maine road primary school

design & access statement

june 2008

07-200-C3LPA-Design & Access Statement

Introduction

This Design and Access Statement has been prepared by Robinson Architects on behalf of Willmott Dixon and Manchester City Council to accompany the planning application for the new Maine Road Primary School. It is submitted with a set of drawings and reports, and is intended as illustrative material to help explain the rationale of the design.

Maine Road Primary School is the working name for the as yet un-named school which will replace the existing Bishop Bilsborrow and St. Edwards schools. It will be a 2FE Roman Catholic Primary School with a 60 place nursery. The existing school buildings are to be demolished.



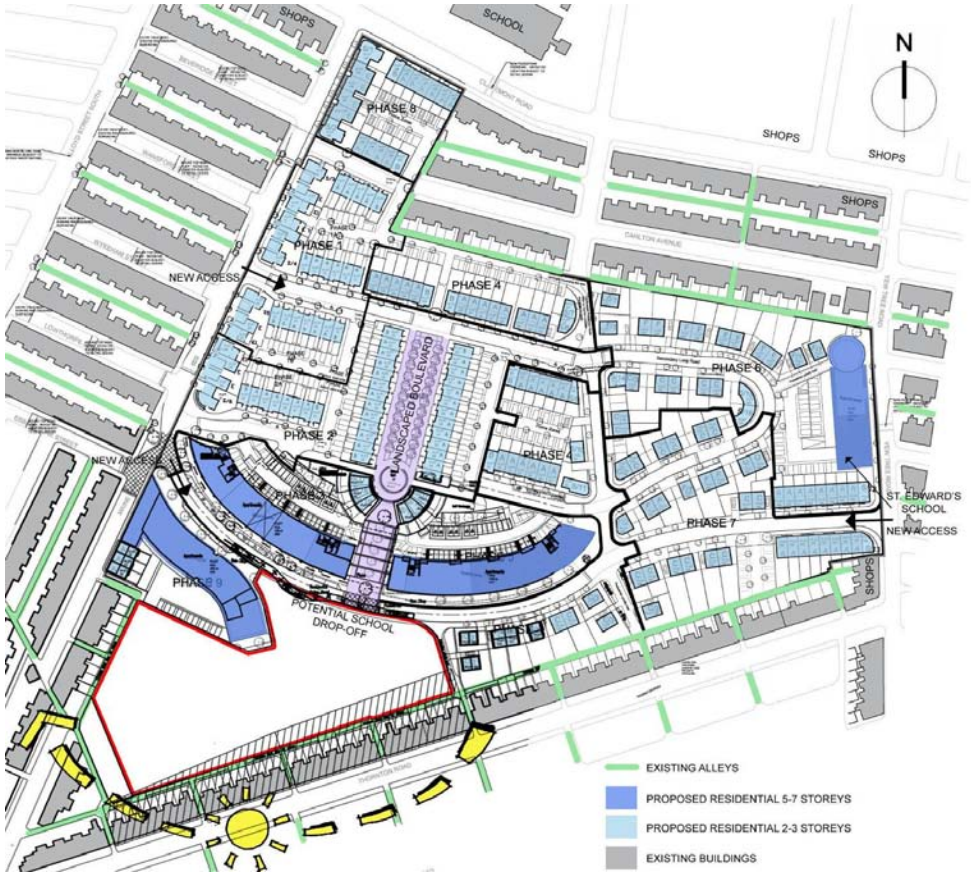
Site

The site is within the boundaries of the demolished Maine Road football ground. The rest of the area is being redeveloped by Lowry Homes as a high-quality residential scheme, with some potential associated uses (shops and medical centre). The school site is to the south-west of the development, bounded to the south by the rear of the properties to Thornton Road, and to the west by the rear of the properties to Maine Road. The site will be accessed via a new road (Blue Moon Way), which will be the main road through the new residential development.

The site covers 0.96 hectares and is irregular in shape. It is roughly flat, although the existing levels will have to be amended to allow access from the newly constructed road, and to connect to drainage runs.

The site previously formed part of the car park for the stadium, so there are areas of tarmac covering part of the site. Other areas are largely covered in rubble. There is no existing vegetation on-site, and no trees either on-site or in the vicinity.

Currently access to the site is from the newly constructed section of Blue Moon Way, via Maine Road. Once complete this road will also be accessible from Yew Tree Road to the east, and a potential pedestrian route will link the new road to Thornton Road (via an existing alley).



Surrounding Area

The surrounding area is largely residential, with some independent retail outlets (general stores, butchers, take-aways, barbers, laundrettes etc) mainly focused along Claremont Road. The housing mainly takes the form of traditional Victorian through-terraces of two storeys, built in red brick. Some of the terraces have front doors directly onto the pavement, although some streets (such as Thornton Road) have small front gardens. Most of the buildings appear to have been fairly well maintained, and some have interesting brick and eaves details. There is also some nice tiling next to front doors.

There are a few more modern infill developments along Claremont Road: a new apartment block is currently under construction, and Claremont Primary school has a new single storey wing in a mixture of brickwork and white render.

To the south-west of the site is what is known as the “ice cream factory”. Its current use is undetermined, but it is a rather run-down and unwelcoming building. Its windows are boarded up and there is barbed wire around the roof.

The area is very dense, with little open space in the immediate vicinity. There is a network of pedestrian passages behind and between houses, used for the storage of bins etc. Some of these can be a little intimidating, particularly where a number of them converge and there is no clear line of vision, such as near the ice cream factory.

The nearest large area of open space is Platt Fields, around 500 metres to the south-east of the site. Claremont Primary also has playing fields adjacent to it.







The Maine Place Development

The new residential development on the site of the old stadium will form the main context for the new school. The development includes a mixture of low-rise housing, and apartment blocks, centred around a landscaped pedestrian boulevard which runs roughly north-south through the site. At the heart of the scheme is the "centre spot" which marks the position of the old centre spot of the football pitch. At this point there is intended to be a work of public art, although the form of this is not yet decided.

Immediately to the west of the school site will be a four storey apartment block, with undercroft parking. Much of the building will be finished in white render, with some elements of red brick, and timber effect cladding. There will also be features in galvanised steel, timber and glass, such as balconies and balustrades. Immediately south of this block will be some two storey housing, fronting onto Maine Road, in a similar palette of materials.

