

Barnsley BSF - Wombwell & Foulstone

Design & Access Statement

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1.0 Introduction Design & Access Statement

1.1 The Purpose of this Document

1.2 Scheme Overview

1.1 The Purpose of this Document

This Design and Access Statement has been prepared on behalf of Barnsley Partnership for Learning to accompany an application for Reserved Matters Approval (pursuant to outline planning permission 2007/2131) for a new 1600 place Advanced Learning Centre (ALC), with P16 and PRU facilities for a total of 1779, to replace the existing Foulstone and Wombwell schools. The proposal involves the creation of a new learning and community facility on the former Darfield Colliery located between the two existing schools, Foulstone to the north in Darfield, and Wombwell to the south. The application for Reserved matters Approval also includes further details for a drop off lay-by on Pitt Street and the new access from the Wombwell by-pass (Mitchells Way) which were approved under outline planning permission 2007/2131.

This Statement responds to the requirements of the Town and Country Planning (General Development Procedure) (Amendment) (England) Order 2006 for applications for development consent to be accompanied by a Design and Access Statement that explains the design principles and concepts that have been applied to the development and how issues relating to the access to the development have been dealt with.

The structure and content of this statement has been informed by DCLG guidance on information requirements and validation (March 2010) and 'Design and Access Statements; how to write, read and use them' (CABE 2006). The proposals that are considered within this Statement have been the subject of discussions with Barnsley Metropolitan Borough Council as approved in the outline planning application No. 2007/2131.

This Statement has been prepared by Aedas Architects in conjunction with the wider consultant team which includes;

- Environmental Consultants
- Landscape Architects
- Engineering Consultants
- Transport Consultant

The design team have worked together to consider the context of the site and identify the constraints and opportunities that this presents. The proposal is a consolidated response to this analysis.



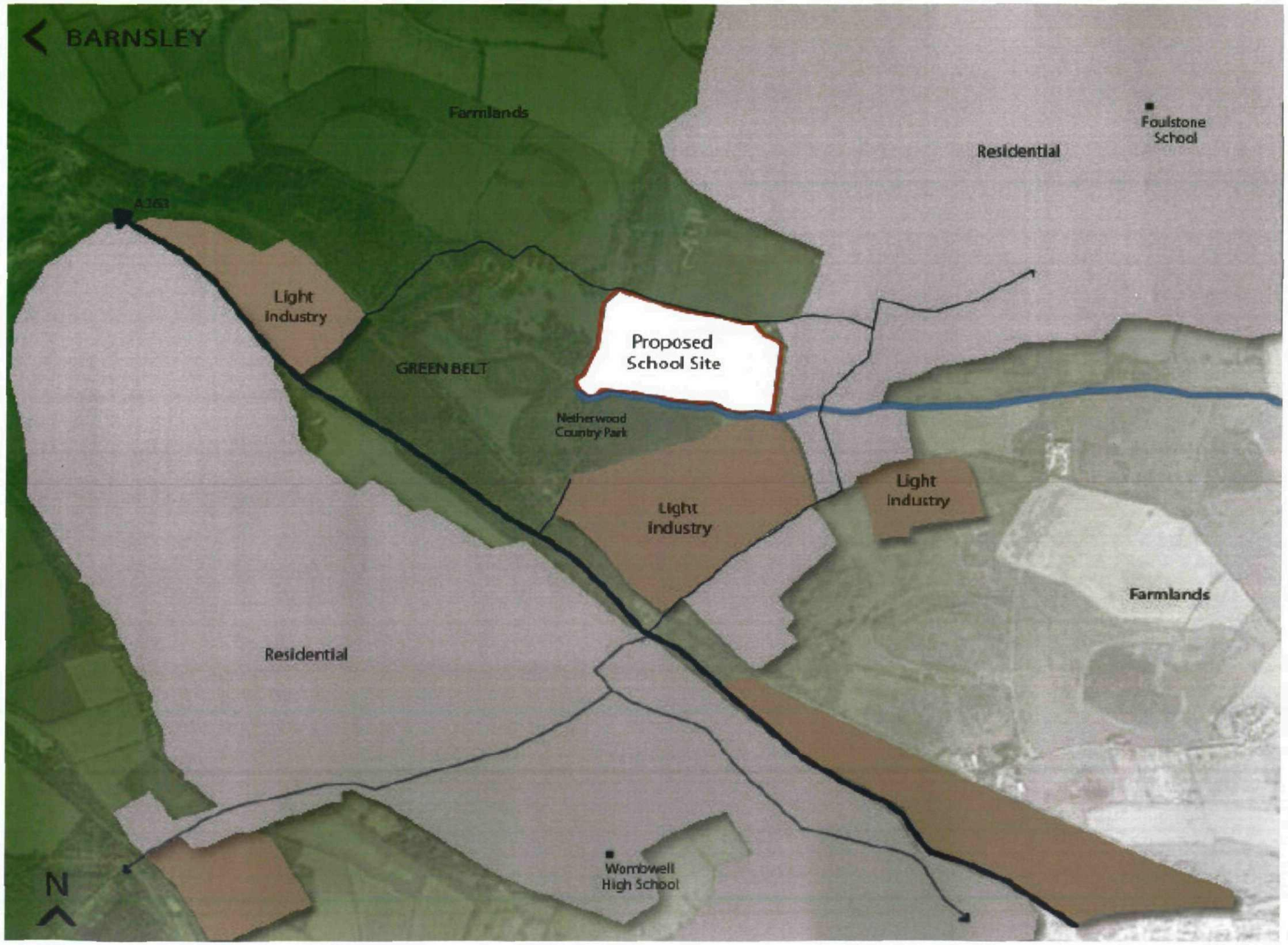
1.2 Scheme Overview

The new Foulstone and Wombwell ALC will be an 11 FE 11-16 secondary school for 1,600 students and 165 post sixteen pupils. It also will accommodate a pupil referral unit for up to 14 student, providing a total of total 1779 places.

The ALC will be the merger between two neighbouring schools, Foulstone and Womwell. The proposed specialism for the ALC will be Humanities & Creative Arts and this will play a significant part in allowing the two existing schools to integrate fully.

The proposed site measures approximately 13.2 hectares as is situated halfway between the two catchments areas of Darfield and Wombwell. A key requirement of the project brief was to ensure that pupils could walk to school or conveniently access the site by public transport. The application site was chosen as it is adjacent to the settlement of Darfield and is easily accessible being near five main bus routes. The site was formerly owned by the British Coal Corporation, and used as the Darfield Colliery until 1989 when the site closed and ownership was taken by BMBC. The site is currently used for recreational purposes, and is largely covered with trees and vegetation. There is little evidence of its history other than three mine shafts identified by concrete markers, as the site is now populated by dense woodland.

The new building will comprise, generally, of two/three storeys of accommodation with a proposed GIFA of approximately 14,244m2 and will utilise a limited, complementary palette of materials appropriate to context.



2.1 The SEN and Inclusion Policy

2.1 The SEN and Inclusion Policy

Barnsley has developed a clear approach to inclusion and SEN. In Foulstone and Wombwell High School, Barnsley has provided a designated provision in this area in the form of a Pupil Referral Unit for those at risk of exclusion from mainstream education. The nature of this space and its location has been developed to maximise the chances of young people using this space to thrive and achieve in a safe, secure and calm environment - with access to the high quality learning resources and experiences available in the main school.

