

HIGHGATE SCHOOL MSC 4-PHASE ALTERATION, REFURBISHMENT & EXTENSION PROJECT

SECURE BY DESIGN STATEMENT

PLANNING APPLICATION SUBMISSION

7 October 2022

Final



Project proposals

The proposed nature of this project planning submission includes:

- Retention of existing sports hall, associated changing rooms, small studios, swimming pool and wet changing rooms, and plant and boiler rooms.
- New north-west extension for a second indoor sports hall with associated new circulation corridor, viewing gallery, access stairs and lift, with ancillary spaces for storage and plant, and a teaching block extension for Combined Cadet Force and Outdoor Education classrooms and offices, with associated storage.
- New south extension to the existing sports hall for 8 no. new external covered Fives Courts with run-off area one level below local ground level.
- New south-west extension and alterations to the existing building to create an enhanced Entrance with Foyer, reception with Café at floor above, and with improved new access stairs down to the existing changing rooms, and lift to all levels.
- Alterations to the existing sports hall to enhance natural lighting by new rooflights, renovation of roof with new finishes, with interior changes to associated spaces.
- New single storey east extension in the existing outdoor courtyard to provide additional studio / gym spaces and form connections back to the changing rooms, with ancillary external storage for sports use.
- New single storey east perimeter extensions for waste storage, plantrooms
- New hard and soft landscaping around the perimeter of the site, including removal of 3 no. trees and replacement with new semi-mature trees, and formation of an entrance courtyard area at the new south main entrance.
- New mechanical and electrical fit-out to all new extensions; part new mechanical and electrical fitout to existing areas as upgrade where required, including new ventilation ductwork to the existing sports hall; new rooftop plant areas with screens.
- Re-planning, re-grading and landscaping of the existing sports playing area to the east of the existing sports hall, an area known as “The Orchard” – in part to improve sports activity facilities, and in part to provide a temporary flood basin to mitigate potential surface water flooding based on future climate change predictions.

Photographs of existing site

[Bird's eye aerial photos are from Googlemaps circa 2000]



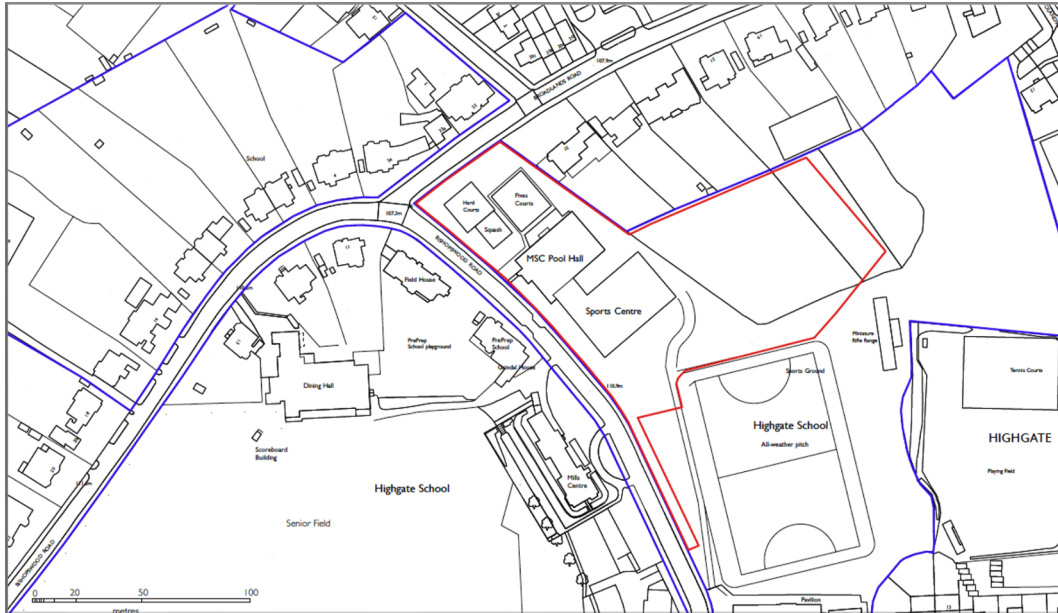
Bird's eye aerial view of the MSC sports centre site from west



Bird's eye aerial view of the MSC sports centre site from south

Site and Site boundaries

This is an existing site for indoor sports, closely related to the adjacent all-weather external sports pitches to the south, the outdoor pitches on Senior Field to the west, and the practice pitches to the east.



