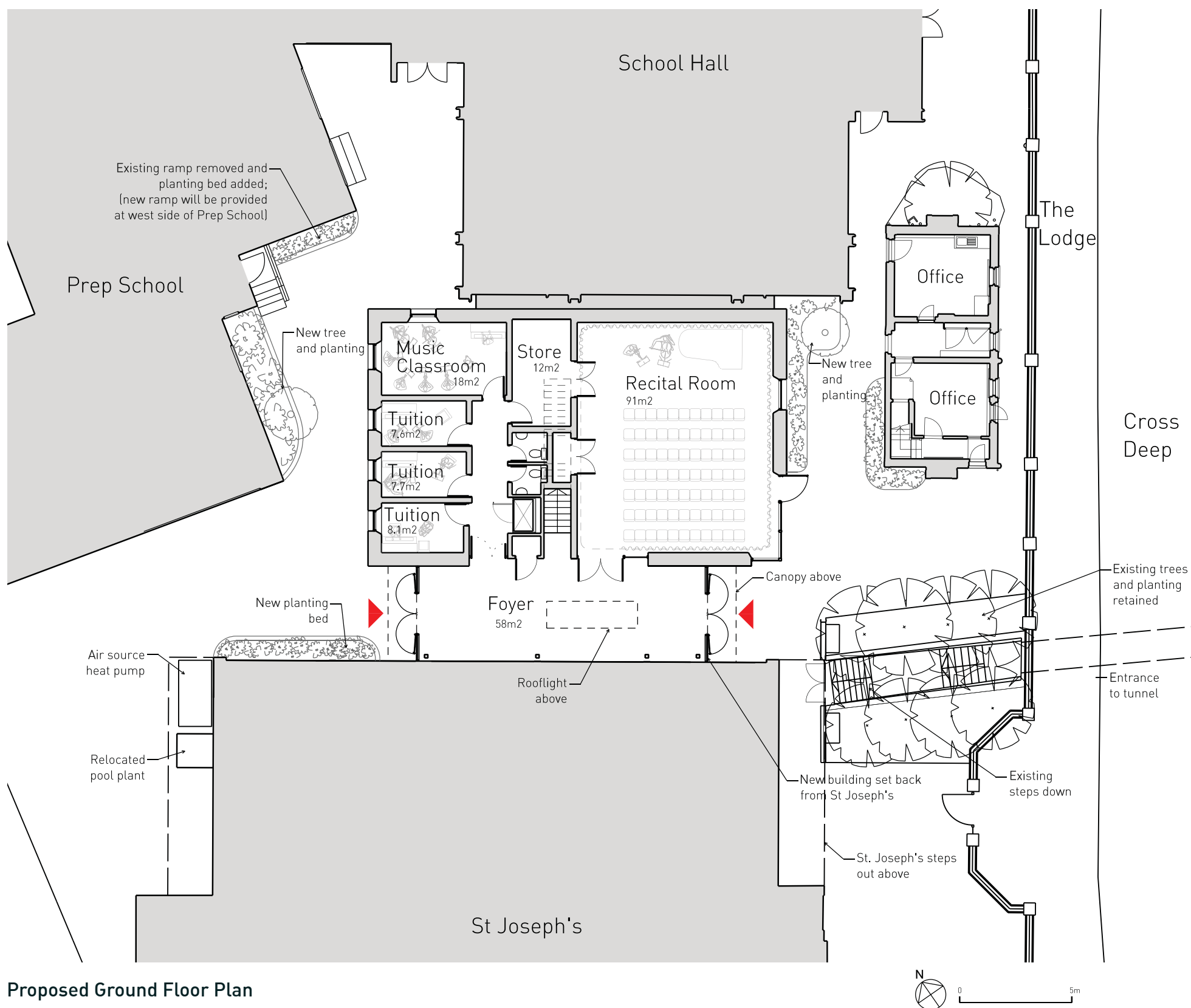
Because of its very shallow pitch, the new roof won't be visible from Cross Deep, and it will only be visible from a small part of the playing fields and very limited distant views.

We were also asked in the Pre-App advice to consider making the rooflights flush with the roofing surface. Completely flush rooflights aren't possible with a 5 degree pitch, but the rooflights have been adjusted to be as flush as possible. The rooflights will not be visible from Cross Deep, and won't stand out if seen from distant views.

Solar panels will be on the rear part of the roof only, and will be flush with the rooflights. Again, they won't be visible from Cross Deep,

The flat roof above the foyer link will have an extensive green roof, to improve ecology and slow down rainwater run-off.

Ground Floor Plan



Proposed Ground Floor Plan

The new building is set back from the existing buildings along Cross Deep - the Lodge, Hall and St. Joseph's.

There are two sets of entrance doors - one at either end of the glazed link. The link creates a circulation route, and a foyer and exhibition space.

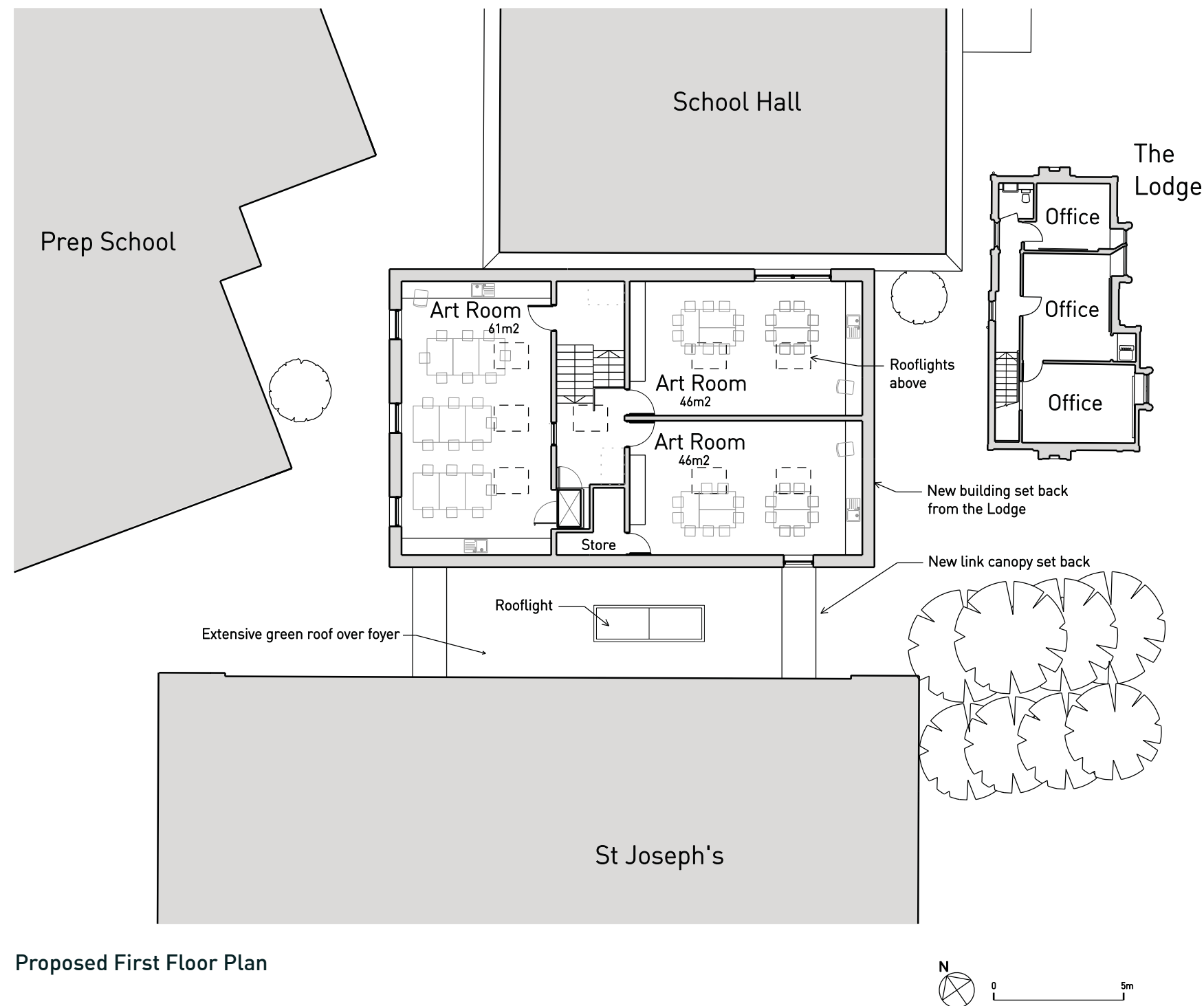
The Recital Room and music teaching spaces are on the ground floor.