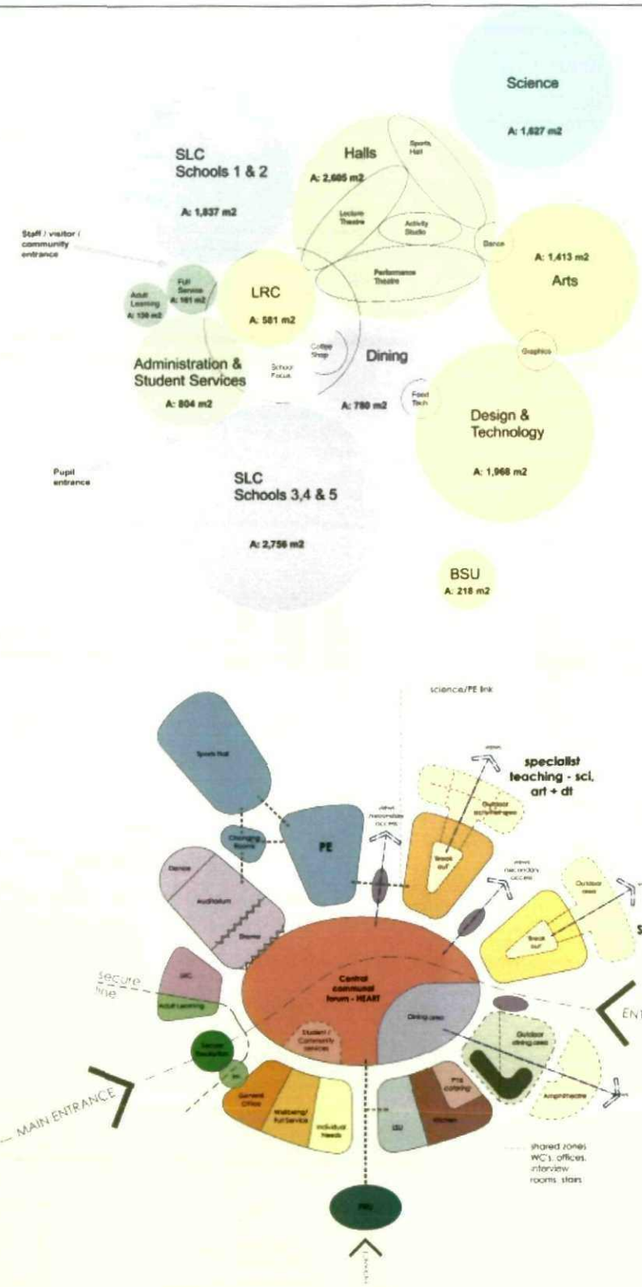
A key priority in Barnsley is the closing of the inequalities gap. This means supporting and developing all individuals' abilities and skills by providing personalised and differentiated curriculum provision including gifted and talented and other elements of SEN.

While the inclusive ethos and success of the school is not dependant on design solutions, the very nature of the design team's approach has been based on the policy of inclusion by recognising all learners are individuals with a diverse range of needs and therefore should be provided with appropriate spaces:

- A range of spaces within each small learning community for mentoring, group work, targeted support and independent study, without the need for exclusion or extraction to centralised support areas.
- A group or seminar room within each small learning community for small class working and additional support.
- Promotion of opportunities for alternative curriculum provision through the design of high quality vocational and specialist spaces
- An SEN resource area is provided within each small learning community to offer a highly resourced, calm and pleasant space for those learners requiring specialist intervention unable to be provided within the more conventional teaching spaces.

Beyond the more formal learning experiences it is essential to remember that the experience of the school will encompass both movement around the school and the informal curriculum encountered during social time and interaction with other learners. The design team has therefore provided a scheme that supports this through:

- A range of dining and social spaces that can provide a calmer more personal and familiar environment for those who find large *and energetic spaces too challenging.*
- External spaces that offer quiet seating under cover through to hard play areas for more active pursuits.
- An accessible site and building, to recognised standards
- Tactile and visual signals incorporated into the final design solution in consultation with the school to aid wayfinding, a sense of ownership and belonging within the building.



3.1 Site Description and Condition

3.2 Site Context

3.3 The Outline Planning Permission and Infastructure Requirement

3.4 Relevant Design Policy

3.1 Site Description and Condition

The site is greenfield, partly wooded and sits between farmlands to the north and Netherwood country park to the south. In terms of topography the western part of the site has a significant fall from the northern edge of the site to the river Dove. This fall is *equivalent to a storey in height. The remainder* of the site is reasonably level.

The northern boundary is formed by Pitt Street and the southern boundary by the river Dove. The western boundary is formed by diverted footpaths and bridleway, with the eastern boundary defined by residential accommodation.

A limited part of the site is within an area of higher risk of flooding. Present access to the site is via a grassed pathway from Pitt Street, or over the existing brick bridge in the South Western corner of the site over the river Dove.

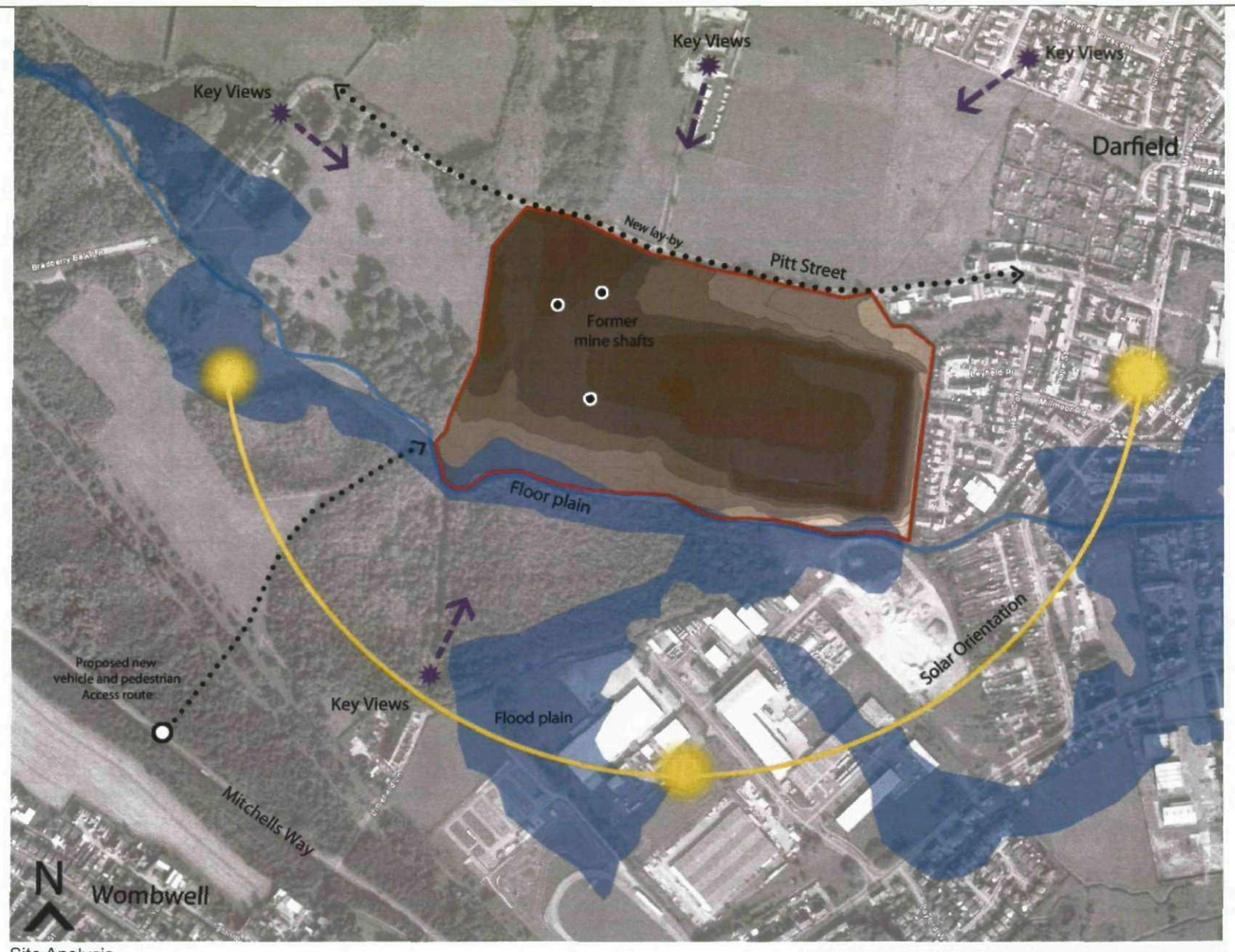
In terms of key views, those out of the site are predominantly to the south and west across Netherwood Country Park and north to the farmland beyond Pitt Street.

The location of the site and the existence of predominantly mature tree and dense vegetation cover, combined with a moderate slope means that views into the site will be limited. The density of the perimeter vegetation is such that the site will remain obscured during the winter months. At close range the public footpath to the west of the site within the Netherwood country park affords the best views into the site.

Because of the factors noted above and the site's location in the valley between Darfield and Wombwell, the only significant long distant views are from the north east of the area. The most prominent long distant view into the site would be from Venetian Crescent in the northern area of Darfield (i.e. upon the hill).