Location plan of the MSC sports Centre – refer to planning drawings for full details

The whole Highgate School campus on the east side of Bishopswood Road, which also includes the RMC building [currently planned for re-development with the masterplan] on the south boundary and a small store building [formerly an indoor rifle range], is bounded and made secure by perimeter painted steel railings of traditional design, approximately 1.6 – 1.8 metres high [varies with the ground]. The boundary with the residential properties to east and south are formed with timber close boarded paling fencing of 1.8 – 2 metre height. In this way the School site is very clearly defined both as a School site and a sports site, and provided with appropriate security, with limited points of access, forming a safe general area for pupils to engage in sports. It is not considered necessary in the local context for more secure or taller fencing railings.

There are no public footpaths across the site.

There are limited numbers of cycle parking stands on site at present, but this project will substantially increase the amount of secure covered cycle parking, principally on the north end of the site, in an area of the grounds that will be overlooked by the adjacent classroom and offices teaching wing.

Pupils taking part in games on outdoor pitches are always supervised by members of staff. The use of the all-weather pitches can extend beyond normal School hours.

There is a crossing of Bishopswood Road for accessing between this site and the west site, which has Senior Field, the Mills Centre, Pre-Preparatory School and the main School Dining hall. At key times of day this crossing is manned by a member of the School security team.



View of the MSC sports centre site from south, Bishopswood Road on the left behind railings

On the north side the site is bounded by Broadlands Road, and the rear gardens of residential properties along that street.

On the south side it is bounded by residential properties, and on the east side by another School, Saint Michael's Church of England Primary School and their amenity spaces.

The closest residential property to the MSC is no.27 Broadlands, whose property and rear garden abuts the east side of the site.



View of the MSC sports centre site vehicle entry gates at south end

Access gates are controlled by magnetic locks and coded electronic entry devices. There are both pedestrian and vehicular gates. At the south end of the whole site there is access for service vehicles and fire brigade, with only a small area of service vehicle parking.

There are CCTV cameras covering the site and buildings linked back to the School's security team on the School network.

The whole site is in a Conservation Area, there are no listed buildings, and there is a large open area with the all-weather pitch and environs which is part of designated Metropolitan Open Land.

Existing building

The existing MSC sports centre building, comprising the sports and pool interlinked complexes, are generally accessed from a single point of entry at the south end off Bishopswood Road, via a lobby and reception, which is always staffed. The School wish to retain the concept of a single main secure point of entry for the new project.

There is a secondary entrance/exit at the north end, next to the swimming pool, that is more rarely used but is available, particularly for access just to the pool facilities, and this is arrived at via a gate in the railings.