New landscaped external spaces are formed to the east and west of the new building. The steps and entrance to the Pope's Grotto tunnel will not be altered, but the setting will be improved.

First Floor Plan

The first floor contains art rooms.

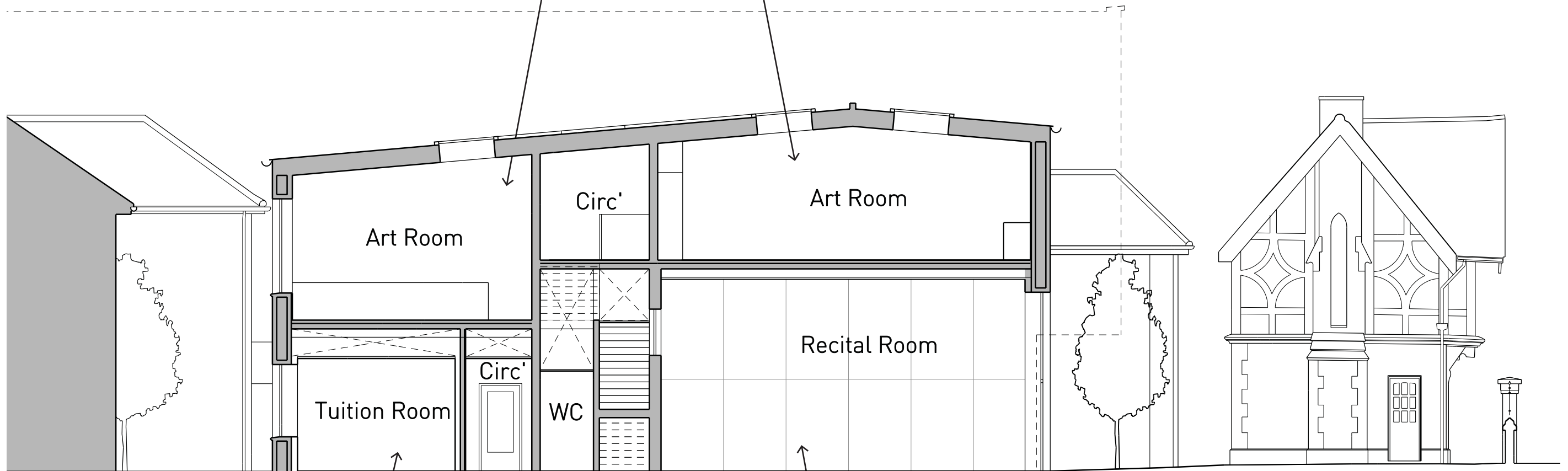
Since the previous planning application, the language rooms have been omitted, and the building made two storeys. The stairs have been moved out of the glazed link and into the main part of the building, so the link is now single storey and more transparent.



Proposed First Floor Plan

Proposed Section

The art rooms are located at the top of the new building, where they will be well-lit by rooflights and windows



The smaller music teaching spaces are positioned at the back

The Recital Room is located on the ground floor facing Cross Deep, where it can be easily accessed for public events

Area Schedule



Proposed Recital Room, with timber panelling and high ceiling for improved acoustics



January 2022 image showing view into Recital Room

The internal area schedule for the new building is as follows:

Area Schedule

Ground Floor:

Recital Room	91 m ²
Foyer	58 m ²
Music Classroom	18 m ²
Tuition Room 1	8.1 m ²
Tuition Room 2	7.6 m ²
Tuition Room 3	7.7 m ²
Store	12 m ²
WCs	4 m ²

First Floor:

Art Room 1	61 m ²
Art Room 2	46 m ²
Art Room 3	46 m ²

Gross Internal Area

Including circulation:	430 m ²
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Foyer Link