On the opposite side of Blue Moon Way will be two apartment blocks framing the pedestrianised boulevard. These will rise from 4 storeys at the eastern side to 7 storeys at the western side (facing Maine Road) and will again be in a mixture of brickwork and white render with features in galvanized steel.

To the east of the site, across a pedestrian priority road, will be some two storey housing, in the same palette of brickwork and render.

Bishop Bilsborrow & St. Edwards

Both Bishop Bilsborrow and St. Edwards schools are very traditional school buildings. Bishop Bilsborrow has had a number of extensions and other additions, but the original building remains intact. Both schools were designed to have very strong street frontages, and although Bishop Bilsborrow's has been somewhat weakened due to the thick belt of trees in front of it, there is a formality in the way it addresses the street, with a symmetrical, regular frontage and a large scale. This not only gives it a strong presence in the community, but was intended to convey an impression of it being a serious place of learning. The use of good quality brickwork serves to reinforce this impression.







Basic Design Principles

We believe that the new building should take the positive qualities of the existing school buildings and build on them. This should give a good starting point to produce a high quality school environment, which has a positive effect on its pupils.

The building is positioned so that it has a strong street presence, and so that its main entrance is centred on the landscaped boulevard running through the Maine Place scheme. To relate to the new buildings around it, which have large areas of white render, the school is predominantly white. However, to achieve the feeling of robustness and strength that the existing schools evoke white bricks will be used, rather than render. The main entrance is clearly marked out with a feature canopy and leads through the reception area and into a central double height space. This space is the heart of the school, with all of the other rooms accessed from it, making the building layout very legible.

The teaching accommodation has been organised into two wings, as it was the desire of both schools to create a sheltered outdoor space which could be shared between the foundation unit and KS1 pupils.

Layout

The site layout has been developed to ensure that vehicles and pedestrians are kept as separate as possible. There is one vehicular entrance onto the site from Blue Moon Way which leads directly into the car park. All servicing vehicles (refuse lorries, deliveries etc) will not enter the site, but will stop in the servicing layby off Blue Moon Way.

The main staff and visitor entrance is directly off Blue Moon Way. There is no secure fence line along this frontage, to ensure that the school feels like part of the community, rather then separate from it. Instead planters or similar will visually mark out the school boundary providing a defensible barrier, while still allowing this space to be publicly accessible at all times.

Pupil entrances are to either side of the school building. There are wide footpaths running along both sides from Blue Moon Way, allowing children either direct access to their playgrounds, or into the teaching wings. It is envisaged that parents of younger pupils will accompany them along this path in the morning, and collect them in the afternoon. The area by the foundation wing is generous in scale to allow waiting parents to mingle and chat.

There are entrances at the end of each teaching wing, giving access to the KS2 classrooms on the upper floor. These are clearly marked out by a step back in plan and a change of materials. Ground floor classrooms have direct access from outside.

Inside the building corridors have been avoided wherever possible. Teaching areas have been kept fairly open-plan, with fixed storage and group rooms defining spaces wherever possible. On the first floor where there are more traditional enclosed classrooms, open plan spaces have been retained in both wings to ensure there is no long central corridor.

Both teaching wings can be accessed via the central “heart” of the school, which serves as both the main dining space, and as a multi-purpose teaching area. The main circulation stair rises through this space, with the main hall and library both being accessed from it. Staff areas are also adjacent to this space to ensure there is passive supervision.

It was the desire of both schools to create a sheltered space between the KS1 and foundation unit classes. This takes the form of the foundation courtyard, which can be accessed from both the foundation unit and the KS1 wing. It is fairly intimate in scale, although it is large enough to accommodate all of the spaces required for a foundation play area such as group and individual seating areas, bike track, sensory garden and climbing area. It will be a light airy space due to its southerly aspect and the use of white brick and large areas of glass. Balconies from the KS2 classrooms above overlook the space and create a link between the older and younger children, as well as creating sheltered areas. The foundation courtyard will be fully enclosed by a 1.2m timber fence which will contain activity panels and matching lockable gates.

KS1 and KS2 play areas are more open-plan, and open onto a variety of other outdoor spaces. The layout has been designed to ensure that noisy play areas are kept close to the building, with the quieter spaces further away, near the surrounding housing.

Scale

The setting for the school is a densely populated area, with some fairly large scale buildings proposed adjacent to it. While it is important that the school has a strong street presence, it should not be too imposing on the existing housing surrounding it. The main mass of the building is therefore focussed to the north of the site, to create a wide frontage onto Blue Moon Way. While it cannot compete with its neighbours in terms of height, it is intended that a formal, ordered frontage will give the school a strong presence.

By breaking the teaching accommodation down into two wings the building will not impose on the existing housing to Thornton Road. Due to the site levels the school will sit slightly higher than the existing housing, but as it is to the north it will not over-shadow them (see shadow analysis). Nor will there be issues of overlooking as there are no windows to the ends of the wings.

Appearance

It is a requirement of the client that the school has a strong public face, but other factors such as robustness, affordability, and the effects of weathering have all played a part in the development of the appearance of the building. While respecting its proposed neighbours the building has not been designed to entirely blend in with them. We feel that as this is a different building type it is appropriate that it takes a slightly different approach.

The building has been designed as a mainly white object, with feature elements in different materials either cutting into the walls, or projecting from them. White brick has been chosen in preference to render as it is robust, will weather well, and conveys a sense of solidity that is present in both existing school buildings.

The frontage to Blue Moon Way is, like both St. Edwards and Bishop Bilsborrow, formal and regular. It reads as one façade, with large openings cut into it in a regular pattern. These openings will have deep reveals to create shadow.

Within them will be a combination of glazing and coloured cladding panels. At the main entrance there is a double height opening, with a large area of curtain walling. There is the potential for the main entrance area to accommodate a piece of artwork, whether this be in the form of coloured glazing, or an object within the lobby. The entrance canopy therefore forms a frame to this area, and is kept purposely minimal itself. Forming a background to this elevation is a rendered spine wall, which is intended to be read both internally and externally.

The teaching wings are less formal in their elevational treatment. They are still built in white brick, but there are larger areas of glazing, and cantilevering group rooms and curved specialist rooms project from the white walls in coloured render to compliment the coloured cladding panels above the windows. The central and curved dining areas both have full height curtain walling to maximise the feeling of light and spaciousness within. Render is again used to pick out the entrances to the circulation stairs at the ends of the teaching wings.