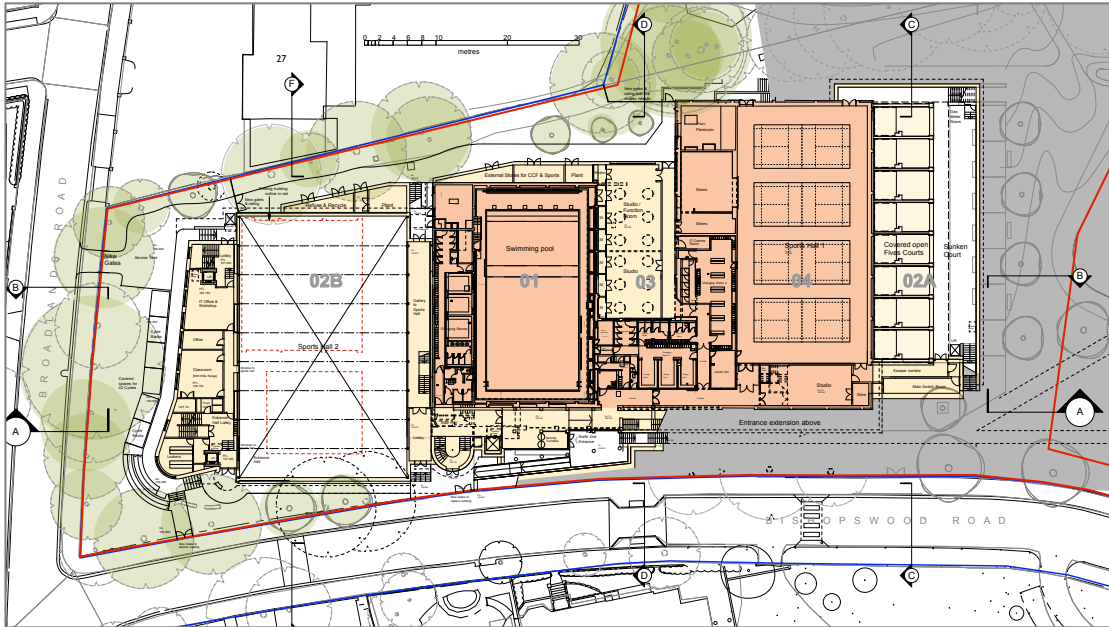
Community Uses

There are community public uses for the outdoor pitches, as well as the indoor sports centre, including use by other schools and sports clubs. In the holidays there are also holiday camps and other activities. The MSC sports centre is currently available to the community for use outside of school hours. The options for public use are noted as follows on the Camden Cindex website:

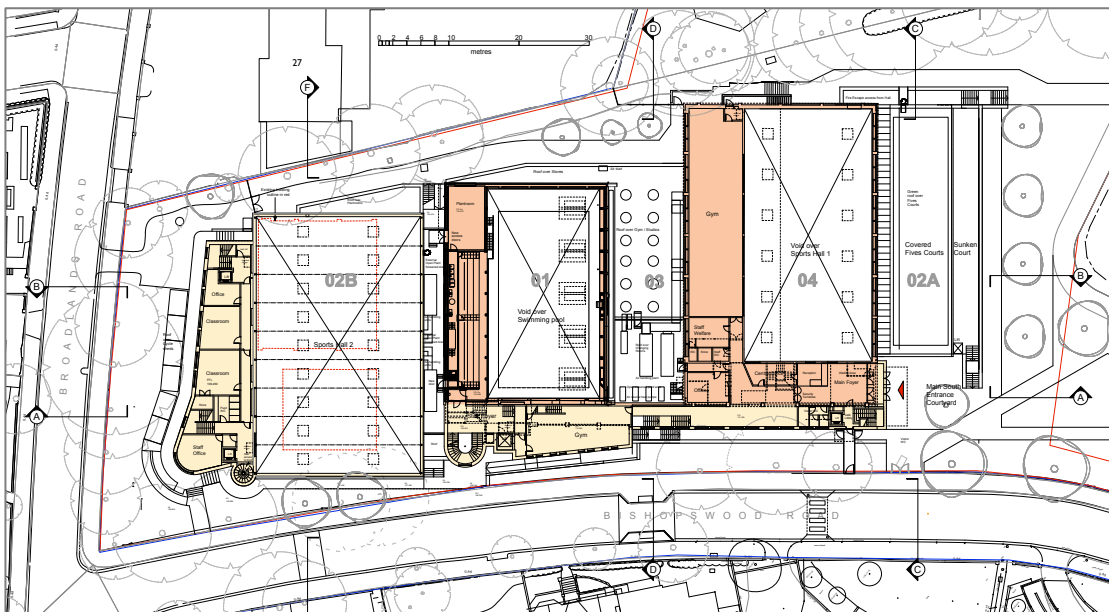
Private school facilities available to the public. Term-time sports activities for children aged 5-14. School holiday courses include multi-activity, football, cricket, tennis and dance. Facilities for adults include squash, fitness suite and tennis (courts available), 25m x 12.5m swimming pool. Children's parties for 5-15 year olds (maximum 25 children) available at weekends including a variety of sports options and games and swimming sessions. Bouncy castle party available for children aged 5-7 years. Swimming club.

New project building design and security arrangements

The new extensions will create a larger building with varied sports facilities, including a second sports hall, which will also be used for other School events, parent evenings, examinations, and assemblies.