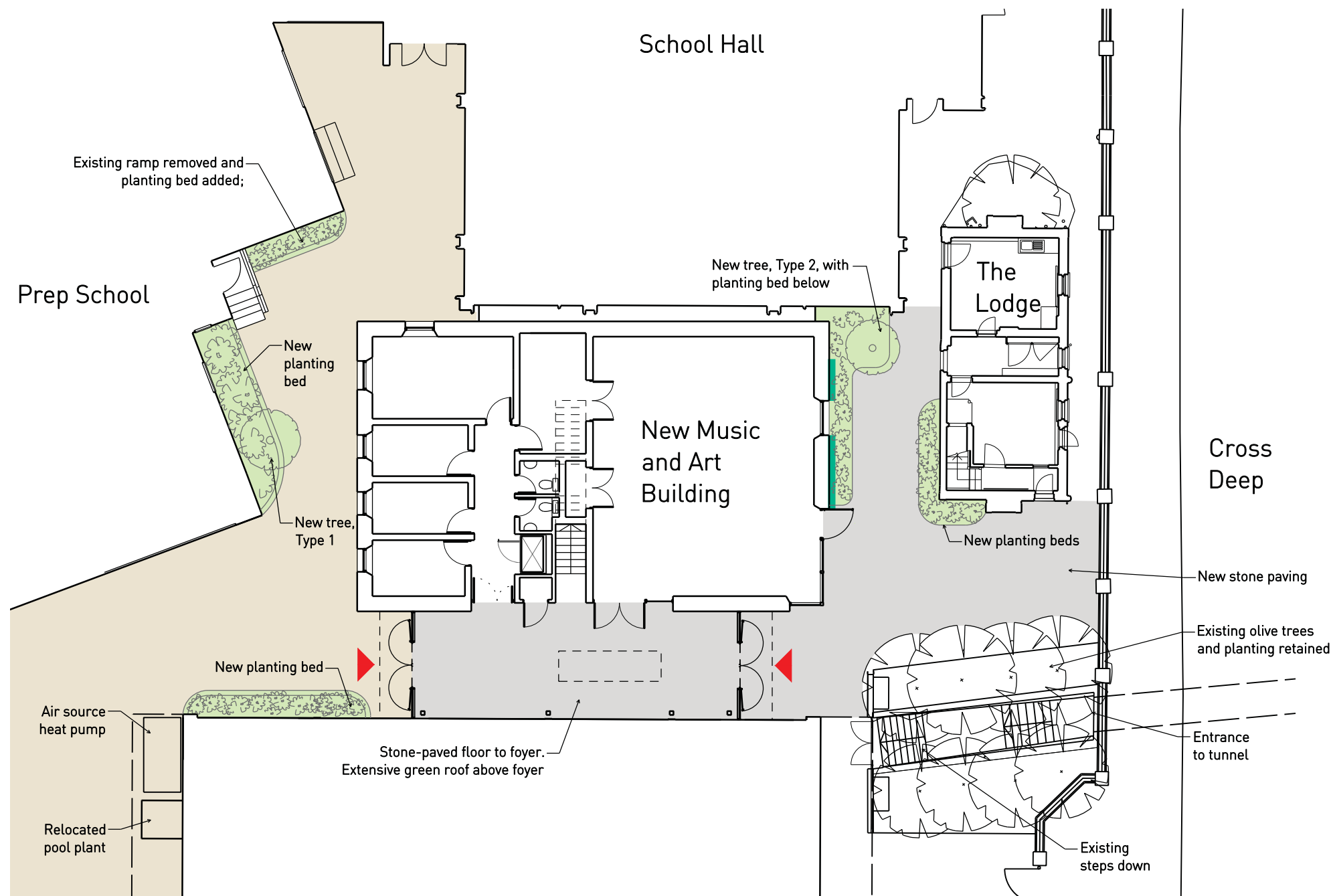


Image of the proposed foyer link

The glazed foyer link keeps a connection from the grotto through to the playing fields beyond and will become a space for exhibitions - from student artwork to displays telling the story of Alexander Pope's house, garden and grotto.

St Catherine's School has a close connection with the history of the site. The Headmistress is a member of the Pope's Grotto Preservation Committee and the School enjoys this association too. Alexander Pope's home and garden have been celebrated in Music and Poetry events at the School, and visits to the Grotto have been joint-hosted. The School is keen that the new building will encourage more events of this kind, giving pupils and visitors a deeper understanding of the fascinating heritage of the site

Landscaping Proposals



Landscape Plan as Proposed



KEY

- New stone paving
- Resin bound gravel
- Ivy on trellis forming green wall
- New planting suitable for pollinators, and new trees

New Tree Schedule

Type 1	Sorbus aucuparia Joseph Rock
Type 2	Amelanchier alnifolia 'Obelisk'

An important part of the project is to improve the external spaces, by creating landscaped courtyards to the east and west of the new building.

We propose stone paving to the front courtyard, and resin bound gravel to the west courtyard. New planting beds, trees and a green wall will attract pollinators.

The olive trees and planting around the steps to the tunnel and grotto will be retained, and protected during the works.

The existing cycle shelters will be moved to a different location within the School site.

The new landscaping will improve the school environment and enhance the ecological value of the site. The ecologist has calculated a Biodiversity Net Gain of 100% for the project.

Proposed Trees



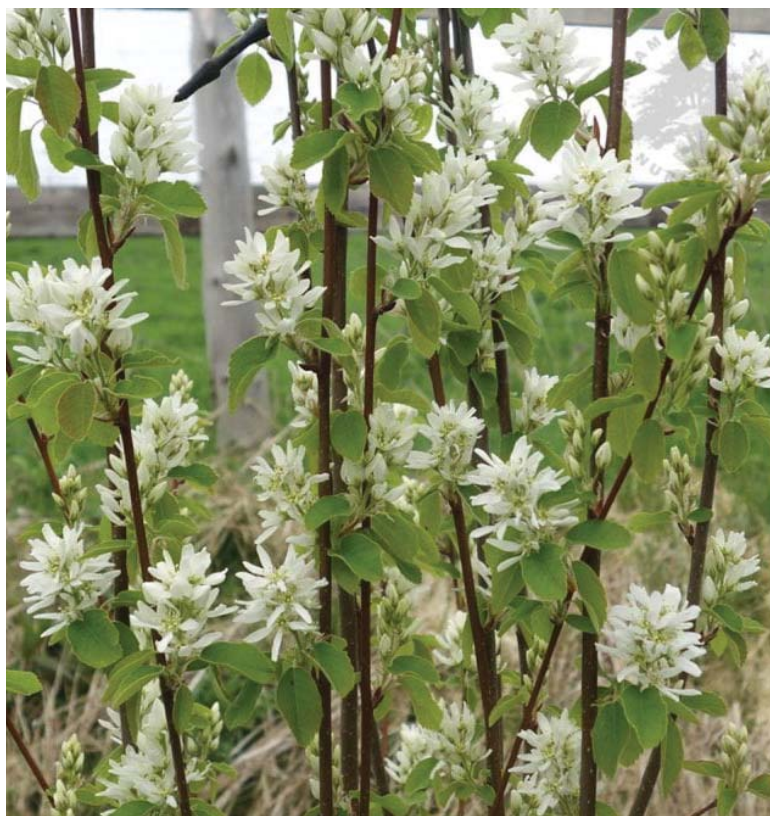
Sorbus aucuparia Joseph Rock



The arboriculturalist suggested some suitable new trees for the site, as noted in his report.

The tree proposed for the west courtyard is the *Sorbus aucuparia* Joseph Rock. This is a type of Rowan or Mountain Ash, and is a well-shaped tree with beautiful leaves. It can grow to mature size of 8 x 4m.

In front of the new building, an *Amelanchier alnifolia* 'Obelisk' is proposed. This is an upright, slender tree, which can grow to 5 x 2m in 20 years. It has small leaves and stunning white flowers in spring which attract pollinators. (It is a 'Tree for Bees', recommended by The British Beekeepers' Association.)