Although classed as a greenfield site, there is historic evidence of colliery, clay pit works etc with associated contaminated ground that will require remediation prior to full development of the site.

With the exception of 3 no. former mine shafts present on site, we are unaware of any significant historic or archaeological features of the site.



Site Analysis


Panoranic View Looking *South Across Site*

3.2 Site Context

In terms of surrounding land uses the nearest built development is to the east of the site and comprises residential uses. The adjoining housing estate is of limited architectural value. However the open, rural nature of the site along with the predominantly 2 storey scale of the surrounding properties does require further consideration.

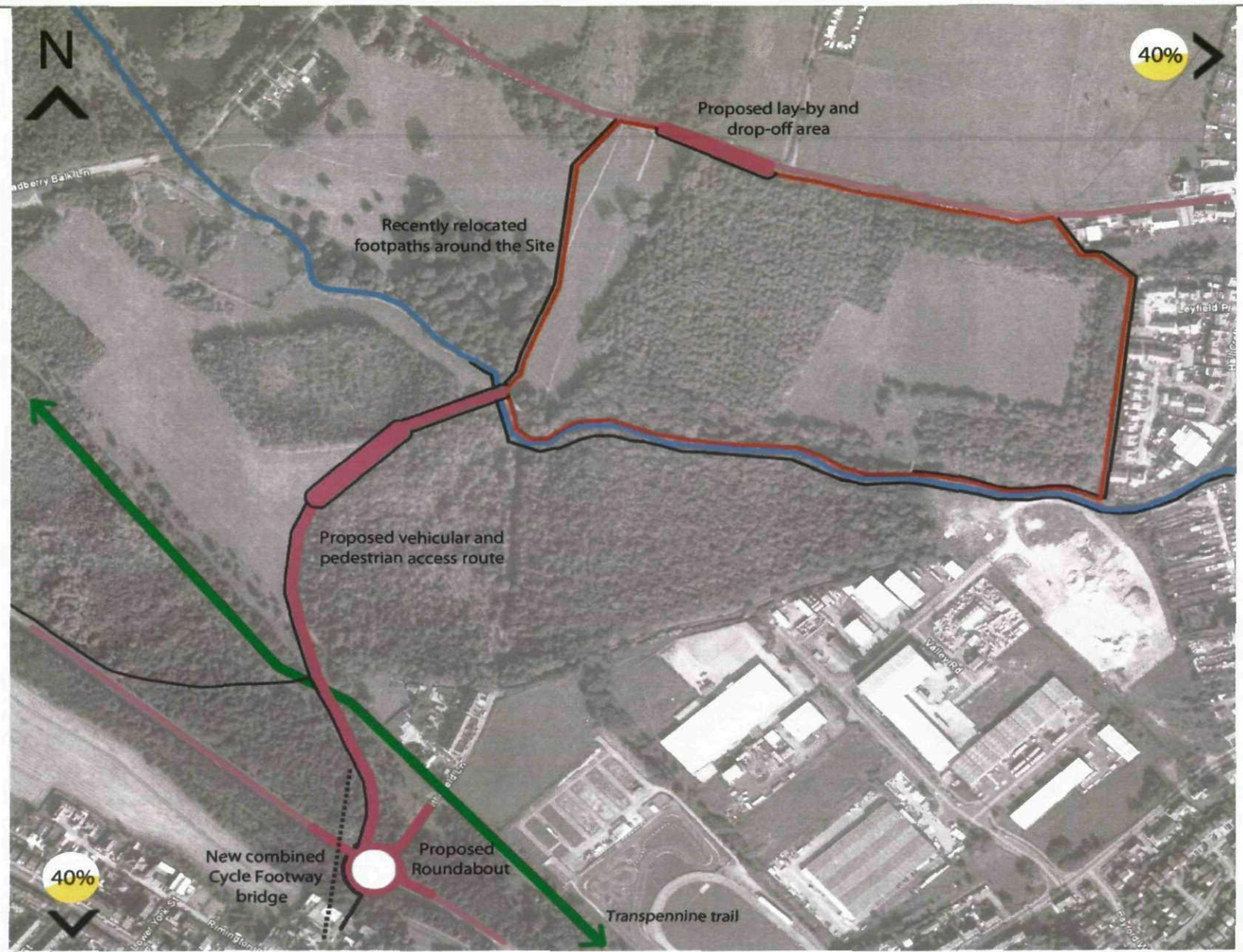
3.3 The Outline Planning Permission and Infastructure Requirement

Due to the sites rural nature, there are significant infrastructure issues to be addressed by the project. Outline planning permission (2007/2131) has already been granted for the school where means of access was approved with all other matters reserved. To facilitate access to the wider site an extensive list of infrastructure requirements has been identified:

- A new roundabout is required to be constructed off Mitchells way to create a brand new vehicular access to the site across Netherwood country park.
- The creation of this access is to accommodate cars, coaches, bicycles and pedestrians.
- A new footbridge and cycleway across Mitchells way to connect the new access road to the Wombwell residential area.
- The diversion of a bridleway to the western edge of the site
- The creation of a bus lay-by to Pitt street to allow pupil drop off from the Foulstone catchment area
- The (un-adopted) extension of the footpath and cycleway along Pitt Street to create a single northern site entrance

The outline planning permission also places a number of conditions that will have bearing upon design resolution. These include:

- No building to be located over or within 3 m of the sewer.
- Removal of existing trees and hedges limited to those indicated in the application
- Creation of access infrastructure noted in the introduction to this section.



Site Access


Panoranic View Looking East Across Site

3.4 Relevant Design Policy

PPS1: Creating Sustainable Communities

PPS1 sets out the Government's commitment to sustainable development, highlighting the importance of urban regeneration, prioritising the re-use of previously developed land, securing mixed-use development and concentrating new development in town centres and locations similarly well-served by public transport. It also promotes the efficient use of land through higher density mixed use development.

PPS1 states that to ensure sustainable development, high priority should be given to development proposals in locations that are easily accessible by foot, by bicycle or by public transport, rather than by car. This includes access to jobs, health, education, shopping, leisure and community facilities.

Within PPS1, Local Planning Authorities are encouraged to:

- Give priority to re-using previously developed land;
- Create sustainable patterns of development;
- Create usable, durable and adaptable places;
- Make more efficient use of land, and
- Promote good design in development.

PPS1: Climate Change Supplement

This statement supplements PPS1 by setting out how planning should contribute to reducing emissions and stabilising climate change and take into account any unavoidable consequences of planning.

Consideration of the environmental performance of a proposed development, particularly taking into account the climate that the development is expected to experience of its projected lifetime, is encouraged.

The design of new development should therefore:

- Take account of landform, layout, buildings orientation, massing and landscaping to minimise energy consumption
- Deliver a high quality local environment
- Provide public and private open space as appropriate
- Give priority to the use of sustainable drainage systems
- Provide for sustainable waste management; and
- Create and secure opportunities for sustainable transport

The effects of the proposal on existing and proposed development in close proximity should also be taken into consideration.

By Design (DETR/CABE)

It is now a requirement of PPS1 that regard should be given to good practice guidance set out in 'By Design'.

'By Design' highlights the fact that good design is important everywhere and the creation of successful places depends on the skills of designers and commitment from those who employ them, as well as input from the planning system. The key aspect it focuses upon includes the design of buildings and spaces, landscapes, roads and movement systems. It also ties in with both PPS3 and the Urban Task Force report by seeking to enhance the quality of urban development through a move from reliance on prescriptive development standards towards a more design led approach with a positive emphasis on place making.

'By Design' states that successful streets, spaces, villages, towns and cities tend to have characteristics in common. These factors have been analysed to produce principles or objectives of good urban design. They help to remind us what should be sought to create a successful place. 'By Design' lists the objectives of urban design as follows:

- Character – a place with its own identity. Planning should promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, landscape and culture.

- Continuity and enclosure – a place where public and private spaces are clearly distinguished. Planning should promote continuity of street frontages and enclosure of space by development which clearly defines private and public areas.

- Quality of the public realm – a place with attractive and successful outdoor areas. Planning should promote public spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including disabled and elderly people.

