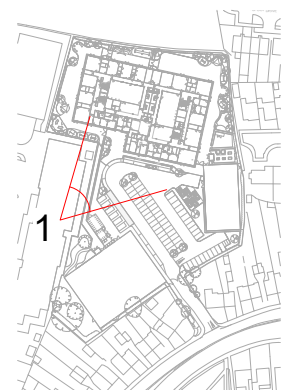




1. Indicative view of main entrances from the pedestrian approach.





2. Indicative view from the playground looking back towards Rabbs Farm Primary



4.00 Appearance

4.01 Materials

Materials have been considered to suit the durability and robustness required by the school - due to the nature of the students at this SEN school, as well as meeting the life expectancy requirements of the brief and DfE Output Specification.

A simple palette of materials has been chosen to create a cohesive and striking façade, whilst providing welcoming impression to students, staff and visitors by highlighting the entrances and other areas of the facade with coloured panels representing each school zone.

The materials palette is:

- Architectural concrete precast facade panels, in two colours and textures.
(Samples of the panels will be made available)
- Composite rainscreen feature cladding panels in the Academy branding colours.
- Curtain wall glazing and PPC windows and doors in dark grey, RAL 7016.

The outer, decorative architectural concrete face of the facade will be treated with coloured pigments to create a through-coloured, durable and more robust finish. In key areas of the facade, a textured timber board finish will be added to the concrete to create visual interest and compliment the adjacent Rabbsfarm Primary School cladding. It will also respond to the natural setting of the Green Belt parkland to the north of the site while allowing each school zone to have a clear identity.

The concrete façade of the building is durable and easy to maintain. The ground floor panels will be coated with an anti-graffiti coating to aid maintenance. External rainwater pipes will be anti-climb and projections and connections to the building are limited, to reduce the risk of climbing.

Curtain Walling

The facade will be broken up, with elements of full height curtain wall glazing used to locate enhanced entrances and

provide clear views out from circulation routes.

Windows

Southern and eastern facades are protected from glare and overheating through the application of brise soleil. As seen on the right the example of the integrated nature of the window, louvre and brise-soleil solution envisaged.

4.02 Massing

The two storey building sits sympathetically within the suburban setting, similar in scale to the surrounding residential properties and the adjacent primary school. It reflects the requirements of the brief to have links from inside to outside.

Entrances are highlighted with feature cladding with colour branding to identify each zone.

The building is broken down vertically by the use of different coloured panels and different textures to reduce the overall scale of the building visually and reduce the appearance of the linear facade of the northern and southern boundaries. Curtain wall glazing is added to bring light into the building at entrances and circulation route and externally defines the location of access into the building.

Brise soleil have been added for solar shading to the south, west and eastern facades to achieve compliance with overheating and daylighting criteria.

There is full stair access to the roof and a prefabricated plantroom at roof level.

4.03 Branding, Way finding and Signage

Whilst the building design and site layout facilitates intuitive way finding, the proposal will also include clear and coordinated range of signage for pedestrians and vehicles.

The signage will be influenced by the school 'brand' and the aim is to coordinate this with the building aesthetic to create a cohesive and easy to navigate development. The use of colour is a simple method of giving each school zone its own identity whilst maintaining continuity and cohesion to the overall building design. Colour is used to highlight the main entrances and add clarity to the arrangement whilst

also enlivening the general facades.

Identity signage is likely to be located on the front façade of the building adjacent the main receptions or logo/school name given prominence on the building facades which are most visible upon arrival.



Reckli - Colorado - Textured concrete facade panel example.



Facade treatment example



South Elevation



East Elevation

5.03 Site arrangement

As a result of the engagement process, the main building has been positioned to the north of the site adjacent to the designated Green Belt. Careful micro-siting has ensured that the building does not overlook, over shadow or pose a fire spreading risk to its neighbours and it allows for a single-phase construction approach to be practicable.

The design of the school zones, with Alternative Provision (AP) to the west, AP Primary to the north and SEN to the east, provides clear demarcation of adjacencies and zoning of different spaces, with a distinct front and back of house. The design of the main building and externals have optimised the separation and secure lines between each independent accommodation and allowed for controlled shared use of external facilities if required.