Throughout the scheme windows are large to ensure plenty of natural light in all spaces. Balconies have been provided to first floor classrooms not only to allow older pupils direct access to outdoor teaching areas, but also to create shade and shelter at ground floor level.

The roof will be of single ply membrane, and will be hidden behind a parapet wall. There will also be a staff terrace directly accessible from the first floor staff room. This overlooks the playgrounds to the south, providing passive supervision. The windcatchers which provide ventilation to the classrooms are arranged along the centre of the teaching wings and the central dining area.

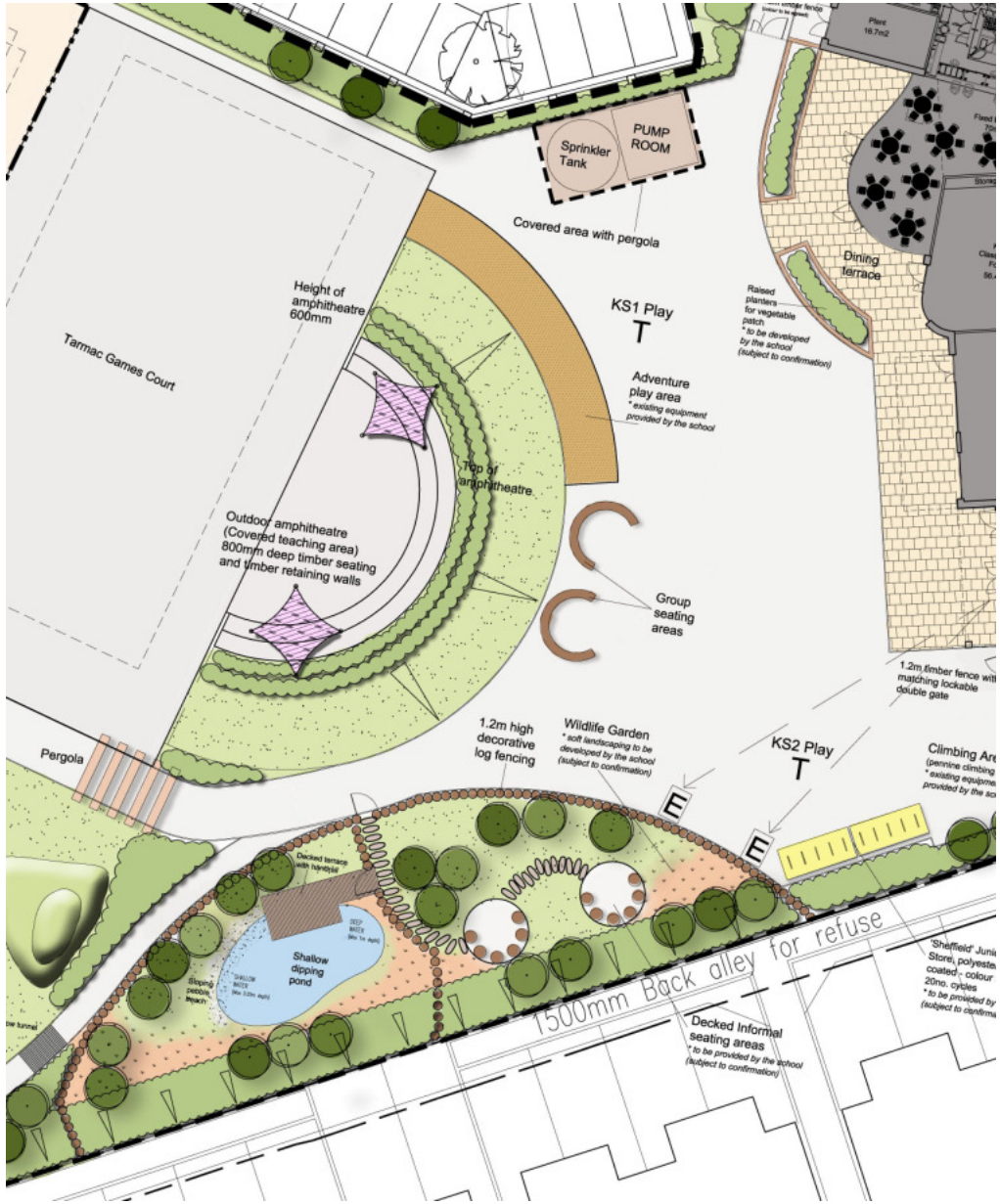
Landscape

The landscape has been developed at the same time as the design of the building, and the two elements work together. A forecourt has been created to the front of the building to create a strong frontage with an open feel. All circulation routes are wide and legible. As well as the foundation, KS1 and KS2 play areas, a number of other interesting spaces are provided.

An outdoor dining area connects to the main dining hall providing a courtyard space for external dining. Raised accessible planters define the space and provide space for growing vegetables. An amphitheatre provides space for teaching and performances. The enclosed wildlife garden and pond area has been designed to encourage participation by planting orchards and wildlife friendly species. Group and individual seating areas will allow interaction.
Climbing and adventure play areas, specialist games courts and mounding have also been included in the design.

External lighting will be designed to avoid glare and annoyance of neighbours.

A generous landscape buffer has been maintained around the perimeter to visually screen the play areas from surrounding housing, to soften the impact of fencing, and to give the school privacy.





view from the plaza



view along blue moon way from maine road



view along blue moon way from the east



view from south-west



view from south-east



foundation courtyard

Sustainability

The scheme has been designed in line with the recommendations contained within the *Guide to Development in Manchester Supplementary Planning Document and Planning Guidance Adopted April 2007.* Sustainability has been considered at an early stage, and principles such as air-tightness and good thermal insulation have been designed-in.

As well as this it is intended that the school will become part of the community heating system that is being introduced as part of the Maine Place development. This will have a biomass boiler at its heart to provide the school and surrounding apartment blocks with heat and hot water.

The school will be almost entirely naturally ventilated (apart from ICT suites and the kitchen), with teaching spaces utilising a windcatcher system to both bring in fresh air and extract stale air at roof level. These will be assisted by solar powered fans in summer months when required to achieve the necessary ventilation rates.

Rainwater harvesting will be utilised to flush toilets, and this will have a screen within the building to educate the children.