- Ease of movement – a place that is easy to get to and move through. Planning should promote accessibility and local permeability by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport.

- Legibility – a place that has a clear image and is easy to understand. Planning should promote legibility through development that provides recognises routes, intersections and landmarks to help people find their way around.

- Adaptability – a place that can change easily. Planning should promote adaptability through development that can respond to changing social, technological and economic conditions.

- Diversity – a place with variety and choice. Planning should promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs.

PPG 13

PPG 13 sets out the government's objectives that integrate planning and transport at the national, regional and local level. The guidance seeks to;

- Promote more sustainable transport choices;
- Promote accessibility to jobs, shopping, leisure facilities and services by public transport, reducing the need to travel especially by car.

A key objective of PPG 13 is to ensure that jobs, shopping, leisure facilities and services are accessible by public transport, walking and cycling. Local Planning Authorities should give particular emphasis to accessibility, in identifying preferred areas and sites where such land uses should be located, to ensure that they are located where they will offer realistic, safe and easy access by a range of transport modes, not exclusively by the car.

The Development Plan

Regional Spatial Strategy

The issued RSS offers little in terms of design guidance which is relevant to this proposal. Policy ENV5 seeks to encourage green technologies and requires 10% of energy to be sourced from decentralised or renewable / low carbon sources. This policy also encourages the orientation and layout of development to maximise passive solar heating.

Barnsley UDP (2000)

In accordance with Policy GS8, the construction of new buildings in the green belt will not be permitted unless these are for:

- Agriculture or forestry;
- Essential facilities for sport and recreation, for cemeteries, or for other uses which preserve the openness of the green belt and which do not conflict with the purposes of including land within it;
- The replacement of existing dwellings.

Other development in the green belt is not acceptable except in 'very special circumstances'. Policy GS9 requires that any development within the green belt should be an appropriate design and siting so that it does not incur significant harm to the visual amenity of it.

In terms of landscape design, Policies GS22, GS23 seek the retention of existing trees and the creation of new woodland, hedgerows and habitats as part of development proposals.

Policy BE6 requires that the council achieve good design standards for all types of development.

Proposals will be assessed according to:

- The quality of layout and suitability of scale of the development;
- The use, quality, design and landscape treatment of open land within the site and the area around buildings;
- The standard of detailed design and facing materials of proposed buildings;
- The suitability of the whole development for its proposed context and its relationship with adjoining land uses.

Supplementary Planning Guidance 25 Landscape Design

This supplementary planning guidance note provides further details on landscape design. This document sets out that good landscape design should:

- Soften the impact of new buildings on the surroundings;
- Integrate new development into its surroundings; and
- Provide an environment which is pleasant to live and work in.

4.0 Concept Evolution Design & Access Statement

4.1 Site

4.2 The Scheme

4.1 Site

The design has evolved through constant dialogue with the school in the form of meetings, workshops and presentation days. These meetings have been attended by governors, teachers and council representatives.

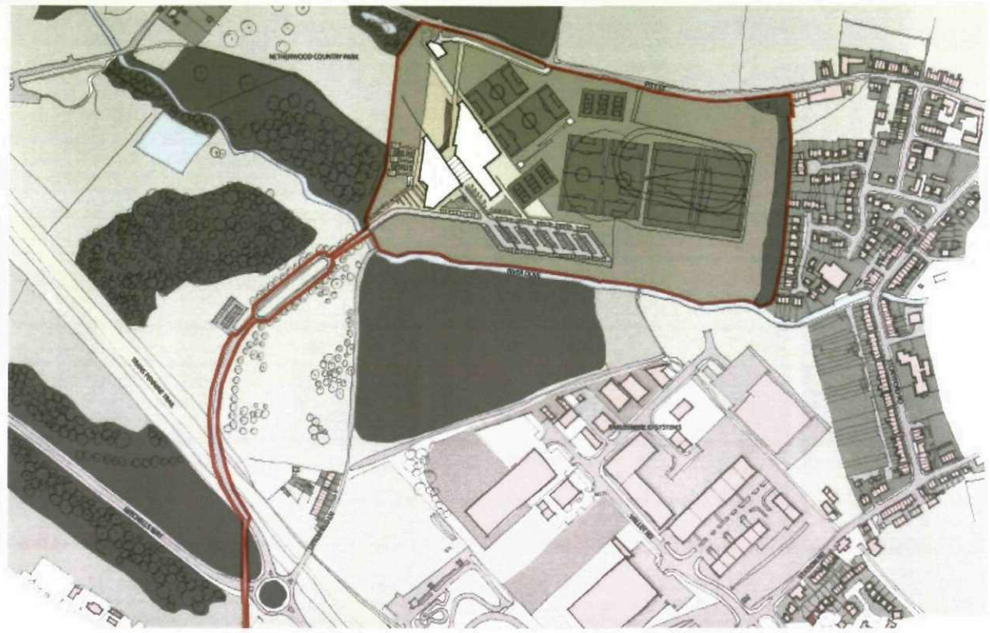
The constraints to the site included three known mine shafts that were identified on the site by concrete markers, and positioned in the west side of the site. The proposed building footprint cannot infringe on a 15 metre radius of the mine shaft markers. A 1 in 100 year flood plain was identified by the environmental agency as encroaching the south western corner of the site, and it is understood that no construction works can impact on this area. The proposed access from Mitchell's Way will bring pupils, staff and visitors into the South Western corner of the site.

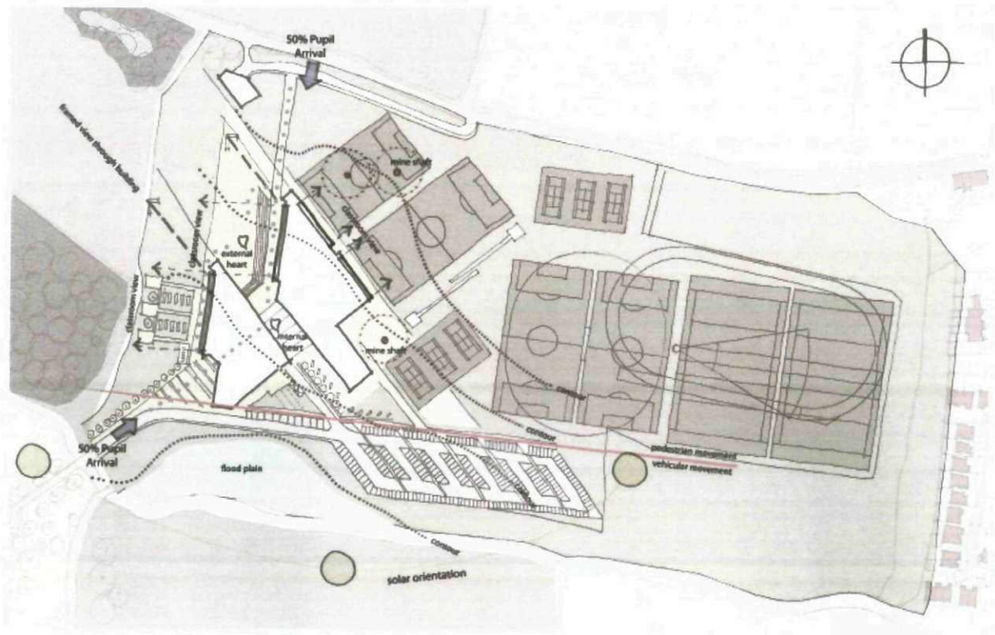
Given the playing field provision required for school to achieve a good spatial provision in relation to the BB98, the majority of the existing level surface area to the centre and east part of the site will need to be utilised for sports activities.

Due to the tight site constraints and playing field provision, the location of the building on the site was limited. The location of the building exploits the features of the site, creating split level schemes that step up the natural topography whist taking full advantage of views in all directions, and in particular the Netherwood Country Park.

To avoid conflict between vehicular and pedestrian movement within the site, there was a desire to position the proposed ALC close to the South Western bridge over the river Dove.

In response to the school's vision and the constraints of the site four possible strategies for the form and placement of the new building were developed. Each of these took a different approach to the site and the way in which internal spaces were arranged and managed.