Further engagement informed the location of the external sports facilities and the configuration of the car park and drop off area. By locating the 3G pitch and Multi Use Games Area (MUGA) either side of the carpark to the south of the site, community access to external sports is controlled and segregated and both schools have easy access to their own sports provision and, if required, can share facilities without passing through each other's grounds or disturbing the AP Primary facility.

The site retains its existing access off Falling Lane and the internal configuration allows for efficient, safe and segregated vehicular and pedestrian movements, whilst accommodating all parking and anticipated vehicle movements cited within the briefing and planning documents. Drop off is located directly in front of the SEN entrance, with a loop system to allow taxis and minibuses to wait in a demarcated area, to be met by a member of staff. Arrival is the most important part of the day in the SEN school as it sets the scene for the rest of the day and this design should facilitate a calm and stress free drop off scenario.

Movements within the site have been designed to allow the school to operate safely with clearly defined areas for

both the SEN and AP secondary and primary spaces. Each facility has direct access from classrooms and corridors into their own separate and secure hard and soft informal play areas and external resource spaces, along with controlled access to external sports and the AP habitat area.

Finished floor levels for the building, car parks and playing pitches have been determined so as to achieve the optimum fit in terms of cut and fill and to tie in with existing levels at the boundaries (particularly where close to offsite retained trees) whilst ensuring that all spaces will be DDA compliant and accessible and suitable for all users.

Our proposed solution enhances the control option by:

1. A two-storey school single block compact design with shorter travel distance. The building form articulates each school zone.
2. Clear differentiation of ownership/zones.
3. Areas for community use well defined.
4. Optimization of external areas for hard formal and informal play.
5. Providing a safe pedestrian pupil access to designated sports areas.
6. Clear and safe separation between vehicles and pedestrians.
7. North/south classroom orientations for a similar environmental strategy away from housing.
8. Robust materials to withstand frequent challenging behaviour.
9. A secure safe-guarded teaching environment.
10. Layouts that provide passive supervision.
11. Efficient use of external spaces for secure drop off and pick up.

5.04 External Space Organisation

The general strategy for developing the landscape and external areas is to create a strong identity and calming setting for the new school with good links between the new building and its external spaces, educational resources and sports facilities. Careful attention has been paid to site neighbours to ensure that a positive contribution is made to existing adjacent residential areas and the Green Belt. Sufficient landscape buffers have been included between the school and its neighbours in strategic locations, whilst also allowing space for maintenance and emergency access. The design proposal provides a unified site layout and a dynamic and vibrant school environment which is both conducive to learning and social interaction.

The site can be considered in two halves due to the position of the 'secure line' that continues from the southern façade of the building to the east and west site boundaries. The majority of the south of the site will only be accessed by pupils during arrival and departure or when supervised for sport, whereas areas to the north, west and east of the school are used by the pupils at any time of the school day as an educational resource and free play and social space.

School Grounds

The proposed external design provides most of the area requirements recommended within BB104 and all of the external requirements contained within the briefing documents. However, due to the limited total site area, full BB104 physical education and soft informal and social area recommendations cannot be accommodated on site. As agreed in the CEM sessions and advocated in BB103, external informal and social areas have been designed to maximize available hard surfaced areas. Consequently, the immediate perimeter of the building will be designed to have hard surfaced paving and tarmac to maximise flexibility and allow access for maintenance.

The design of the school grounds evolved through the CEM engagement process to accurately reflect the needs of the end users. Design responses included the introduction of

a subtle deterrent feature in front of the SEN entrance to visually and physically separate alighting pupils from the car park; moving sensory gardens away from sports facilities into easily accessible and quieter areas and, providing a soft buffer either side of the Primary play space.

External spaces have been designed in relation to internal adjacencies, with an external Technology area near the SEN Construction room, growing areas near the Food/ Vocational rooms and a generous, attractive entrance plaza near the AP entrance and SEN approach.

The design of the informal and social areas includes multifunctional open spaces that allow for informal games and also various smaller seating, socialising and external teaching spaces. Designs show scope for shade structures and outdoor fitness equipment, along with durable seating features and dense planting where required to soften boundaries to residential neighbours and the Green Belt; all cited and specified to avoid creation of hiding places or climbing aids.