The school is targeting a "Very Good" BREEAM rating, and following the initial assessment this seems achievable. Measures to be taken will include ensuring that specified products have low environmental impact, that appropriate recycling facilities are provided (see the appended Waste Management Strategy), and that the ecology of the area is improved upon. The initial BREEAM assessment is appended to this document.

Security

The scheme is intended to achieve *Secured by Design* accreditation, and consultation with the Architectural Liaison Officer has been undertaken (see attached correspondence and Crime Impact Statement).

The scheme does have areas which are largely hidden from public view, but this is as a result of the schools' requirements for private, quiet external spaces. However monitored CCTV will be provided as part of the development which will cover all vulnerable parts of the building.

The scheme has been designed to provide passive surveillance of routes wherever possible, for example by providing windows to offices along Blue Moon Way. Internally too, the central space is designed to minimise corridors and aid orientation.

Boundary treatments are generally 2400mm high, although where visible from the street they are 1800mm to tie in with neighbouring developments.

Biodiversity

As part of the BREEAM assessment an ecologist will be involved in ensuring that the scheme has a positive effect on the site's ecology (see attached correspondence from ecologist). As the site currently has low ecological value, the scheme will certainly do this. There are currently no trees on-site, and we propose fairly substantial planting using native species where possible as described on the planting plan. It is also intended to create a variety of soft landscaped areas including a wildlife garden containing native and berry/fruit bearing species which should encourage wildlife.

access

Access

The scheme has been designed in accordance with the principles of Design for Access 2 and Approved Document M. The site is more or less flat, so all areas of it will be accessible to all. There is level access around the perimeter of the building.

Transport

Buses run regularly along Claremont Road and Yew Tree Road, and it is proposed that buses will stop along the new Blue Moon Way, about 60m from the main entrance of the school. Princess Road provides quick and easy access both into and out of the city by car. The nearest train station is at Mauldeth Road, which is over 1.5 miles away.

Approach

Staff and pupils will approach the school from all directions, as the new school sits between the two schools it replaces. However, over time the catchment area may change. Access to the school is from the new road, Blue Moon Way, although a pedestrian link is proposed from Thornton Road as part of the Maine Place masterplan.

The majority of staff currently drive to work, although there are a number of cyclists. The staff and visitor car park is accessed from Blue Moon Way, and cycle stands for adults and children are provided adjacent to it. Having parked staff will enter the building by the main entrance on Blue Moon Way.

Pupils will also enter the site from Blue Moon Way, using one of the two pedestrian entrances to either side of the building. These will allow them to access either their playgrounds, the pupil entrances at the end of each teaching wing, or the direct access into the KS1 and foundation unit classbases.

Parking

Secure on-site parking is provided, with 22 ambulant spaces as well as 2 accessible spaces. The accessible spaces are located as close to the main entrance as possible, with dropped kerbs allowing easy access to the main entrance. The parking bays are designed accordance with the baseline standards set out in "Diagram 1.2 – Design for Access 2" and "Diagram 2 – Part M 2004". The spaces will also be constructed as recommended in "BS8300 – Figure 3" relating to drop kerbs and signage.

The gates to the car park (separate vehicle and pedestrian) will be open during the normal school day, so visitors and staff will be able to freely access to main entrance.

There is also time-restricted on street parking along Blue Moon Way.

Steps and Ramps

There are no steps or ramps within the site.

A balustrade/handrail will be required around the decking and pond area within the wildlife garden. They will be a minimum of 1m high above the decking with additional horizontal railings underneath to restrict access.

The pond area is also separately enclosed by a 1.2m high timber fence with lockable gate and will only be accessed under controlled supervision. The ampitheatre will allow for wheelchair users to utilise the lowest tier, and will be detailed to ensure the steps do not create a hazard.

Paths

All paths around the building are a minimum of 1500mm wide, and generally much wider. They all have gradients of less than 1:21 and will be fully accessible. All paths will have headroom of at least 2500mm (for example where there are cantilevering balconies etc). All uncontrolled crossing points will have tactile blister paving in a contrasting colour to the main surface colour i'e buff and will be designed in accordance with "Diagram 2.1 – Design for Access 2" . Balcony supports will be identified with tactile paving and contrast markings.

Principal Entrance

The proposed principal entrance to the school has a level approach, with an accessible threshold. It will be clearly marked out with a prominent canopy and integrated signage. The main entrance doors will be fully glazed aluminium construction having a minimum clear opening of 1000mm and be

fully automated. Manifestations will be provided and the doors will contrast with the frame, including the ironmongery.

Reception

The entrance lobby will be served by a window from the general office. The counter will have dual levels, and will contrast with its surroundings. An induction loop or other hearing aids will be installed to the reception counter. The lighting within the lobby will meet the relevant CIBSE guidelines to provide adequate lighting.

Once visitors have signed in at the reception counter the receptionist will release the inner doors to allow visitors access into the reception / waiting area. Accessible toilet facilities are accessible from this area, and the stairs and lift will be clearly signposted.

Additional Entrances/Exits

All other entrances have level access. Single doors have a minimum clear opening width of 1000mm, and double doors have at least one leaf with a clear opening of 1000mm. Accessible thresholds will be provided to all entrances and exits. Where external doors open outwards planting will be provided to prevent collision with an open door leaf, rather than recessing them as per diagram 10.1c in Design for Access 2.

Horizontal Circulation

All circulation spaces within the building will be a minimum of 1800mm wide, with 2000mm diameter turning circles at corners. A 2000mm diameter turning circle will be provided in all lobbies. Internal doors will have a clear opening width of at least 850mm, with 900mmto accessible wcs. 450mm will be provided between the leading edge of a door and any obstructions.

Vertical Circulation

There are three staircases within the building, two at the ends of the teaching wings (which are escape stairs as well as for circulation), and one in the central double height space. The stairs will be 1300mm minimum clear in width with risers of 150mm, treads of 280mm and flights of no more than 1800mm rises. There will be a clear zone of 1800mm at the top and bottom of each flight, in accordance with DfA2 Requirements. Nosings and handrails will be in bold contrasting colours to aid the visually impaired and handrails will run 450mm beyond the top and bottom tread. There will be refuge areas at the top of each escape stair.