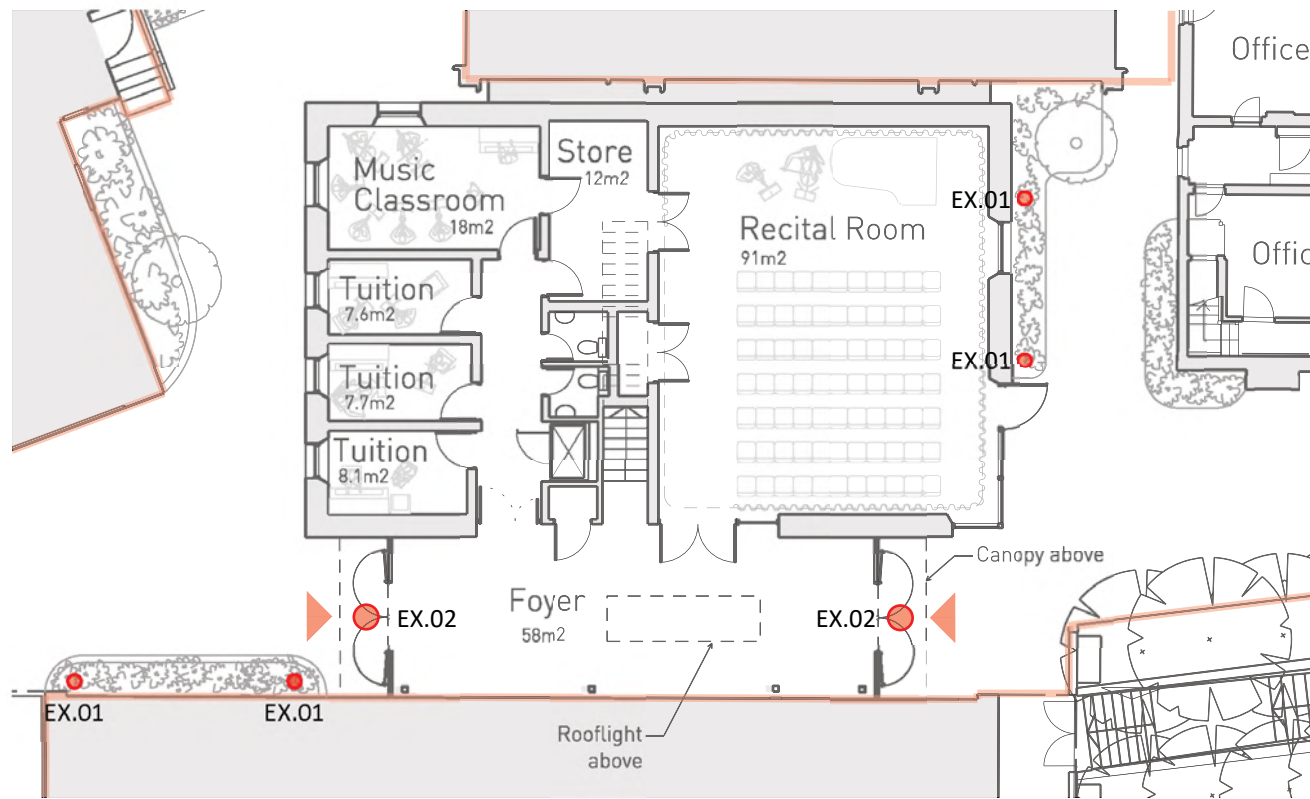


Amelanchier alnifolia 'Obelisk'



Both trees are deciduous and have beautiful Autumn colours.

External Lighting



Extract of external lighting plan

The external lighting has been carefully designed to minimise light pollution - to reduce impact on wildlife, local residents and the night sky.

An external lighting drawing by the services engineers is included in the application (extract left). New lighting is needed by exits for emergency escape, and for general low level lighting to circulation routes. The proposals consist of down-lighters above entrance doors, and four low level bollards in planting beds.

Light will be directed down, with shielding of fittings to avoid light pollution. A warm colour temperature is specified because this has less impact than blue-white light. Lighting will be no brighter than is needed for safety, and will be on a time-clock so it turns off automatically at night.

Air Quality Assessment

Air pollution is a serious public health issue, particularly near busy roads in large cities.

The proposals will improve air quality by replacing the existing gas heating with systems that do not pollute the atmosphere. The services engineers, Max Fordham, have stated:

“St Catherine’s Music and Art building will be an Air Quality Neutral development. This is ensured by the fact that the building will have space heating provided by electric air source heat pumps and hot water by point of use (PoU) electric water heaters. Neither of these systems have the potential to produce any NO_x gases or particulate matter. The replacement of the existing building, which is heated by gas, will result in a net reduction in CO₂ and NO_x emissions from the school site.”

The air quality will also be improved by introducing new planting and trees, as described on the previous pages.





Sustainability is key to the design of the project.

The Energy Statement included in this application shows that the new building will achieve a 36% CO₂ saving compared to the current Building Regulations. This energy reduction is achieved in two main ways:

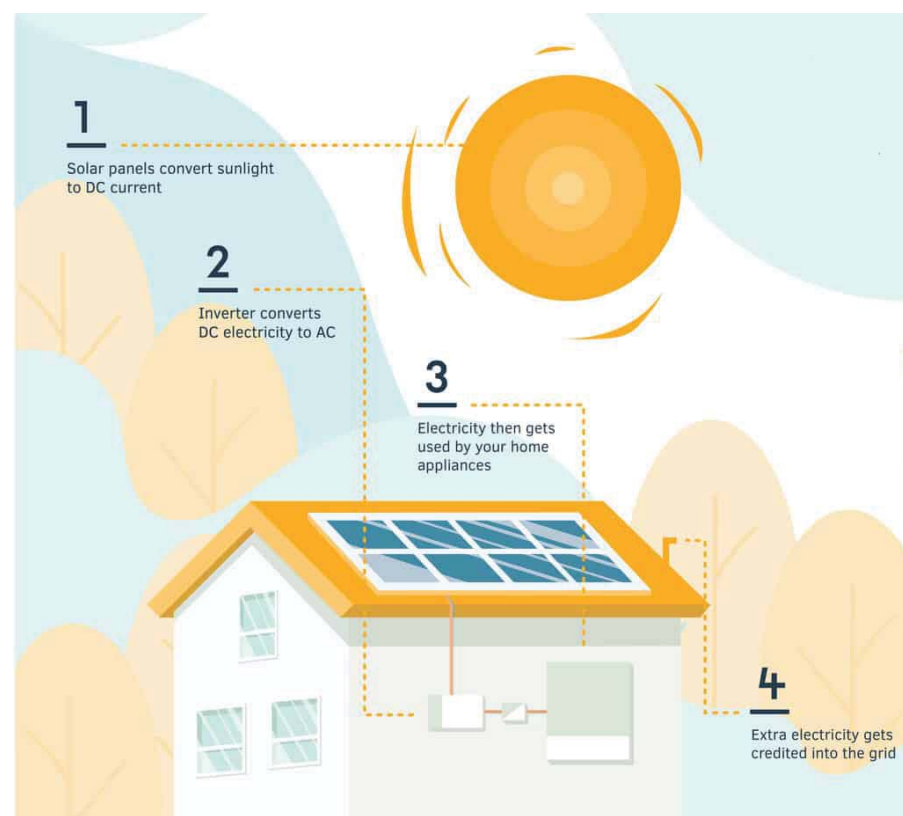
- By reducing energy demand, through high levels of insulation, passive design, and highly efficient lighting and ventilation systems.
- By using renewable energy - specifically an air source heat pump, and photo-voltaic panels on the roof.

Further detail is provided in the Energy Statement.

The project will achieve BREEAM 'Excellent', and the Pre-Assessment is included in the application.

Materials and fittings will be durable and sustainably sourced. Wherever possible, recycled or renewable materials will be used. Construction and demolition waste will be reduced to a minimum.

There will be new trees and planting, improving biodiversity. Sustainable transport is a priority for the School, and the current School Travel Plan achieves Gold accreditation under Transport for London's Stars scheme.



Social Benefits



St Catherine's is committed to providing social value to the local community. It offers means-tested bursaries to pupils who would not otherwise be able to access the educational opportunities the School offers. Many of these pupils especially enjoy the rich Music and Art programmes - several current bursary pupils are regular concert performers and artists.

The School also opens its facilities to a number of local groups, including two choirs. The project will allow the School to offer better facilities to groups with whom St Catherine's already has a relationship. The new Recital Room will provide a beautiful space with excellent acoustics and sound-proofing. Planned as a stand alone building, the new building can be used independently of the main school buildings.

A Music Partnership with local maintained schools is underway - the goal of which is to offer music tuition and assistance to local maintained primary schools. The plan is to welcome these local pupils to some specially designed music activities during the school day.

The new Music and Art building will enhance the School's offer to pupils and the community. This project sits alongside a broader commitment to public benefit by the School which includes supporting academic programmes within maintained schools, service within the local community, and volunteer roles taken by staff in local churches, charities and groups.



Philosophy and Approach to Inclusive Design

The key elements of inclusive design, which benefit everyone, are:

- a) ease of use
- b) freedom of choice and access to mainstream activities
- c) embracing of diversity and difference
- d) legibility and predictability
- e) high quality.