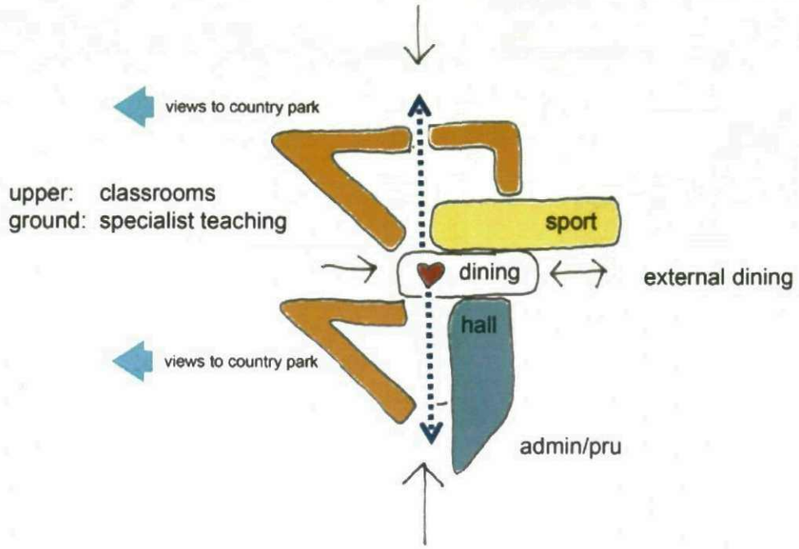


4.2 The Scheme

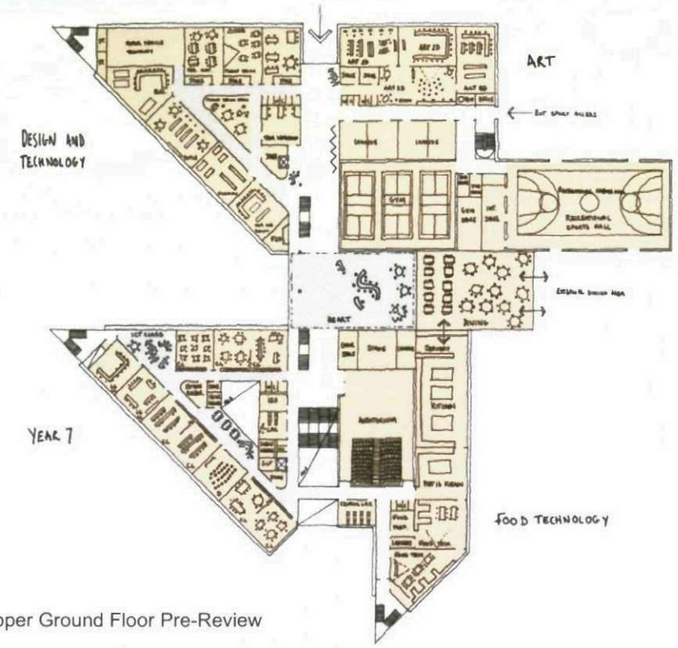
As the design developed the scheme containing the two triangular wings, together with aspects of a central circulation spine and dining/heartspace link, fitted with the aspirations of the school. The organisation of the ALC was required to be based around small learning communities or schools and will initially be based around year groups. The creation of "breakout" or flexible social hubs was an important aspect of these communities together with the location of small learning resource centres in each of these schools

The wings concept provided this SLC leaning base, split between KS3 & 4, whilst maximising the views over Netherwood country park. The majority of the specialist teaching accommodation was located on the ground floor allowing ease of access for community use, and providing the general teaching areas of the SLC's to function independently.
A very strong heart of the School was formed with immediate adjacencies to the central learning resource centre and the large performance spaces. The School were keen to see the development of a professional performance and theatre space which is a prominent space again seen on entering the heart space. Sports facilities were required to be co-located with the auditoria grouping together the large spaces which will be in demand by the community.

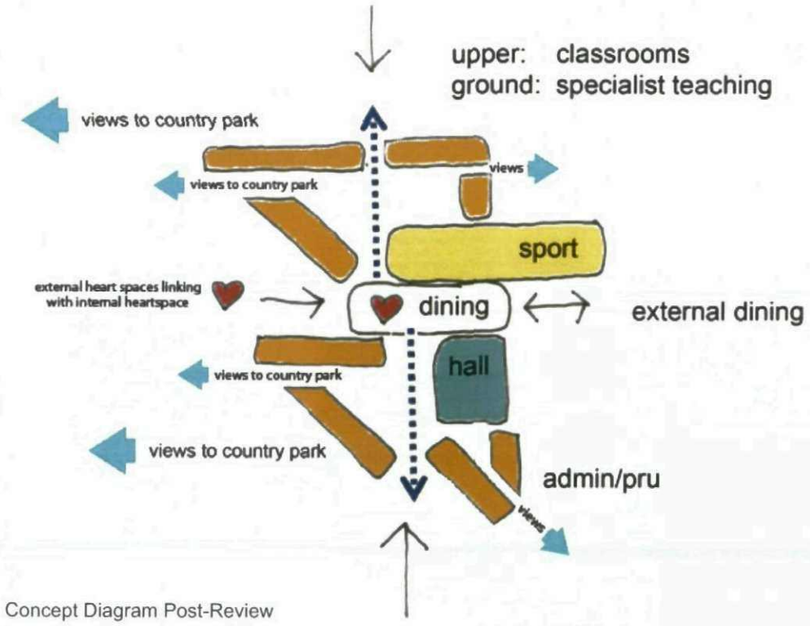
As the school design progressed, an external 'design panel review' was undertaken to evaluate and advise on the proposals. Feedback received from the review panel identified the desire to improve views towards the country park, and connectivity between the circulation spine and both the SLC's and heart space. These desires were achieved by relocating the stairs from the 'elbow' of the triangles, thereby creating attractive look out points and improving the relationship between the internal accommodation and the external woodland setting. By relocating internal staff accommodation and sliding the southern pavilion east, this improved sight lines of the northern pavilion whist breaking the continuous axis of the circulation spine.



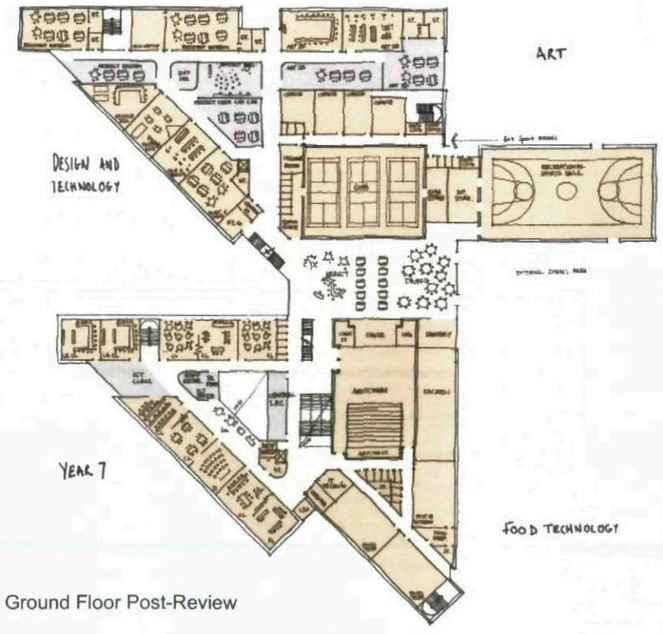
Concept Diagram Pre-Review



Upper Ground Floor Pre-Review



Concept Diagram Post-Review



Upper Ground Floor Post-Review

5.0 The Scheme Design & Access Statement

5.1 Design Development

5.2 Use

5.3 Community Use

5.4 Amount

5.5 Layout

5.6 Scale

5.7 Appearance

5.8 Lighting

5.9 Internal Circulation

5.10 Future Adaptability

5.1 Design Development

Foulstone and Wombwell High school is designed to accommodate 1600 pupils aged eleven to sixteen and 165 post sixteen pupils. It also will accommodate a Pupil referral unit for up to 14 student, giving a total of total 1779 places. This is a large school and needs careful consideration to ensure that staff and students feel a sense of community and value.

The Specialism of Humanities & Creative Arts can play a significant part in shaping the character of the buildings to allow the two existing schools to integrate fully into a coherent school.

As discussed previously, during the concept evolution, various scheme solutions were explored in response to the site and educational drivers.