The porous macadam MUGA would be marked out for basketball, tennis and football and the 3G pitch would accommodate 5 a-side football and hockey. Each would be enclosed with sports fencing with additional netting to prevent ball escape. The 3G pitch and its AP footpath approach fencing, enclose the AP habitat area and this area is screened from the car park by the cycle stores; with the AP cycle store being clearly visible from the school office for passive supervision.

Hard and Soft Informal Social Spaces

Current proposals for hard and soft informal and social areas include generous space for habitat and growing areas, covered spaces, and outside classroom/curriculum areas around each school zone, allowing all year groups to gain easy access to a plethora of outside spaces and resources, above and beyond BB103 and BB104 recommendations. There is increasing evidence and awareness that taking the curriculum outside of the classroom has multiple benefits for learning and development, along with the restorative

and calming effects of viewing ‘nature’, and this emphasis on the external landscape is particularly relevant and required within an SEMH context.

Around the majority of the school’s periphery are hard surfaced spaces that relate with the internal layout to provide free-flow into stimulating outdoor learning environments. These spaces will be subdivided through seating, planters and floorscape detailing to create areas for socialising, informal play and outdoor teaching. Shrub and tree planting around these areas will provide all-year seasonal interest, shade and shelter as well as biodiversity enhancements and screening of retained fences and/or residential receptors within close proximity to the boundary.

5.05 Landscape Design Materials

Hard landscape surfaces

Care has been taken to specify robust and cost effective materials across the site which will meet functional demands as well as provide an attractive and appropriate external environment. The main arrival space and other strategic paved areas will be surfaced with pcc block paving with natural aggregate. An area within the AP, SEN and Primary grounds will comprise matching pedestrian loaded block paving to differentiate a multifunctional space. Edging will comprise of pcc edging, standard BN road kerbs and vertical metal edging to planting beds in front of the SEN entrance.

Growing areas will be surfaced with self-binding gravel laid over a plastic paving grid system. Minibus bays and ‘soft buffers’ to Primary will be reinforced grass. Other pedestrian areas, the vehicular entrance and parking areas are to be constructed of impermeable hot rolled asphalt. A 400mm wide strip of PCC deterrent paving will be installed adjacent to the façade to provide open window collision protection.

The 3G will include a multi-purpose synthetic turf (sand-filled, sand dressed or needle punch carpet) with a shock pad. The MUGA will be open textured porous macadam. There is the opportunity to use bound rubber mulch under play equipment.

External Furniture

The scheme uses a modern palette of external furniture, specified to ensure it is appropriate, robust and safe for each intended age group and learning requirements.

Proposed seating will comprise of a simple suite of monolithic concrete units which has been selected to be durable, robust and attractive. Other street furniture will include robust timber picnic tables/seating in suitable contexts, stainless steel bollards and door stop barriers on main exit doorways. Informal seating will also be provided through the inclusion of suitably durable natural timber Unilog edging.

Space has been designed for shade giving shelters, trim trail features and fixed play equipment within the Primary play area.

Drainage

In terms of surface water drainage, hard standings will be designed with suitable falls to avoid standing water with traditional drainage gulleys and channels taking water to below ground attenuation areas.

Existing Trees

The site presently contains one tree of note, a mature Tree of Heaven (*Ailanthus altissima*), located at the south east of the site. This Category A tree would need to be removed in order to construct the entrance car park and Multi-Use Games Area. There are 3No. smaller Category C trees close to the eastern and southern boundary that would also need to be removed, and each of these three trees were recommended for removal within the tree survey.

The loss of these isolated trees can be mitigated through replacement planting.

A number of existing trees are located just outside the site boundary to the south and either side of the existing access road, within residential gardens, which have been picked up in the tree survey. Their canopies and roots potentially encroach into the site. It is anticipated that since there are existing areas of hardstanding within the root protection areas of these trees within the site, conflict with roots would be minimal. However, the advice of an Arboriculturalist will be sought in order to develop the detailed construction techniques and to inform any tree works so that the 3G pitch and access road works can be undertaken whilst safeguarding the retained offsite trees. Specialist no-dig techniques will be used where required.

An arboricultural survey in accordance with BS5837:2012 has been undertaken to detail the existing trees on site, recording their species, height, girth, spread and general condition. Recommendations of an Arboriculturalist will be followed in terms of correct methods of work to ensure the care of retained offsite trees during construction.

Proposed Soft Landscape

The planting scheme responds to the differing needs identified across the site.