Ground floor plan [basement on south side], refer to the project drawings for all final details



First floor plan proposed, refer to the project drawings for all final details

The principle of a single secure point of access at the south end is to be maintained, with a larger and more open entrance and foyer fronting on to the all-weather pitches. Once inside the foyer via a draught lobby, the area is immediately controlled by the main Sports Centre reception desk, which will be staffed at all times during regular operational hours. The desk will be open within the space to create a friendly and welcoming impression for pupils and visitors, but also to improve visibility. It is anticipated that turnstiles will be used to control and monitor access within the building – these are

provided also at the west entrance next to the second hall. Turnstiles and entry doors would all be linked to the building fire alarm and detection system and default to open in the event of a fire for emergency egress.

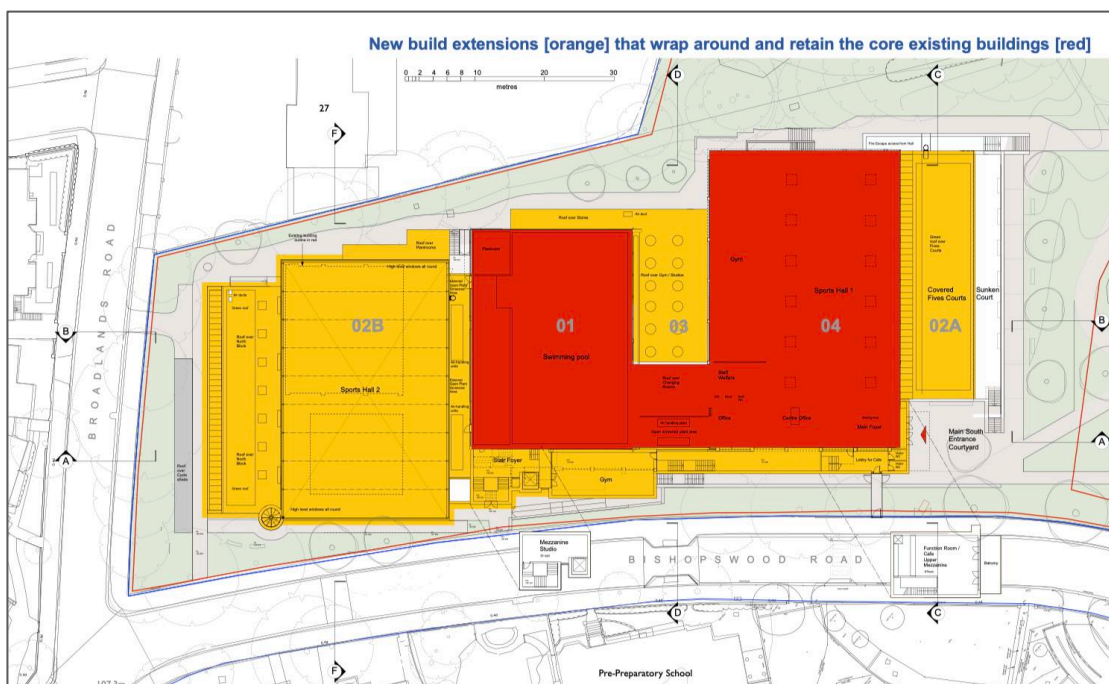
As a result of the proposed extensions, new lifts will allow complete accessibility for disabled users to all areas of the building, which is not currently wheelchair accessible.

Generally during the School day the main doors will be openable, the entry doors being on automatic electric opening systems for disabled and Part M access. After School hours it is anticipated that the main doors at both entrances doors will have access security control, operated by coded entry devices with magnetic closing locks. An option being investigated is to have the entry systems operated by pupil and staff cards, that will serve several other functions in the School also.

However because the second sports hall may be used for diverse functions, including community use on occasions, a second entrance has been provided in close proximity to the second hall – such that it will be possible to allow functions to take place in this part of the building while the rest is in other use. This will allow some ‘compartmentation’ of the sports centre to cater for different events and users, and ensure child safety in coordination with management direction.

In addition, there will be a separate street entrance to access the cafeteria on the upper floor, which is intended as much for parents as pupils. This route will be ‘gated’ from the street, with railings preventing access to the main grounds, and the stairs up will be visible from the main reception.