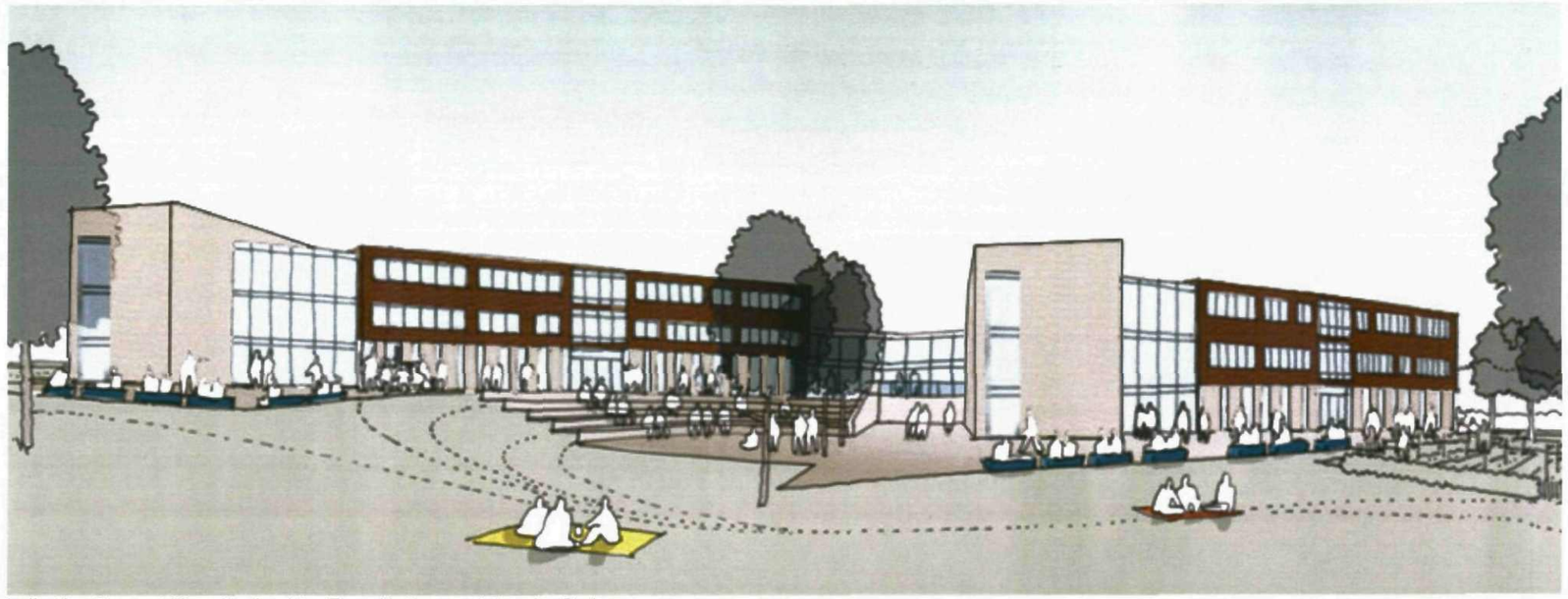
As several themes were developed, a key factor we were required to address was the core issues of intimacy between the individual (student) and the (school) community, and creation of a coherent whole as well as the creation of points of impact/surprise.

The most significant design driver has therefore been to divide the Advanced Learning Centre (ALC) into 5 distinctive 'Small Learning Communities'. These communities need to be designed in such a way that the whole building is intuitively navigable and makes the best use of the site, its setting and it views.

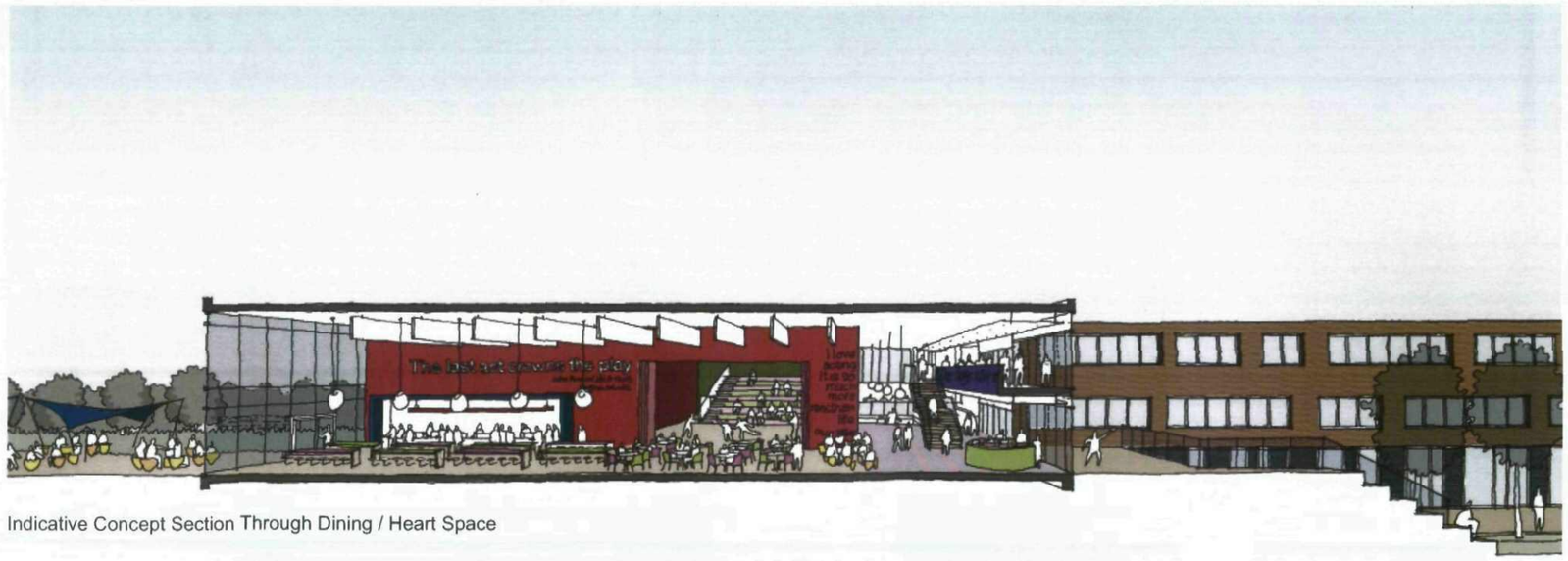
The second significant design driver has been the creation of a "Heart Space" as a distinct space where staff, students and (when appropriate) community can congregate to share knowledge and experience as well as interact socially. The location of this space is critical to the proper functioning of the ALC and forms one of the "three points of impact" This area needs to be flexible, welcoming and closely associated with facilities such as the Learning Resource Centre, café, dining and auditorium in order to encourage the widest possible use by the community when not being required for student use.

The entrance to the school is also defined as a "point of impact" representing the most tangible expression of the ethos of the new school. It should be open and welcoming but also informative and studious.

Finally the site is genuinely stunning, with a distinctly rural feel. The topography demands a very positive response with areas such as the heart space aligned to take maximum advantage of the site.



Indicative Concept Elevation Looking From Netherwood Country Park



Indicative Concept Section Through Dining / Heart Space

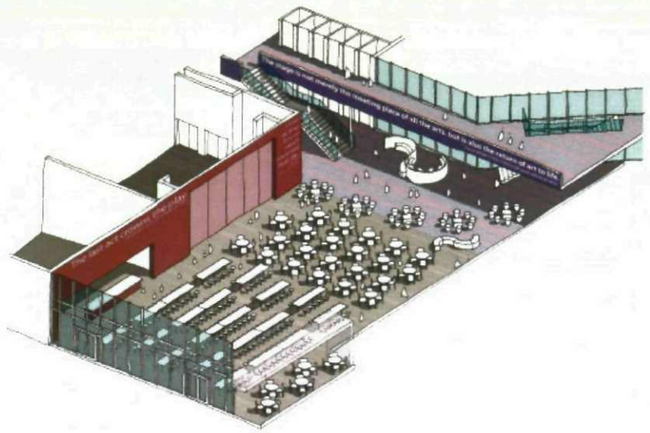
5.2 Use

The ALC will have a Specialism of Humanities & Creative Arts, and will be split into 5 learning communities incorporating special needs, resource areas, arranged around a heart space.