Access has been considered in its broadest sense to reflect the needs of all individuals, including those with sensory, mobility and hidden impairments.

Key Issues for this Scheme

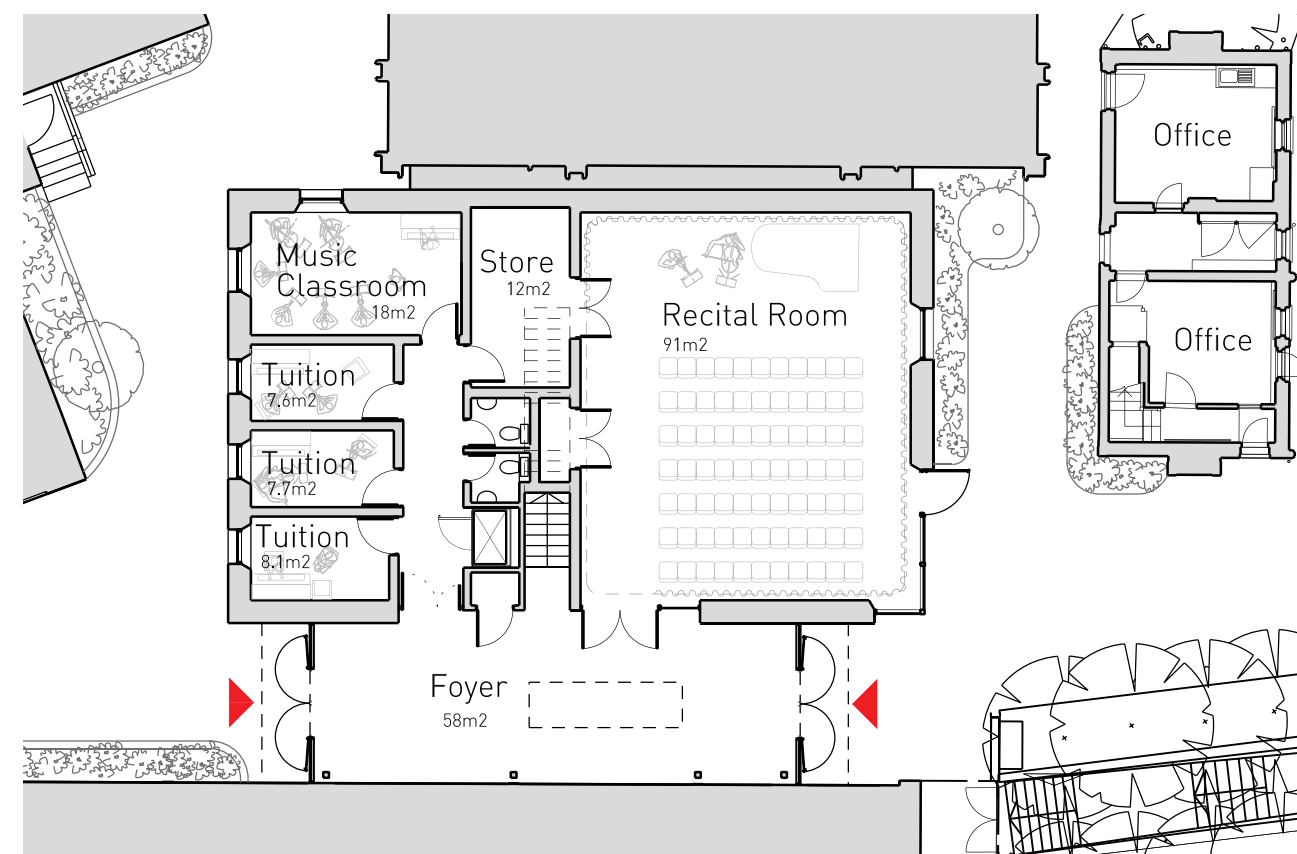
The new Recital Room will be used by local groups and for events, and needs to be fully accessible to all.

It is also important that the new art facilities on the first floor are accessible to all pupils and staff, including wheelchair users.

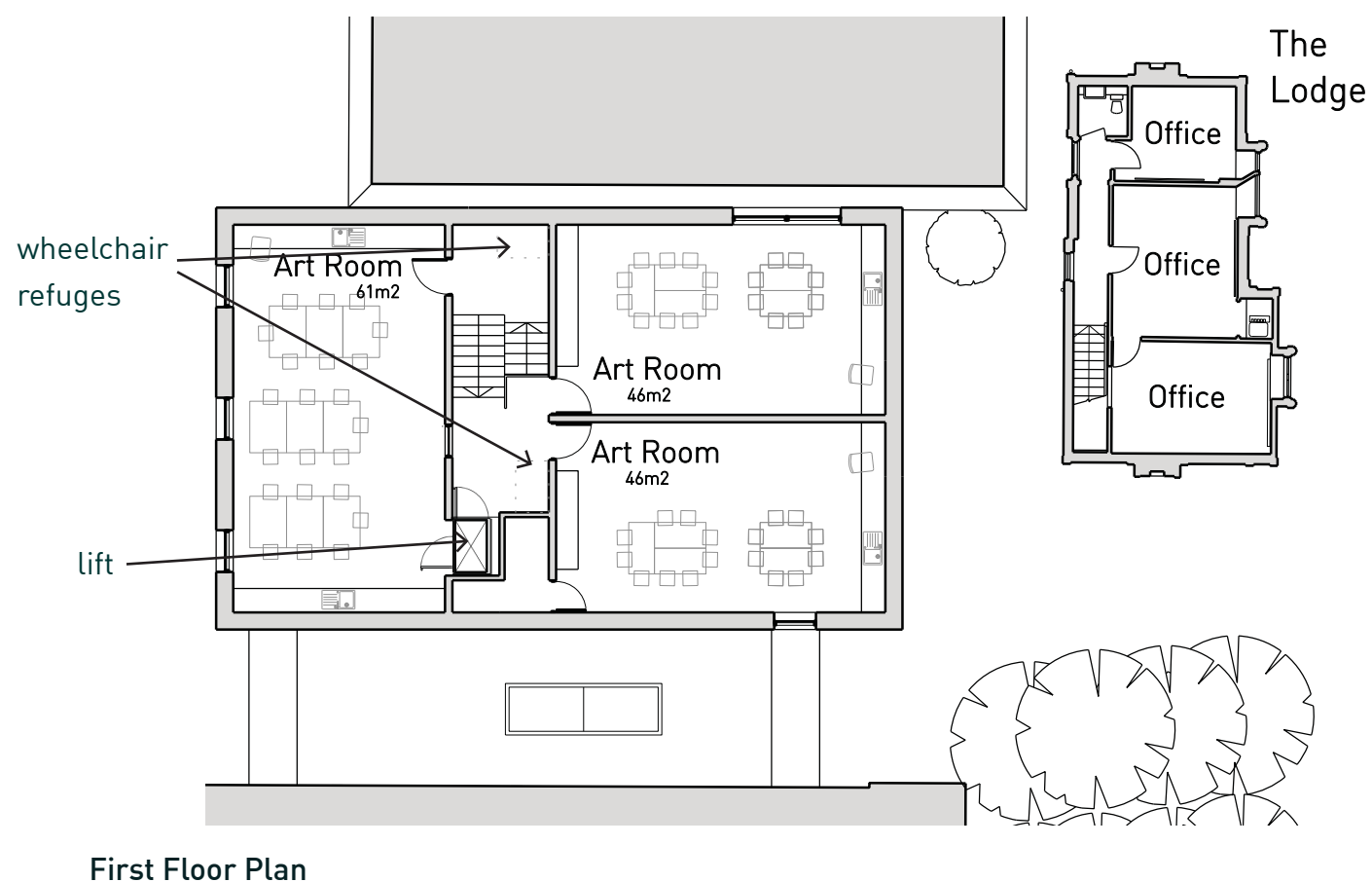
Access to the Ground Floor

There are level access pathways to the new building from all school entrances, including the parking area. There will be level access into the new building from east and west, and a level floor throughout the ground floor. The Recital Room will welcome the public for events, and particular consideration will be given to ease of use for all users.