The intention is to have ornamental planting in some areas to provide an attractive and welcoming arrival experience, spatial definition, sensory qualities and focal features, whereas more native species with increased habitat value and plants with educational resource value will be used elsewhere within the wider site. Specifically, this will include sensory gardens, as well as habitat and growing areas. Planting will predominantly use native or successful local species which are fast growing, durable and hardy with year round interest and low maintenance properties.

Shrub planting has been selected as low growing species around the building to ensure effective sight lines and

surveillance is maintained. Species will also provide evergreen and seasonal displays and scents.

Tree planting and retention of some existing trees will soften the development into its residential setting as well as provide valuable screening into and out of the site.

The existing trees within the Green Belt to the north will help screen northern classrooms and a number of retained trees within the south west corner of the site will add to the habitat value of this area.

There will be open areas of amenity grass that will be well maintained and kept short, along with areas of longer grass and wildflowers to provide seasonal displays and habitat value.

Boundary treatments –Fencing

The security strategy has been developed to suit the schools needs and preferences.

The site is mainly landlocked by neighbouring properties and Rabbsfarm Primary school with existing fencing, trees and vegetation as defensive landscaping. The existing specification and height of the fencing is in some locations below the OS requirement and proposals include for replacement. A detailed fencing condition survey will be undertaken in order to confirm if any panels can be retained and/or relocated, in order to avoid boundary issues, disturbance and/or unnecessary cost, but the current assumption is that new fencing and gates are required to the site perimeter and to separate the SEN School and the AP School from each other, as well as separation from the shared car park and Primary school area.

A 2.4m high vertical weldmesh fence will be placed around the perimeter of the site and will also provide the internal ‘secure line’ from the southern site boundary. A 1.8m version of the same type fencing will enclose the growing and tech areas, whereas the SEN habitat area will be surrounded by a 1.2m anti-trap metal bowtop fence.

Fencing around the pitches will be provided relative to the sports which they host and will comprise of 3m high ballstop rebound fencing around the MUGA/3G pitch with an additional 2m of ballstop netting taking the overall height to 5m to avoid ball intrusion into neighbouring properties.

The bin store will be enclosed by 2m high treated timber fencing and the existing boundary treatment will be retained along the access road between the new school gates and Falling Lane.

Management and Maintenance

All areas of soft planting will be subject to a minimum 12 months of establishment prior to handover to long term maintenance teams. The longer term development of the landscape will follow a structured approach and will focus on delivering an attractive external school environment which will also seek to protect and enhance the sites biodiversity. This will potentially be achieved through differential mowing of grass areas at different heights, coppicing of selected planting as well as potential for the school to engage in their own projects such as tree and bulb or produce planting.

6.00 Sustainability

6.01 Sustainability Statement (Sustainability and Energy)

The team will oversee all key areas of the design to ensure that a strategic approach to sustainable development is maintained, particularly in respect of energy/utility consumption.

The sustainability strategy responds to UK national policy guidelines on sustainability and sustainable development, including guidelines that address energy and sustainability.

Key sustainable considerations include

- Efficient design
- Minimizing energy consumption
- Low and carbon technologies
- Maximizing resource conservation
- Environmental impact
- Materials
- Pollution
- Waste and transport
- Future adaptability
- Mandatory and aspirational targets
- Building Regulation compliances.

The proposed development is not targeting BREEAM accreditation.

Continued liaison with the regional suppliers ensures feasibility of the scheme and that the proposals meet with Statutory requirements and that demands do not overburden local infrastructure.

6.02 Sustainable Design and Construction

Environmental Standards

Setting high standards from the outset helps to satisfy Building Regulation requirements and Planning criteria but also provide quality buildings that sustain the health and wellbeing of occupants and visitors.

Site Definition and System Selection

The project's proposal introduces a new build development incorporating classroom and teaching spaces, kitchen and dining facilities, Sports Hall, main hall etc... that are then supported by administration and meeting areas. The layout and orientation of the new development has been considered and modelling of the preferred architectural solutions undertaken to help establish environmental performance of selected systems and predict energy/carbon benchmarks against recognised targets. The new build proposal will be assessed by degree with a systematic approach to minimise energy consumption by application of efficient design. Introduction of low and/or zero carbon technologies has been considered, in relation to compliance and assessment against the London Plan area SAP 10 criteria. This has resolved in the incorporation of a PV array.