The lift will be a 17-person with a carriage of 2000mm wide x 1400mm deep clear internal dimensions. There will be a clear entry zone of 1800x1800mm outside the doors on each level and the doors will provide a minimum 900mm clear opening for easy access.

Call buttons will be at accessible level (900mm above floor level) and there will be illuminated and audible systems to identify floor levels both inside and outside the lift car, all in full accordance with DfA2. Mirrors and handrails will comply with DfA2.

Sanitary Accommodation

Each toilet area will have an accessible wc (2m x 2m inside clear of any obstructions such as drainage) suitably equipped in accordance with Part M of the Building Regulations. Each main toilet facility will have a clear 2m square area upon entrance to the room and an enlarged ambulant cubicle 1200mm wide including support rails and outward opening door.

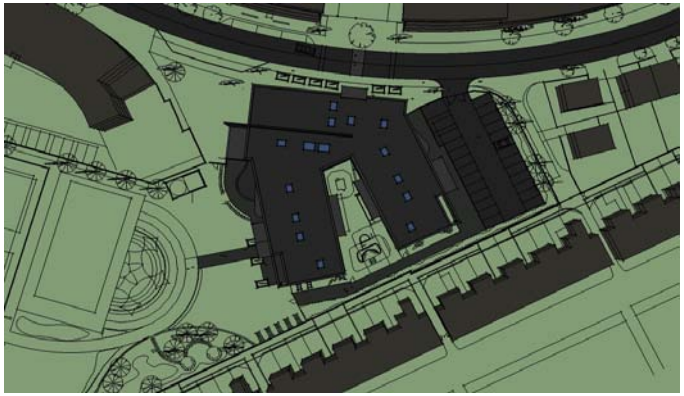
The Foundation Unit has its own easily accessed toilet area, again with 2no. ambulant cubicles and a dedicated accessible w.c. also. Hygiene and Therapy Rooms are required under DfA2 and the hygiene room is adjacent to the Foundation Unit.

White toilet fittings will be set against darker coloured access panels to provide a contrast in order to aid the visually impaired.

Kitchen

The proposed school kitchen which is provide school meals for pupils, will be designed for access by a person who may be in a wheelchair, with 2000mm turning circles at significant locations. There will be a fully compliant accessible w.c. within the kitchen area and suitable space to allow access to the facility.

shadow analysis



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12.00 01 January



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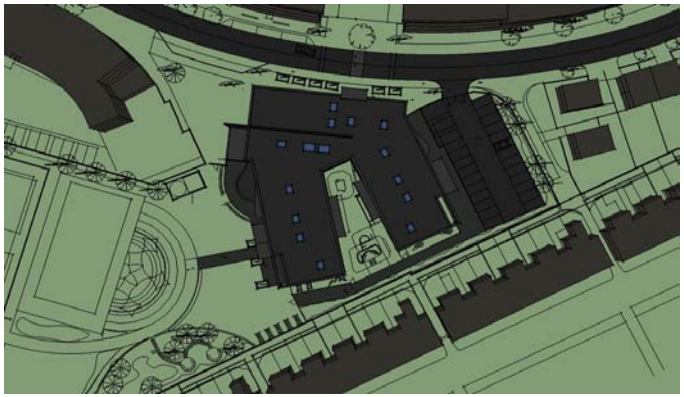

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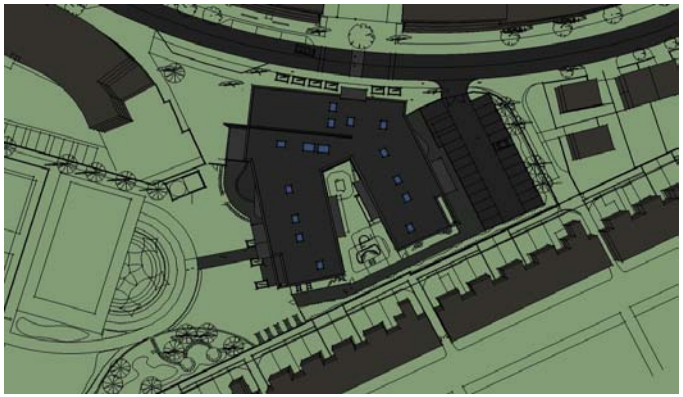

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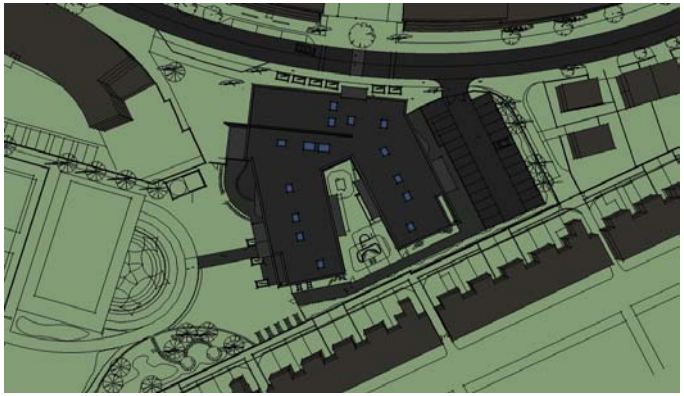

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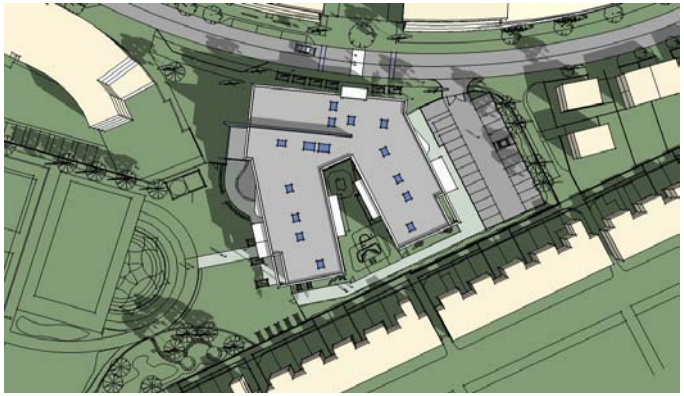