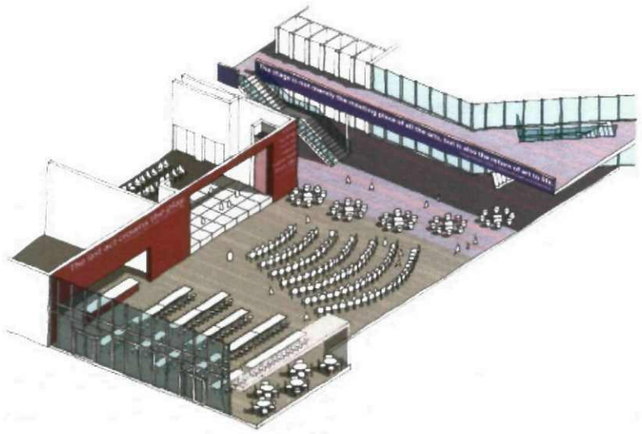
A multi purpose central heart space will link into the auditoria, and will primarily be used for school performances, assembly, community and social activities. In addition to this, the accommodation will comprise of dedicated teaching areas which will be adaptable to a range of learning styles, a Sport England standard sports hall, gymnasium, wet and dry changing facilities, music and drama studios and extensive learning spaces.

The proposed ALC is grouped in two three storey pavilions, primarily to reduce the massing of the building in the landscape, but also to allow the scheme to step up with the existing topography of the site. The orientation is such to optimise the use of natural light, and central atria spaces are used to assist in naturally ventilating the building.

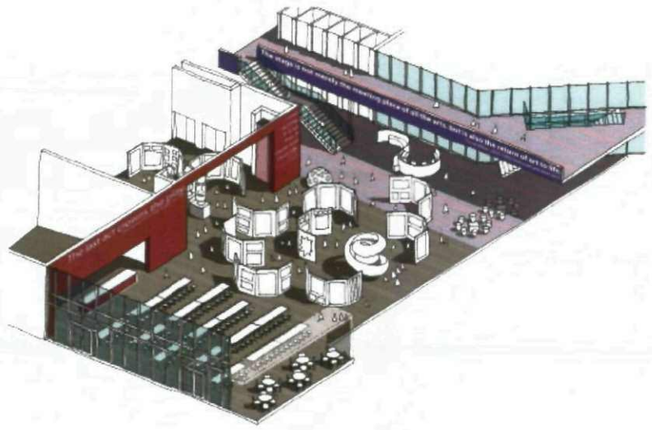
ICT, LRC, performance spaces, sports facilities, adult learning and a Cyber café will all be highly accessible to community. The building offers a variety of learning settings in different sized spaces and is an adaptable design to cater for future expansion or contraction of departments, or even an alternative education model,
Outdoor facilities will include hard and soft landscaped social areas for pupils, habitat areas for outdoor learning, a multi use games area, all weather pitch and grassed pitches for summer and winter games.



Heart Space Configuration - **Dining**



Heart Space Configuration - **Performance**



Heart Space Configuration - **Exhibition**

5.3 Community Use

There is a clear vision that the new Advanced Learning Centre will have a community focus. This occurs close to the entrance of the school with the specialist adult learning space. This facility is rendered even more accessible with the creation of a cyber café space within the controlled entrance lobby. In addition, the design of the school will also actively encourage community use through the careful disposition of the following spaces:

- Sporting provision- gymnasium, sports hall and fitness suite
- Halls and Performance spaces
- ICT
- Dining
- And other curriculum spaces as required.

While elements of community access will be beyond the conventional school day, it is necessary that the design does not prevent this usage from co-existing with learner presence on site with both extended use of the building by learners, and the wish to utilise the building for other adults during core school hours becoming a reality.

It is envisaged that community access would be via the main reception which would encourage a greater interaction with areas such as the adult learning, performance space, heart space and sports facilities. With all these areas acting as a "shop window" for the schools work. However it should also be noted that all these areas (and the general teaching areas which exist along this route) can be securely locked to avoid unauthorised access during community use.

The need to manage, control and monitor the interaction of visitors with young people on site will remain an important duty of the school, and as such we are proposing a scheme that we believe offers an amazing amount of flexibility in its operation, while still maintaining the confidence of the school that all users are safe.

The central heart space acts as the core zone for community use - providing access to the performance space, LRC for ICT use, and changing provision for the Sports facilities. It is envisaged that once through the controlled main entrance, visitors can be managed in terms of where they can access out of hours - without the feeling of being confined into a small and low value area.

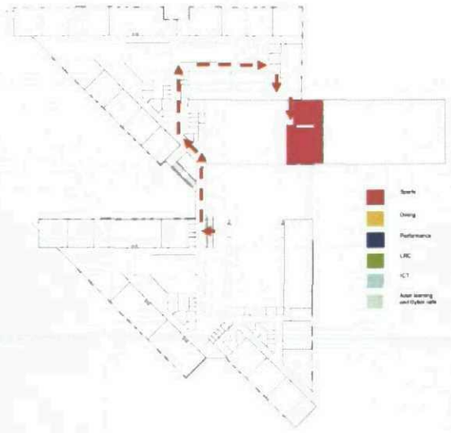
From this central space, each area can be managed independently. The use of the access control solution can offer different users access to different part of the school, including all specialist spaces, as well as access to more general learning areas.



Lower Ground Floor



Ground Floor



First Floor

5.4 Amount

The proposed school has been developed in response to 'Barnsley's Partnership for Learning' education and accommodation brief which relates to their education policy and local catchment area demand.

The overall provision of gross floor area is directly linked to funding by the Department for Education and Schools and is generally in line with the Building Bulletin 98 recommendation for a school of this size.

5.5 Layout

This section covers the building layout and access. The wider site layout and access from Mitchell's Way is covered in detail within the landscape section of this document.

The school has been significantly involved in developing a design brief that aims to provide a schedule of accommodation that reflects many of their current teaching practices but which also looks at new developments in curriculum and pastoral organisation.

The Advanced Learning Centre (ALC) is split into 5 Small Learning Communities (SLC), organised in year groups. These are then dispersed throughout the upper floors of "Pavilions" with specialist common accommodation located at ground floor.

These small learning communities are further organised into a lower school in the southern pavilion (years 7 and 8) and an upper school in the northern pavilion. (Years 9, 10 and 11)

This organisation could also allow for an alternative model to be adopted based on curriculum, dispersed across the 6 upper floor spaces occupied.

Each SLC consists of a wide range of spaces, including learning resource centre (LRC), Information Technology (IT) staff resource, learning support and informal group spaces. Each SLC has been given the opportunity to create a set of spaces that can be combined to provide lead lessons for 90 students. Finally Every SLC is also provided with support from the senior leadership team. However this degree of standardisation is tempered by the opportunity to give every SLC a unique character through the bold use of colour and vertical separation and the creation of "breakout" or flexible social hubs.



Indicative Internal Perspective of Small Learning Community

The arrangement of spaces will service a wide range of curriculum needs. The number of conventional teaching spaces provided with the ALC can comfortably accommodate 1600 key stage 3 and 4 learners within the SLCs with the further 165 post sixteen students distributed throughout the SLCs to provide mentoring opportunities to the key stage 3 and 4 students. Finally there is a separately accessed pupil referral unit which can accommodate a further 14 students located to the north of the "wellbeing" centre. This location allows the large space at the boundary to "flex" between well being and PRU thereby extending the functionality of both areas.

The SLC, PRU and Wellbeing areas, when combined with the specialist teaching accommodation of technology and science located on the ground floors, generate significant overall capacity which will allow for practice to develop as part of a CPD and transformation programme to fully utilise the less conventional flexible areas for a more personalised approach to curriculum delivery.

The Specialism of Humanities & Creative Arts has informed the design and plays a significant part in shaping the character of the buildings with the creation of a large performance space, able to break out into the heart space. This is located close to both music and sport and is therefore capable of offering high quality spaces, with associated informal learning and social areas, and with its proximity to the heart space gives all subjects the opportunity to colonise the flexible space for more formalised activities - or expand into neighbouring zones if required.
It is anticipated that as the school develops its practice through the small learning communities the solution proposed by the design team will enhance this journey - through the approach to ICT and furniture that seek to focus on developing variety within each SLC, while ensuring that the range of functionality can support a move to a more learner led, skills based model of curriculum experience.