Energy Efficiency and Utility Consumption

- Building Envelope

The team propose that the new build envelope will be designed and built to achieve good thermal performance in order to moderate impact of the external climate. Fully dynamic representative pre-submission modelling using real weather data will be undertaken to evaluate Part L Building Regulations compliance using the latest 2015 compliance software at this stage. Feedback will allow constructive evaluation of the design and construction proposals towards achieving optimum performance and full compliance.

- Energy Efficient Plant and Controls

The new build systems will be capable of delivering heat/ventilation/cooling/lighting as required with zonal and occupancy controls fully recognising the differing demands of the building and areas within it.

- Heat recovery systems will be applied where proved viable to avoid energy wastage.
- Plant will be selected to achieve maximum efficiency in operation.
- Low/zero carbon technologies will be provided as part of a low energy strategy.

6.03 Utility Plant and Monitoring

Measures will be taken to minimise water consumption and conserve water supply

The new development will have independent primary water supply metering. The use of sub meters will be provided to enable process system leak detection monitoring.

The new development will have independent gas supply metering. The use of sub meters will be provided to enable energy monitoring and targeting.

The new development will have independent electrical supply metering. The electrical distribution systems will be fitted with local sub meters to enable energy monitoring and targeting.

A Building Energy Management System will enable globalised control and monitoring of the engineering systems in an auditable and efficient manner, within the new development.

Energy Performance Certification will be undertaken to characterise initial and long term performance of the building.

6.04 Plant Selection and Environmental Impact

Plant will be selected within prescriptive noise parameters so as not to create nuisance to occupants and/or any neighbouring sites.

6.05 Sustainable Design Strategy

The primary impact of the sustainability strategy on the design of the new development, is associated with achieving good carbon emission targets.

The team's approach to achieving the design targets is to follow the energy hierarchy of:

Be 'lean' – employ passive design techniques, where viable, to provide ventilation and free cooling together with an efficient thermal envelope and provide a balance between daylight and solar gain, but which should not compromise the education environment.

Be 'clean' – use energy efficient plant and controls.

Be 'green' – consider and use where possible,

renewable energy systems.

The building orientation has been carefully considered to minimise heat gains and maximise daylight.

As air leakage accounts for a significant proportion of the overall energy loss, then robust detailing of building fabric and identifying the surfaces in the building that are key to keeping the building lean. The simple layout of the school creates a less complex envelope, Therefore reducing awkward junctions and interfaces. Designing for air tightness is fundamental in keeping energy usage down.

6.06 Transport

Secure cycle parking is provided on site, although it anticipated this will predominantly used by staff as students are brought to school by taxi and mini-buses.

6.07 Ventilation

The proposed strategy maximises the full potential of the building's inherent thermal performance, cooling and passive ventilation, while still providing mechanical solutions to assist when required to effectively monitor and control carbon dioxide / indoor air-quality levels when required to adapt to external climate.

6.08 Daylight

It is recognised that daylight has a significant role to play in the effectiveness of an educational environment.

Good quality access to daylight benefits the students and staff through keeping links to the outside world, reference to time and triggering of non-imaging cells within our eyes which are partially responsible for managing our circadian rhythms (body-clock). Equally well managed daylight offers environmental benefits through limiting the hours during daylight that electric lighting is required, which not only reduces the energy load and carbon footprint but also extends the operational life (and maintenance cycles) of the luminaires.

Daylight Requirements

The Education Skills Funding Agency (ESFA) makes requirements for buildings to have a high calibre of daylight both for the benefit of the students and staff as a quality lit environment and for energy saving through limiting the number of hours electric light is required.

The quality of daylight within the classrooms is determined through Climate Based Daylight Modelling (CBDM). CBDM uses historic weather data and external illuminance levels to create a model of the changing lighting conditions (and directions) over a typical reference year. By applying these dynamic values within the simulation, it is possible to quantify the proportion of time (and when) particular illuminance (lux) levels occur.

There are two metrics established within the ESFA Output Specifications: Daylight Autonomy and Useful Daylight index.

Daylight Autonomy is achieved when a point within a room exceeds 300lux from natural lighting sources; there is no maximum limit within this bracket. With sufficient surround calculation points also achieving daylight autonomy, it is possible for electric lighting to be switched off (or dimmed significantly) under these conditions.