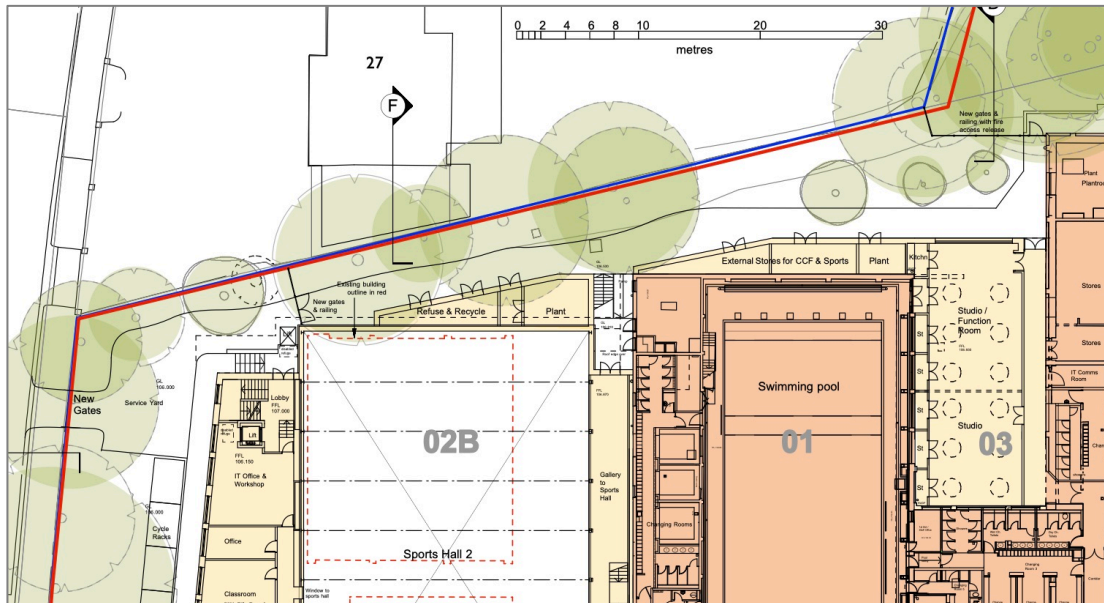
The building entrances will avoid recessed areas as much as possible, so that all areas can be easily included under surveillance, whether by CCTV or visual. The recess on the east side fire exit stair is unavoidable due to the geometry of locating the stair to the basement floor, but this space will be covered by CCTV.



Concept plan for retention and extension, refer to the project drawings for all final details

The project does not contain any inner courtyards, in fact the existing service yard at the back [east] side is being “in-filled” by part of the development to create more interior studio spaces.

The east service area is considered to be a more vulnerable space as it is relatively concealed and not in open view. After discussion with the Metropolitan Police this service access area is to be made secure by railings and gates at north and south ends [on the east side it is bounded by the existing boundary fencing]. Low level lighting will be provided on a timer for out of hours.



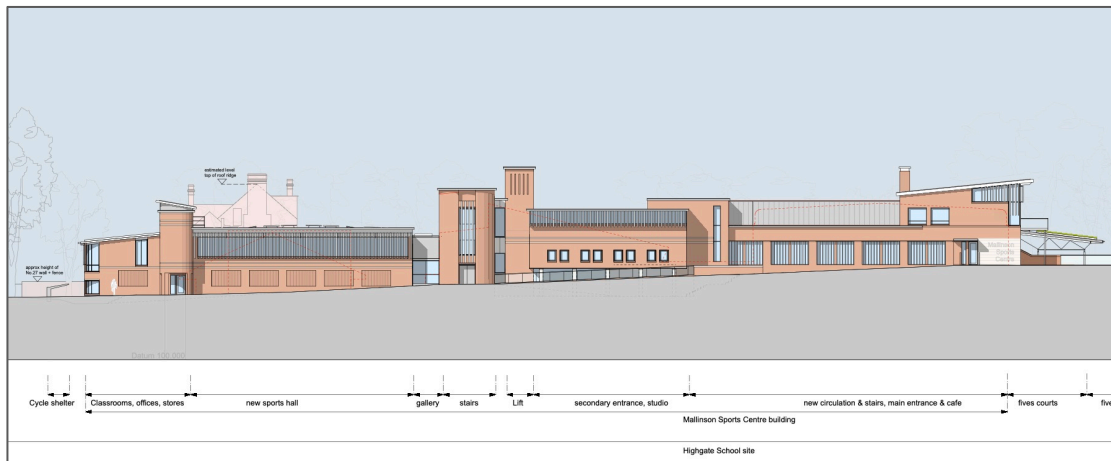
Part plan east service area, refer to the project drawings for all final details

The Cycle Store area is relatively close to the north boundary with Broadlands Road, however it will be extensively overlooked by the north block teaching classrooms during the day when it is most in use by pupils and staff, and will also have external lighting on timers for out of hours.