Wheelchair accessible toilets have recently been installed close to the building, and there is level access from the ground floor.



Ground Floor Plan



Access to the First Floor

A platform lift has been added to give wheelchair access to the art rooms on the first floor, and avoid the need to connect to the lift in St Joseph's. Wheelchair refuges have been added outside the art rooms, and all classrooms are now fully accessible, in accordance with Approved Document M.

Access to the Lodge

The Lodge is used as school administration offices and most spaces are not currently fully accessible, because of existing level changes. As the Lodge is a Building of Townscape Merit, we do not propose alterations to make the building more accessible, because this would affect its character and appearance.

Transport and Travel

The pupils and staff will arrive at the school by the same means as presently, and there will be no increase in pupil or staff numbers. The School encourages pupils and staff to walk or cycle where possible, and the School Travel Plan achieves Gold accreditation under Transport for London's Stars scheme. The cycle parking spaces which are currently on the development site will be relocated a few metres away, to be behind St Joseph's.

Opening Hours

The core opening hours for the new Music and Art Building will be 6.45am to 7.45pm on weekdays, and 6.45am to 6.30pm on Saturdays.

In addition to these hours, the building will host some evening and weekend events which currently take place in other parts of the School. These include rehearsals for two local choirs which are held in the main hall at present. There are other events which currently take place in existing rooms (Drama, Main Hall, Chaplaincy) which might move to a venue in the new building.

The new Music and Art Building will be very well sound-proofed, so there should be a reduction in noise pollution from events. The existing pedestrian entrances on Cross Deep will continue to be used, so there will be no additional disturbance from people leaving after events.

The proposals will not increase the School's impact on its neighbours, either through pupil numbers, or through the number of evening or weekend events held across the site. They will however provide much improved facilities for events which already take place.

Construction

Construction Access

Safety and minimising disruption for neighbours are priorities for the School. A Construction Management Plan (CMP) has been prepared by a specialist transport consultant and is included in this application.

The only way for construction vehicles to access the site is via Grotto Road. Cross Deep is a busy road, and vehicle entry directly into the site is not possible. There is a vehicle entry point on Popes Grove, but this route does not connect to the playing fields or the site.

During the works, there will typically be 1-3 construction vehicles visiting site per day. None will be allowed to park, wait or unload on

Grotto Road, which will remain in use for residents and the public throughout the project.

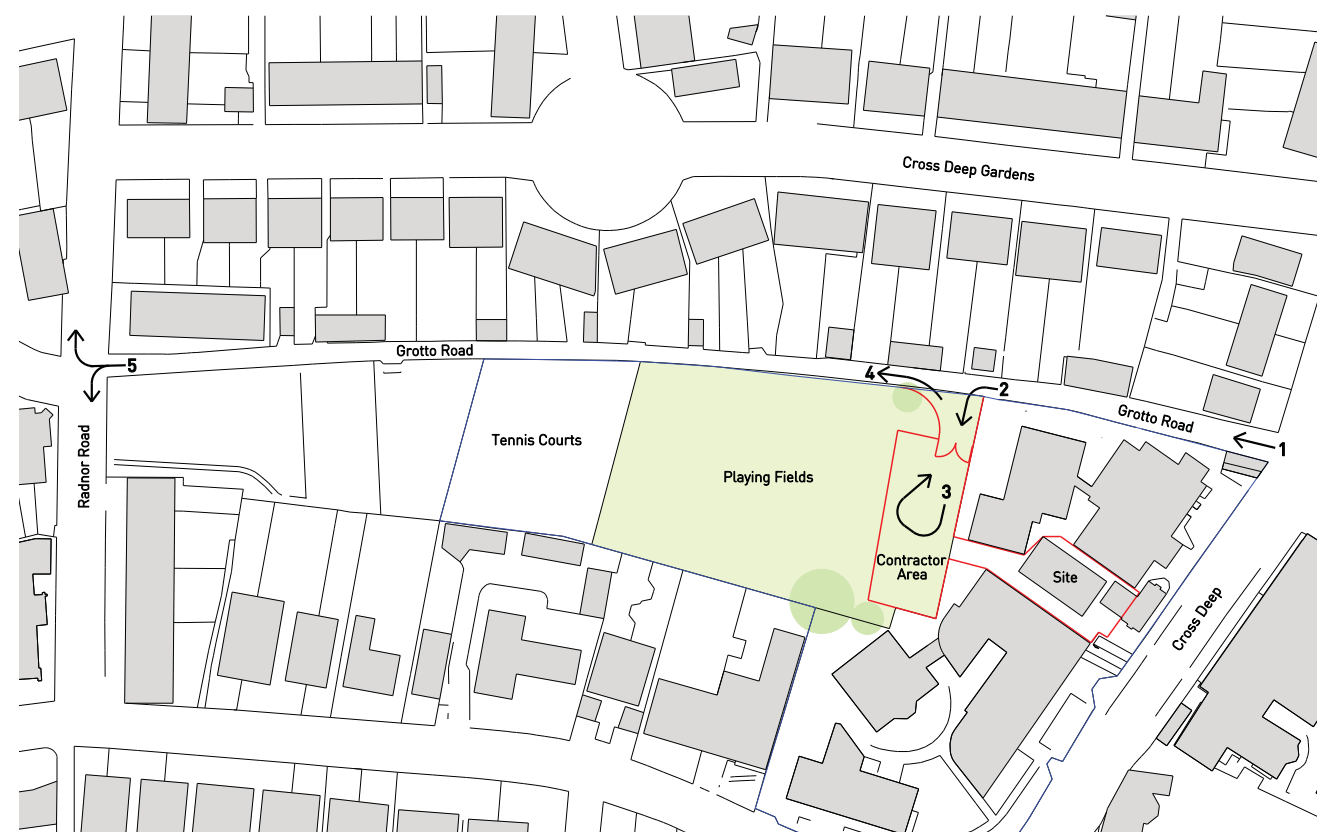
As shown on the plan below left, the access route will be:

1. Vehicles enter Grotto Road from Cross Deep.
2. Vehicles turn into the contractor's area in the playing fields. Traffic marshalls and banksmen will be used for safety, and to prevent property damage.
3. Loading and unloading will take place within the playing fields. Vehicles will turn within the contractor's area and exit facing forwards. For the minority of vehicles which cannot turn, they will be required to reverse into the site and exit facing forwards.
4. Vehicles to exit west along Grotto Road, using traffic marshalls and banksmen for safety.
5. Vehicles to exit onto Radnor Road, using marshalls and banksmen.

A Condition Survey of Grotto Road and adjacent properties will be carried out before works starts, and any damage caused by construction vehicles will be repaired at the contractor's expense.