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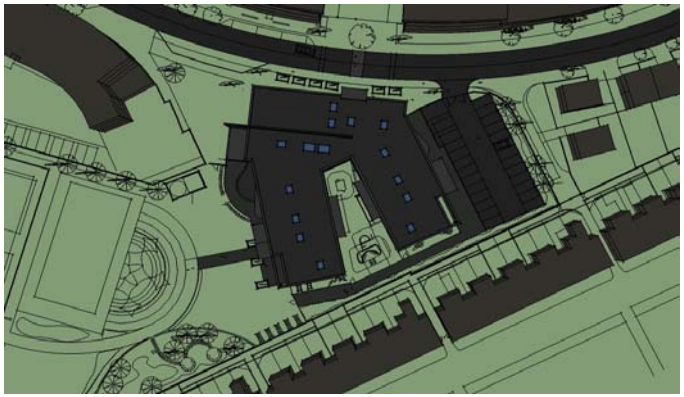

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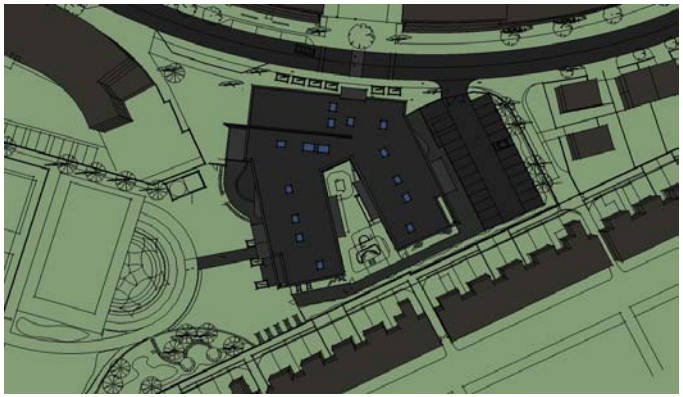

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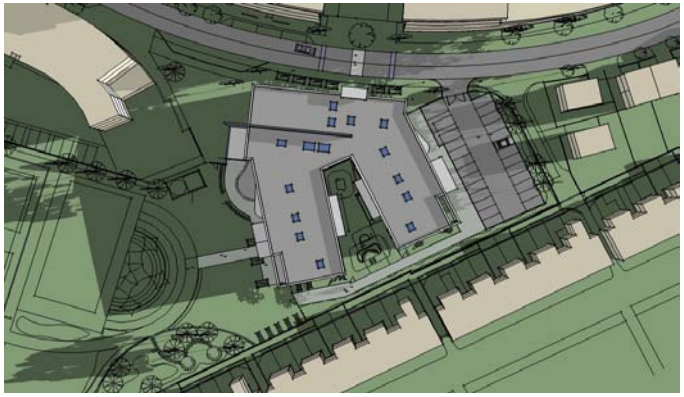

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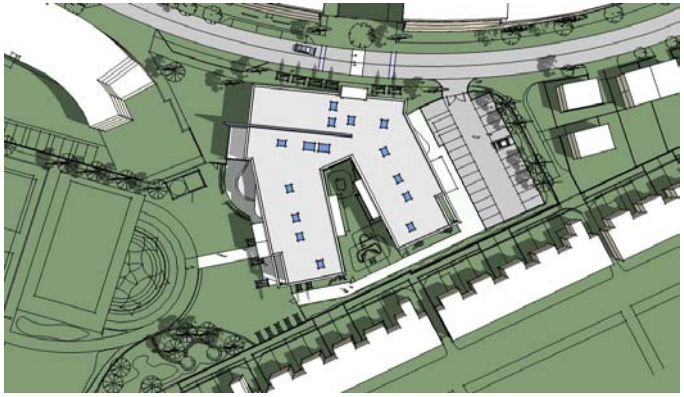

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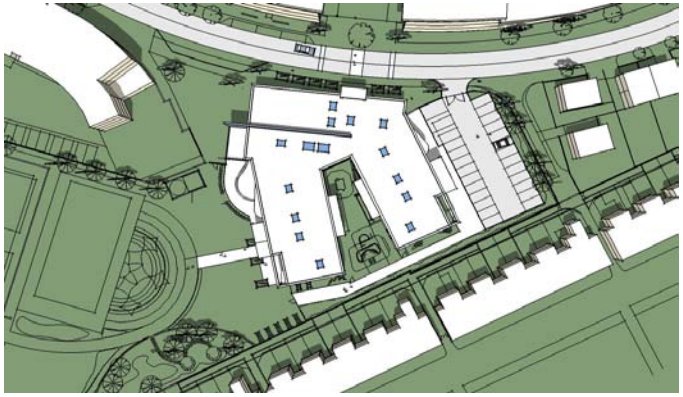

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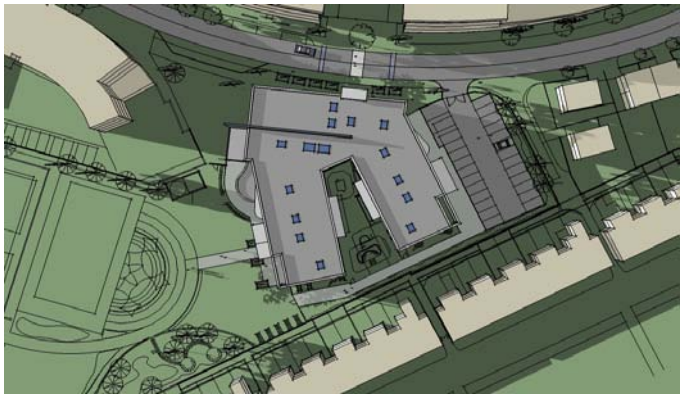

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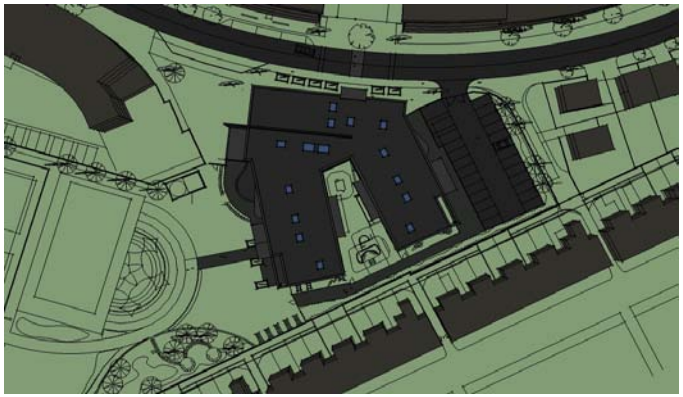