The project will have photo voltaic panels for energy generation, however they are all to be situated at roof level, accessed only by secure means, and fixed in position to robust angled metal frames.

The building facades are to be finished in clay facing brick, that appear as a series of interconnected building elements that continue from the south entrance, down the natural slope of land towards the junction with Broadlands.

The walls do not have obvious opportunity for climbing or access to roofs. In this area there is little evidence to suggest that graffiti will be a problem.



Proposed west elevation along Bishopswood Road

Roofs are generally accessed from within the building, so they are secure. The main exceptions are the roof to the outdoor Fives courts, which is accessed by an external secure ladder with locked access, but this roof does not easily lead to any other rooftop areas. Otherwise at upper level roof level the flat roofs are connected by shorter steps and ladders for maintenance access only.

Along the service access on the east side, there are single storey buildings with flat roofs, which are not accessible from below – see also earlier section for details on security of this area. The green roofs will be accessed for regular maintenance, and these are provided with man-safe systems for trained personal only.

Toilets are provided at appropriate areas of the building, the main blocks being situated in changing rooms, but most are already in place and will be retained, from the refurbishment project to the Swimming Pool and adjacent main changing rooms project. Cubicles in the showers and toilets are typically full height from floor to ceiling, with only a small gap for air ventilation purposes. Additional toilets are being provided at the main entrance, at the foot of the stairs up to the café – these are in an area off the main Foyer that is supervised by Sports Centre staff and not in the secure area of the sports centre. There are also new toilets in the north wing teaching accommodation.

Changing rooms are already provided with individual lockers operated by key code.

New internal stairs are being provided to improve accessibility and inclusivity between floors, in addition to the new lifts. The stairs are to be open and generous in width, and in general designed to the recommendations of Internal stairways in schools Published by DCSF ISBN: 978-1-84775-091-4, in addition to the Building Regulations Parts B & K.

The locking system of doors will be carefully considered with the Sports Centre management, so that as a general rule when the building is not in use many areas will be locked, such as the pool hall, sports halls, studios, classrooms, stores and offices. The School has their own security team who will be actively consulted at the detail stage of design.

An existing Medical Room is located next to the Pool hall, on the ground floor.

Landscaping & External Works

The design strategy for the new sports centre is to:

- Create new landscape areas which maximise the amount of planting so that the new building becomes a recognisable and embedded part of the School's landscape and estate;
- Introduce new tree planting;
- Provide low-level, safe and efficient lighting for students and visitors;
- Surface the paths with permeable paving as part of a sustainable drainage system;
- Utilise a no-dig construction methodology to prevent damage to tree roots where necessary.

The design strategy for the Orchard site is to:

- Create a new outdoor sports area with a unique and elegant oval-shaped amphitheatre that will not only provide seating around the pitch, but also will act as a barrier and flood water storage device to prevent future flooding events;
- Introduce new tree planting; o Provide accessible and safe access to the sports pitches for students and visitors, and connect with other areas of the School;
- Utilise a no-dig construction methodology to prevent damage to tree roots where possible;
- Minimise any impacts on the most valuable, existing trees around the site.

There are existing substantial mature trees around the site perimeter, between the MSC and the Orchard site, and all round and to the east of the Orchard site, where there is a small natural wood.

The proposed landscape around the MSC will provide paths that will connect all the new main entrances, as well as service entrances to the north-east of the buildings. Existing paths around the all-weather pitches will be linked into the proposal, to create intuitive routes around the site.

Generous planting beds along paths and around the new building will soften the space and enhance its 'gardenesque' qualities.

A new paved courtyard will be created at the building entrance at the southern corner, with a cantilevered timber seat for waiting and an ornamental tree as a focal point, creating informal enclosure from the street. There will be no loose gravel in the paths, all will be bound. The intention is to make the outdoor approach area lively and inviting, with good planting and open space, and all in a strong relationship with the outdoor sports pitches.