Useful Daylight is defined as illuminance values between 100 lux and 3000lux; at the lower end daylight is recognised as a contributor to the space and as illuminance levels rise through this range, electric lighting can be dimmed to a supporting role until a point where daylight autonomy is reached at which point electric lighting is no longer required. There is then a considerable range of higher illuminance values up to 3000lux where it is perceived that illuminance levels are too high and this is indicative of direct sunlight or the potential for glare. In circumstances where illuminance levels exceed 3000lux, blinds are often drawn to bring illuminance levels down to a more comfortable value and with appropriate contrast for any whiteboard, projector screen or computers in the room.

Daylight Strategy

The daylight strategy makes use of the optimised modular façade system, supported with rooflights where required.

Classrooms have maximized glazing to maximise natural daylight, without the need for artificial light. Modelling has been undertaken to determine the extent of day-lighting and provide an indication of the use of artificial lighting and therefore the energy saved by the maximum use of daylight, whilst maintaining the required lighting levels.

Brise Soleil has been included to provide shading to the south and east facades. The majority of teaching and learning spaces are orientated north/south to allow for controlled environmental conditions.

Glazing head heights are set as high as practical to allow for appropriate service zones above and classroom depths are set at a maximum of 7.5 metres to allow daylight penetration to the rear.

With a typical modular classroom of circa 7.5m * 7. 5m, approximately 35% of the outer-wall is glazed, striking a balance between maximising daylight entry and limiting solar gains and glare on the southern facades.

For rooms within the core of the structure, rooflights are introduced on first floor level. At ground floor level every effort is made to minimise the number of ‘active’ or long duration occupied spaces without access to daylight. Skylights provide light to the main hall and circulation space.

No computer-based simulation is an absolute match on reality and the tools are designed to provide confidence as to the effectiveness of the daylight environment within the spaces. To this end the scheme shows broad compliance with the objectives, when including spaces that fall within 2% of the target values (within the range of simulation error); overall, the building demonstrates a solid commitment to the application of natural light.

The SEN environment introduces a higher than typical proportion of smaller group or individual learning rooms. Around 80% of these smaller individual/small group learning rooms have been placed at the perimeter of the building benefitting not only from daylight but also the associated views out. Of the remaining independent learning spaces then only two are entirely internal, the others benefitting from access to natural light through rooflights. This commitment to daylight and views out in smaller spaces impacts classroom shapes, creating some small areas of ‘shadow’. These are outside of the core teaching realm and are clearly intended to be periphery storage or form the entrance circulation within the room, consequently these ‘notches’ have been omitted from the calculated results.

Blinds

We will provide dim out blinds to all teaching spaces. Based on the range of the daylight levels in simulations with only glazing, we estimate that teaching spaces will experience lighting levels of 10 – 200 lux with the blinds down. This large variation is a result of the variations in daylight levels throughout the year.

Conclusion

Overall the scheme shows the potential to encompass the daylight requirements and create a learning environment with natural light as a primary illuminant in a significant number of spaces.

When including for tolerances in calculations, the school is at an acceptable pass rate with the design demonstrating an appropriate balance of maximising the number of spaces with access to daylight and views out, given the increased number of L3 type spaces, with achieving the absolute DA and UDI requirements for the spaces within the super-block form factor. The standardised solutions with regards to glazing allow for a balance performance around the building.

The proximity of and orientation of building reduces any overlooking or overshadowing to the surrounding properties.

7.00 Access

7.01 Access

The overall access aim is to provide clear, legible pedestrian and vehicular circulation routes. These have been designed so as not to cause any unnecessary conflicts between user types and to provide safe and controlled access and egress.

Parking and vehicle access to the site has been kept separate where possible to segregate traffic from pedestrians as far as is practicably possible. This provides a safeguarded infrastructure from each access point to the new building entrances with good levels of passive supervision.

The school requires sufficient space for taxi drop off and pickup adjacent to the plaza space at the main entrance, with ample space for taxis to wait if required on site and appropriate staff and visitor parking.