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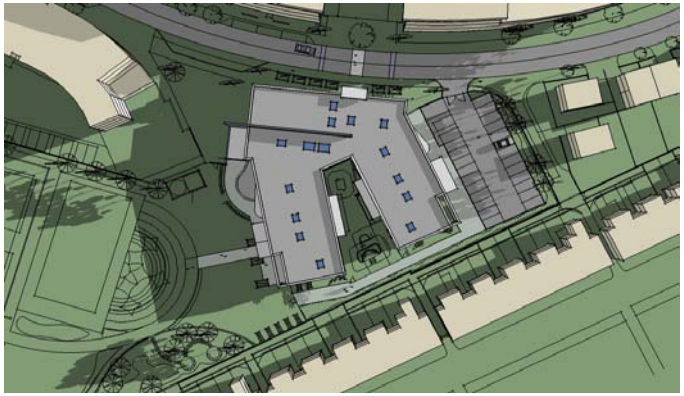

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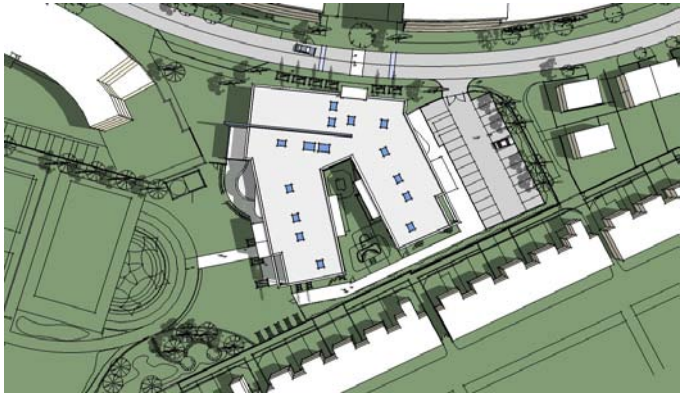

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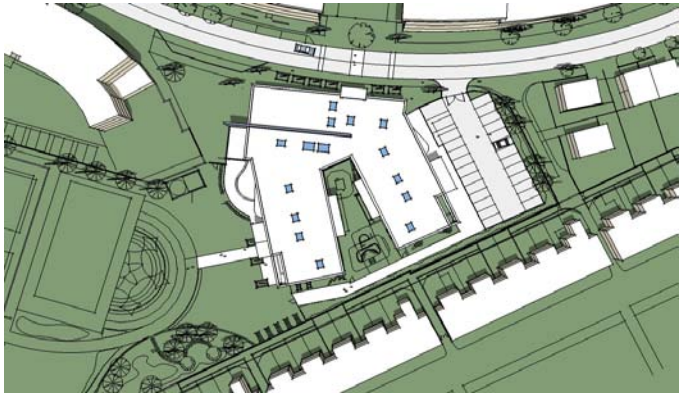

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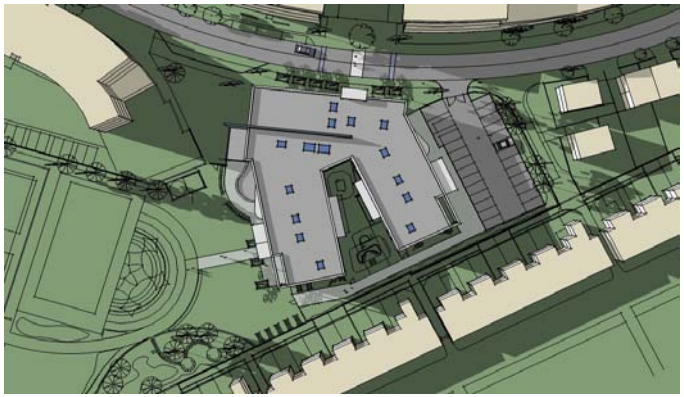

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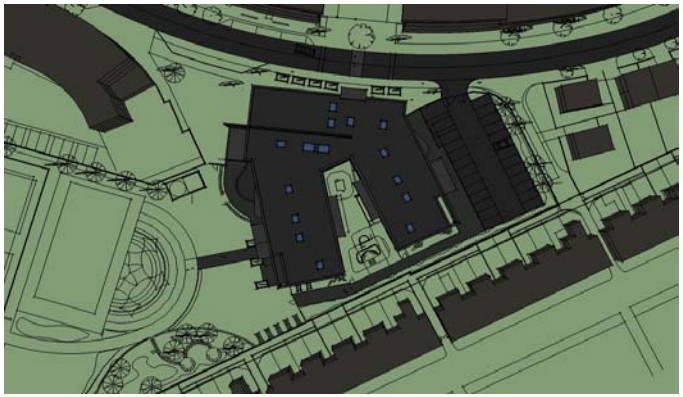
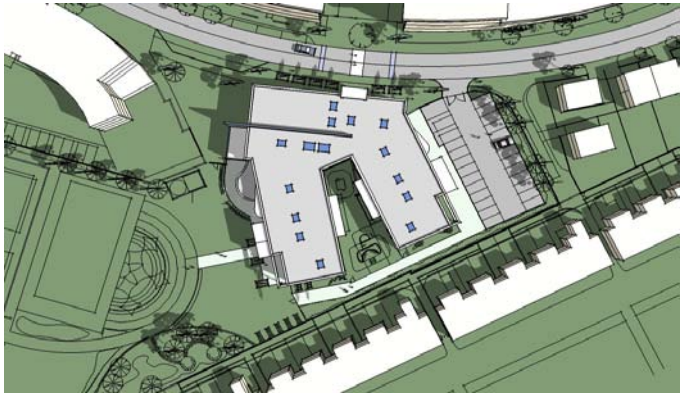