Adjacent to this a paved viewing terrace above the new Fives courts will be backed by a line of new trees to create shelter and frame views of the building, with planting and seating beneath. A terrace with seating in front of the fives courts has also been designed to host viewers at the lower court level.

The proposal for the balcony guarding to the viewing area, that looks down over the Fives courts at basement level, is considered to be a particular safety issue that will require careful detail design, to prevent either accidental falling or intentional climbing over. The proposal is for a glass balustrade at ground level of sufficient height to prevent and deter either eventuality, but still allow good spectator viewing to below. A planting bed at the base of the wall will also provide an additional safety function.

All “street” outdoor furniture, such as seating and bins, is appropriately situated, fixed in place, and of robust long-lasting construction.

External lighting will be designed for paths and building perimeters in association with the landscape plan, particularly at entrances and access points. Lighting will be coordinated with CCTV installations, which are monitored by the School in-house security team.

Lighting will be designed to meet movement and emergency access criteria, with a balance between good illumination and sensitivity to neighbouring residential properties and the setting of the Conservation Area, with light pollution to neighbours minimised or avoided.

Meeting spaces

The designed meeting spaces are associated with the playing pitches and the main entrances, such as at the south main entry and the terrace along the frontage of the new Fives Courts. All of these are in areas that can be well controlled and supervised.

Although pupil access is not restricted around the other perimeter areas of the MSC, on the west, north and east, pupils are not encouraged to go in those areas without supervision by staff.

Servicing

The east side in particular is largely a service access part of the site, with a new gate being provided off Broadlands for service vehicles including for maintenance, landscaping, refuse collection by the School's own vehicle to relay to the central refuse stores.

The new waste storage includes for recycling in keeping with the School's environmental policies, all in lockable enclosures.

Utility meters are all to be located inside plant rooms, accessed only by authorised persons.

Car parking & Cycle storage

There is no car, moped, motorbike or vehicle parking on the MSC part of the site.

The project is providing a significant number of new cycle store spaces. There are some open stands provided at the main entrance, but the majority of the provision is at the north end of the site, where secure covered open stands are provided, with adjacent lighting.

Building components and materials

Wall construction is generally in solid masonry cavity wall construction, with external clay facing bricks or Portland stone facings.

Windows are to be aluminium or aluminium/timber composite windows, or curtain walling systems, with double glazed glass units. The glazing in will include security glazing tape, dedicated security sealant or gasket and a secure mechanical fixing system – in general all glass units will include safety glass, laminated and toughened in compliance with Part N and beyond – this will apply to glass at all levels, as the sports activities will also require safety glass.

Roofs are constructed with a base which might be CLT panels or profiled metal sheeting, fixed to the main structural frame, and finished with rigid insulation and bituminous flat roof weatherproofing systems. In many cases this will be combined with green roof systems including extensive roof build-ups and drainage layer.

Roof apertures will be protected by roof lights certificated to LPS 1175 Security Rating 1 or STS 202 Burglary Resistance, securely fixed in accordance with the manufacturer's specifications. It is anticipated that the rooflight glazing will be double glazed glass units with safety glass as above. There are no suntubes in the design.

The whole project will be Part M compliant in accordance with the Equality Act.

External door apertures will be protected and will meet one of the following minimum standards when the building is unoccupied:

- PAS 24:2012
- LPS 1175 Issue 7 SR2
- STS 201 or STS 202 BR2

All external doors will be in aluminium, either entrance doors, plantroom doors, and louvred plant doors, and where glazed will include safety and secure glazing units as above in compliance with Part N and certified to:

- PAS 24:2012
- LPS 1175
- STS 202

BS 6375 will be referred to for the classifications to ensure that doorsets will adequately meet the demand placed upon them.

External doorsets and windows will be certificated by one of the following UKAS accredited certification bodies (Note 63.5):

- BM Trada Certification
- British Board of Agrément
- British Standards Institute
- Loss Prevention Certification Board (part of the Building Research Establishment)
- Exova Certisecure Scheme
- ER Certification
- UL International UK
- Buildcheck

Intruder Alarm systems

Intruder alarm systems, with contact devices at all opening doors and windows, will be provided – these are to be suitably designed, fit for purpose, monitored, and comply with the requirements of the ACPO Security Systems Policy.