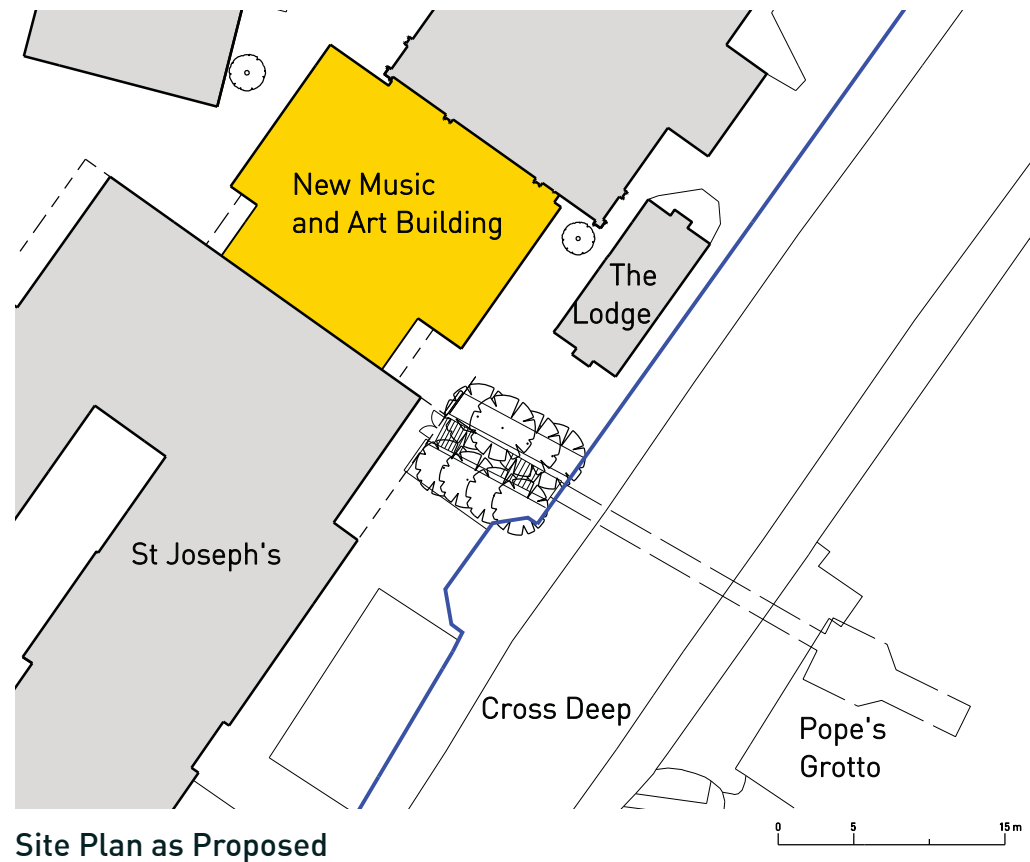
A tower crane is not proposed for this project.

Within the School site, there will be a 'level crossing' arrangement, allowing pupils and staff to safely pass through the site compound at agreed times.



Construction access plan

Construction Methods & Pope's Grotto



Site Plan as Proposed



Steps and entrance to the tunnel to Pope's Grotto

The proposed structure for the building has been designed to ensure that the Grade 2* Listed Pope's Grotto is not affected by the works. Pile foundations have been chosen as these have the advantage of a small footprint area and do not require deep excavation. Piles will be bored rather than driven, to avoid the vibrations associated with pile installation.

The new building is set back from the entrance to the tunnel by 11m, and the distance to the 18th century part of the tunnel and grotto is significantly further. The structural engineer has confirmed that the tunnel will not be loaded or surcharged by the new building, as the piled foundations transfer load deep into the ground and are far enough away.

Site access for construction will not be via Cross Deep, which could risk damage to the entrance to Pope's tunnel. The contractor will provide suitable protection measures throughout the construction period to ensure that the steps to the tunnel, and the trees and planting around it, are not damaged.

Conclusion



The proposals in this application directly address the issues raised in response to the previous application and recent pre-app. The scale has been significantly reduced and the building set back, so the impact on the heritage assets will be low.

The Heritage Statement concludes that the proposed building, due to its much reduced scale and unobtrusive appearance along Cross Deep, will not be harmful to the Conservation Area or the setting of the Lodge. The removal of the existing extension, the landscaping improvements and the high quality of the new building will improve the appearance of the Lodge and its immediate surroundings.

Key views between Pope's Garden and Cross Deep will be retained, and the proposed development will have a neutral impact on the significance of Pope's Garden and the open land of the playing fields.

The development will be highly sustainable, and will provide much improved music and art teaching spaces. The new recital room will be a great asset to the School and the local community.

Appendix 1

Photos as Existing



Photo from Cross Deep looking north, 15.07.21



Photo from Cross Deep looking north, 15.07.21



Photo from Cross Deep looking west, 15.07.21



Photo from Cross Deep looking west, 15.07.21



Photo of Radnor House School, looking south from Cross Deep, 02.08.22



Photo from Cross Deep looking south-west, 15.07.21



Photo from Cross Deep looking north-west, 15.07.21



Photo of the Lodge and extension taken within the site (looking north-east), 02.08.22