Vehicular access to the school has been developed to meet the school needs and to work within the constraints of the existing site access. There are a total of 70 parking bays (including 6 disabled and 6 with electric charging points) and space for 5no. minibus. There are 4no. taxi alighting bays and 7no. permanent taxi drop off/waiting bays. Taxi alighting/waiting bays can be used for visitor parking and/or deliveries during the school day outside of drop off hours, subject to school management discretion. The masterplan design means that all vehicular movements are restricted to the south of the building.

Vehicle Access/ Staff Parking

On the southern edge of the site the existing vehicular entrance will be utilised, off Falling Lane that can accommodate 63no. parking bays. As required 6no. of these spaces will be provided with electric charging points.

Vehicle Access/Student Drop Off

Vehicles enter the site from the south and follow a one-way loop past the entrance, parking bays and multiple drop-off spaces before exiting. Most pupils are dropped off and picked up by taxi and minibuses, therefore a large area is required for vehicles to pull up and wait.

Pedestrian Access

Pedestrians arriving at the school enter in the south of the site, following a wide, level, accessible route towards the main entrance plaza. This space provides a prominent, an attractive, welcoming, safe and legible arrival experience / gateway into the school. It will be formed by high quality pre cast concrete block paving and include informal seating opportunities and a focal planting.

Disabled Access/ Visitor Parking

Dedicated visitor spaces have not been provided. However, visitors can make use of the drop off zone during the day when arrival and collection of pupils is not taking place. Level, step free access for all is provided throughout the site.

External levels have been designed to ensure that all external spaces and routes will be accessible and suitable for all users. In order to provide easy, level access for disabled drivers, six disabled parking spaces are provided at the school entrance.

Services, emergency and maintenance access

There is sufficient space for refuse vehicles to enter the site and manoeuvre to the bin store prior to exiting following the parking loop.

Vehicular gates around the building allow full maintenance and emergency vehicles to access the perimeter of the school.

Delivery vehicles will be scheduled to arrive outside of school drop off/pick up times, when drop off bays are available, providing easy access to delivery doors in the schools frontage. Street furniture will prevent vehicular access onto the paved entrance area, for pedestrian safety.

Cycle Access

It is anticipated that a number of the Alternative Provision pupils will travel to school via cycle. Cycle storage has been provided for pupils, in front of the school and close to the

school entrance. Staff cycle storage has also been provided within a separate storage area. 32 no. pupils storage spaces and 16no. staff spaces have been provided. Both storage areas are within a lockable, covered shelter. Cycle access onto the site is via the main pedestrian entrance. There will be signage to guide cyclists to alight at the entrance a walk into the site.

Other Access

There are several bus routes in the area linking commuters to the West Drayton. The U1, U3 & U5 bus routes pass the site to the south, on Falling Lane.

Community use spaces are located on the ground floor. These are zoned to allow different levels of access. Vocational spaces can be used by the community if required, as well as access to the hall for sports or performances. Externally, the community has access to the All-Weather pitch and MUGA. The community use strategy is outlined on the drawings and can be delivered in line with the Academy's Community Use Strategy.

Access to the shared kitchen is from the front of the school. Deliveries to this can be dropped off at the front of the school and trolleyed to the kitchen entrance. Bin stores are located away from the main arrival area, but within easy access from the kitchen.

The entrance lobby to the kitchens can become an indoor refuse storage area during the day, to avoid multiple trips to the main bin stores.

Access to play areas for both schools are clearly visible and zoned to enable staff to manage each group. All social and play spaces are separate from the 'front of house' visitor entrance and car park. To allow SEN students to use the All-Weather pitch and AP students to use the MUGA, access around the perimeter of the building can be used, within the secure zone or students can be escorted within the building from the centrally located changing rooms to each area.

8.00 Conclusion

This planning submission is for a building of educational significance. It will transform the delivery of learning in its students and will benefit a wider network of educational organisations across the West Drayton area.

The proposed design has been developed jointly with the Department for Education and Orchard Hill College Academy Trust, the end user. It is designed to meet their vision and has been subject to discussion with the Planning Consultations, to ensure good building design.

The rigorous approach has produced a proposal and we feel it responds well to the DfE and Academy's requirements and the unique needs of the pupils, plus Orchard Hill's approach to teaching and learning. It will therefore enable the delivery of high quality SEN and Alternative Provision education to pupils in and around West Drayton.

Following planning submission, engagements will continue with all stakeholders to ensure the scheme continues to meet all the statutory requirements, as well as the specific requirements of the client.