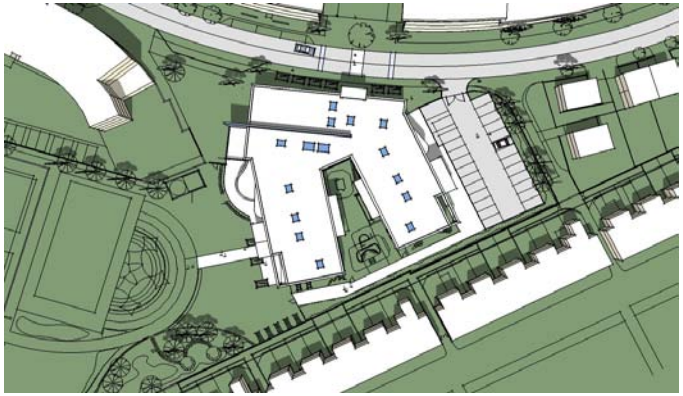
21.00 01 July



06.00 01 September



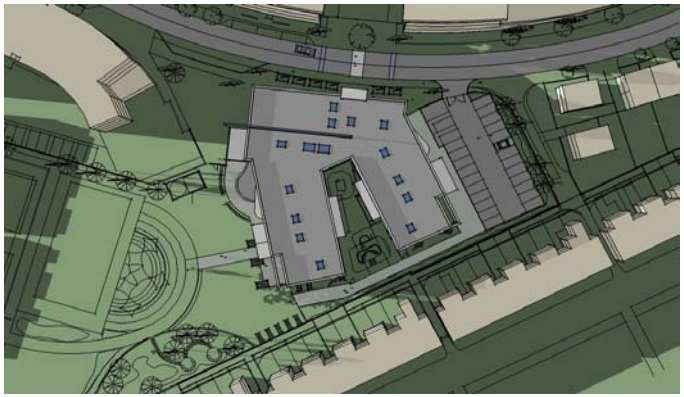
09.00 01 September



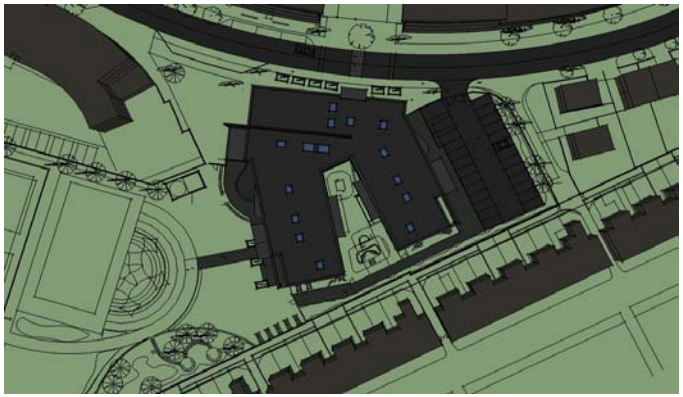
12.00 01 September



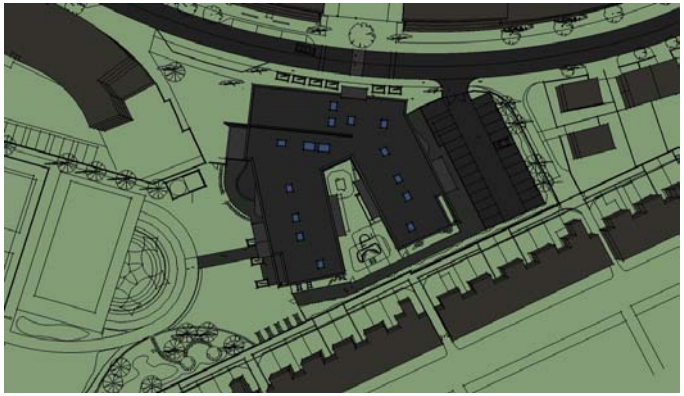
15.00 01 September



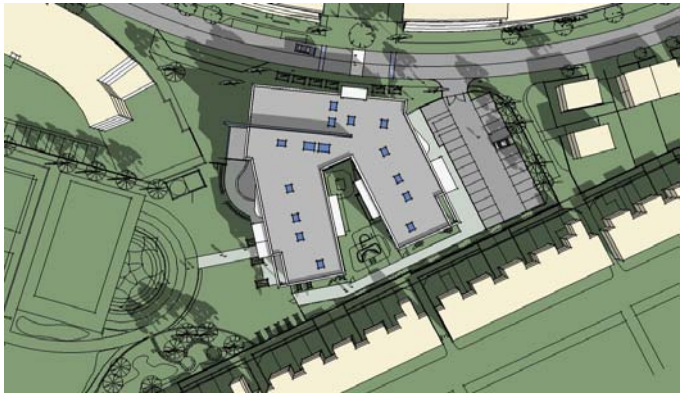
18.00 01 September



21.00 01 September



06.00 01 November



09.00 01 November



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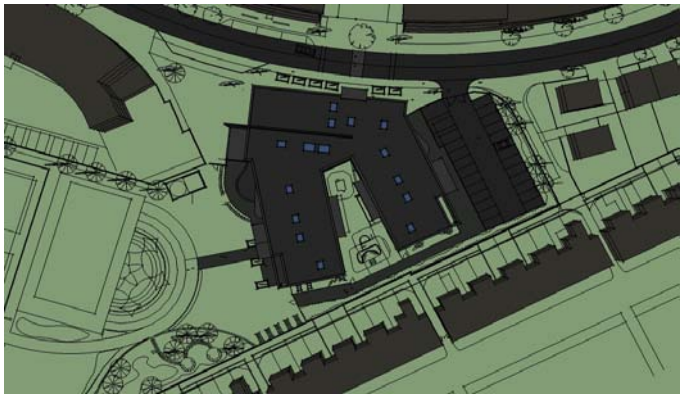

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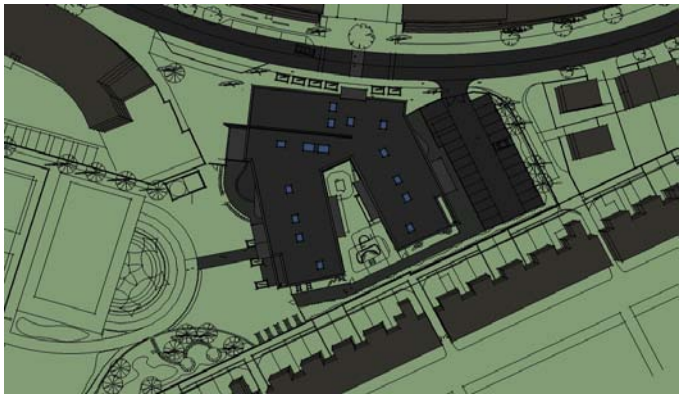

21.00 01 November