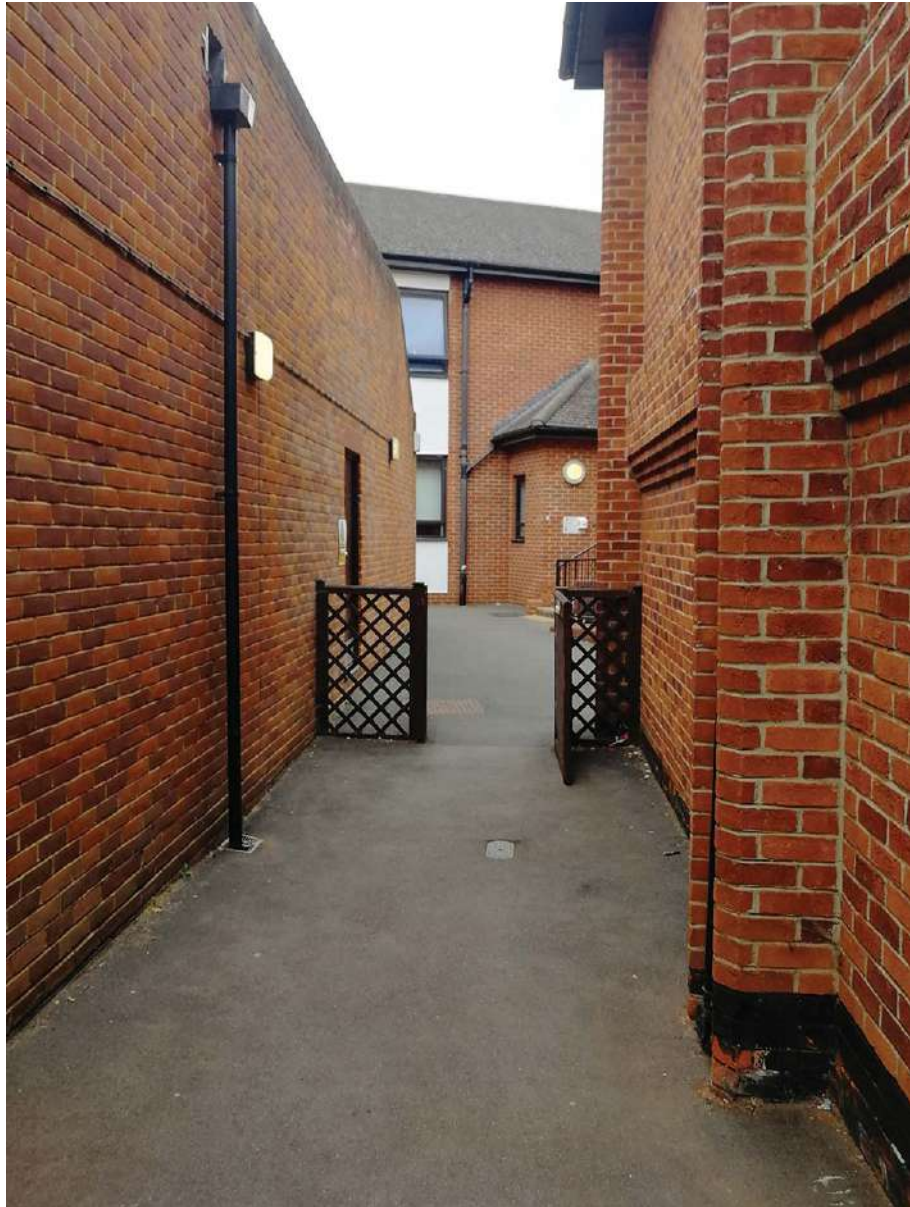


Photo taken within the site, looking north-west towards the Prep School, 02.08.22



Photo taken within the site, looking south-east towards the Lodge, 15.07.21

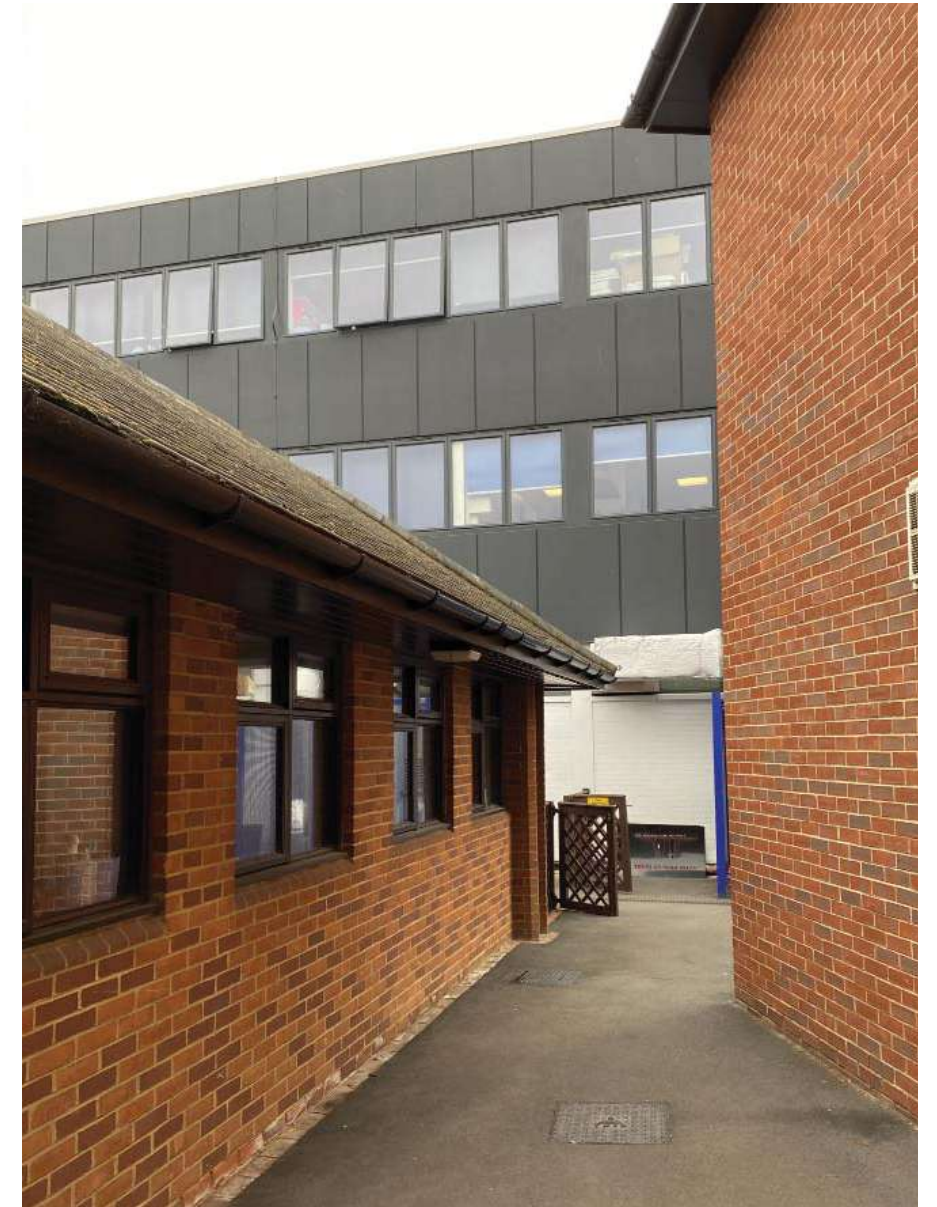


Photo taken within the site, looking south-west towards St Joseph's, 29.04.21



Photo taken within the site, looking north-west, 29.04.21



Photo taken within the site, looking north, 02.08.22



Photo taken within the site, looking south-east towards St Joseph's, 02.08.22



Photo from within the School grounds, looking north-east, 30.06.23



Photo from the playing fields, looking east, 15.07.21



Photo from the playing fields, looking east, 30.03.23



Photo from the playing fields, looking east, 30.03.23



Photo from playing fields looking south-east, 30.03.23



Photo from Grotto Road, looking south-east, 15.07.21



Photo from Grotto Road, looking south, 03.06.23

Appendix 2

List of Drawings and Reports

Drawings by Tim Ronalds Architects:

SCT 010 D	Site Location Plan	1:1250	A3
SCT 011 B	Site Plan Existing	1:500	A3
SCT 012 B	Site Plan Proposed	1:500	A3
SCT 050 E	Ground Floor Plan as Existing	1:200	A3
SCT 051 B	1st Floor & Roof Plans as Existing	1:200	A3
SCT 060 D	Existing Elevations	1:200	A3
SCT 100 J	Ground Floor Plan as Proposed	1:200	A3
SCT 101 J	First Floor Plan as Proposed	1:200	A3
SCT 103 E	Roof Plan as Proposed	1:200	A3
SCT 110 B	Landscape Plan as Proposed	1:200	A3
SCT 120 H	Proposed Sections	1:200	A3
SCT 130 H	Proposed Elevations	1:200	A3

Drawing by Max Fordham:

7228-SK-E-31100 P01	External Lighting Sketch	1:200	A3
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Reports

Supporting Planning Statement
Heritage Statement
Archaeological Statement
Fire Safety Strategy
Construction Management Plan
BREEAM Pre-Assessment
Energy Statement
Sustainable Construction Checklist
Arboricultural Survey and Planning Integration Report
Flood Risk Assessment and Sustainable Urban Drainage Statement
Flood Risk Assessment Checklist
Noise Report
Ecological Appraisal

An Air Quality Assessment is included on page 45 of this Design and Access Statement.

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