The central heart that has been developed in the proposals is seen as a major element of the design, the opportunities of which are only just staring to be explored. We would anticipate that in time this space will become the vibrant beating heart of a school where the boundaries between social interaction and learning become less defined. Where the richness of a life lived in the pursuit of knowledge is one where respect for others and an understanding of ones place in the wider community is not just accepted but is joyfully embraced.

The open and inclusive approach to learning is prevalent throughout the ALC with wide circulation routes overlooking communal spaces. The entrance is welcoming and gives immediate access to the adult learning facilities via a "cyber café". The community will be further engaged, initially through the medium of sport with a well equipped sports hall, gymnasium and fitness suite.



Indicative Internal View of Dining Area, looking towards Heart Space and Performance Stage

5.6 Scale

The height of the scheme has been influenced by its context and the sloping topography of the site.

The massing of the proposed ALC has been dispersed into separate distinctive elements that sit as 'pavilion's in the landscape'. A glazed central link forms heart space that binds the pavilions together. The proposed pavilions sit comfortably into the existing landscape at two different levels, and step up the natural topography of the site from south to north.

The new building will comprise, generally, of two/three storeys of teaching and administrative accommodation. The maximum height of each element of accommodation is to be approximately 11.5m. This is added to locally at roof-top level by small elements of plant enclosures. The vast majority of plants has been designed to sit within the building, located above the kitchen and sports store areas, thereby reducing their visual impact significantly. Glazed roof lights will also add to the building height at localised positions identified on the roof plan. The upstand to the rooflights contain openable vents, and the height is directly governed by the minimum size required to achieve the desired natural 'stack effect', forming part of the sustainable approach commitments.

A shadow cast analysis has been undertaken to understand the effects of shadows cast by the new building massing and to ensure that it did not have a detrimental impact on classrooms or surrounding external activity areas, part of this analysis is indicated below.



Indicative External View Looking from Netherwood Country Park into the External Heart Space



Shadow Analysis Study

5.7 Appearance

In the design of the ALC we have elected to use a limited, complementary palette of materials appropriate to context. Low level materials will be selected for their robustness, where necessary to do so and shall be detailed to maximise life spans and simplify maintenance, thereby adding to the sustainability credentials of the building. The use of timber natural claddings is proposed to be used extensively at the first and second floor levels to blend in with the natural, wooded environment and surroundings. A sample board will be submitted as part of this application.

Curtain walling defines the primary entrances into the school, but also the glazed link between the 'two pavilions' that houses the main heart space and dining area.

5.8 Lighting

External illumination levels in compliance with BS5489:2003 shall be provided to all external areas where there is any movement of people or traffic. Generally lights are to be provided on posts to ensure fittings cannot be easily vandalised or broken.

Careful consideration has also been given to integrating the lighting design with Landscape and CCTV to ensure good surveillance can be achieved across the site.

The entire external lighting system (including the floodlights to the pitches) will be designed to minimise light pollution to neighbouring sites whilst providing optimum light conditions for safe use of the lit spaces and allowing the CCTV system to operate effectively at night.
All external lighting will be provided with time clocks and photocell controls to ensure that they are only switched on when necessary and will be fitted with high efficiency lamps to further minimise energy usage.

The external lighting systems will be aesthetically sympathetic to the Academy and surrounding areas and will be designed in accordance with Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.



Indicative Northern Entrance Approach Leading from Pitt Street Drop-Off Area

5.9 Internal Circulation

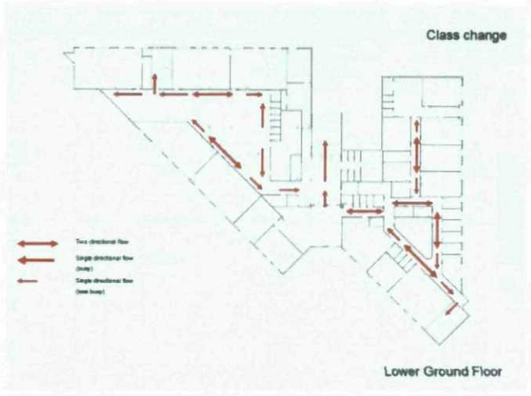
Clear and efficient circulation is critical to ensure the smooth running of a large school. As a result we have ensured that the routes are generous and well defined, with alternative paths to all rooms to avoid bottlenecks. We believe that there are three potential times during the day when the circulation routes will be tested. These are:

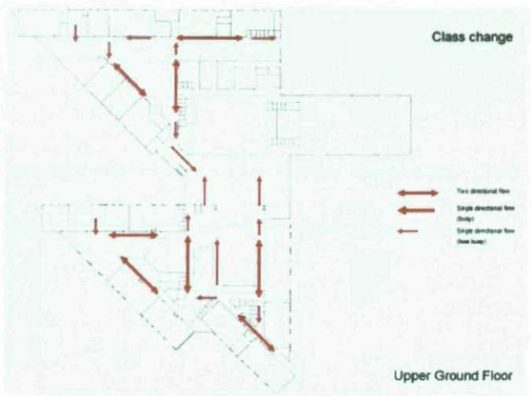
- At class change
- At lunch time
- At home time

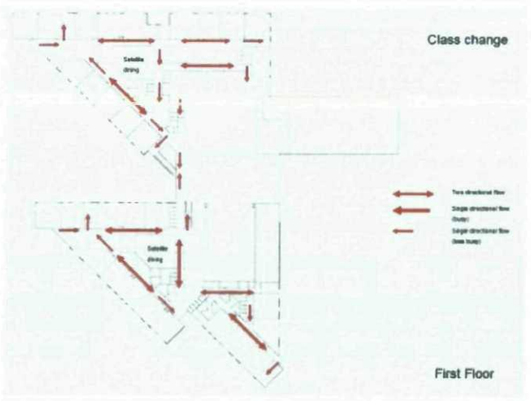
The movement generated at these times will be a combination of horizontal and vertical travel. During "home time" movement will typically be towards the staircases, generating a predominantly unidirectional vertical pattern. Throughout lunchtime, movement will be evenly distributed between horizontal movement to the staircases and informal dining, and vertical movement, down towards the heart space and central dining. Finally the movement associated with class change will be more horizontal in nature as students move between the departments, with multi-directional travel within the staircases.

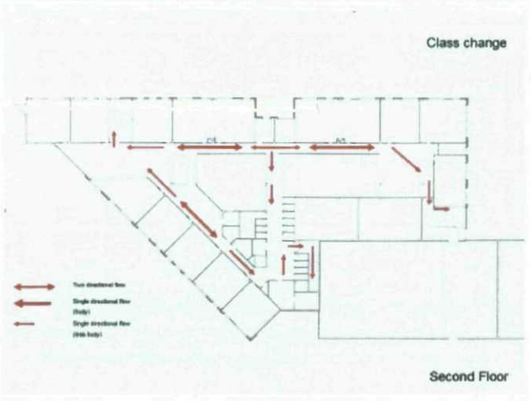
The building is divided into two wings (or "pavilions") connected by a large atrium space. Each wing also consists of two blocks which are also linked by smaller communal spaces, adjacent to the atrium space. Each block has its own staircase, and all staircases are linked by horizontal circulation routes (or walkways).
In order to allow maximum flexibility and learning space, corridors have been kept to a minimum, with enclosed teaching areas grouped around large open areas. These can also be used as teaching space when necessary.
If we now consider the two modes of movement separately, during the three most critical periods, it can be seen that the proposed strategy of "race track circulation" allows considerable flexibility and capacity within the layout.

At Class Change

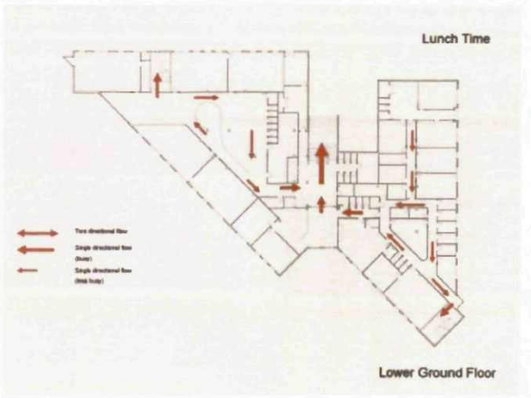


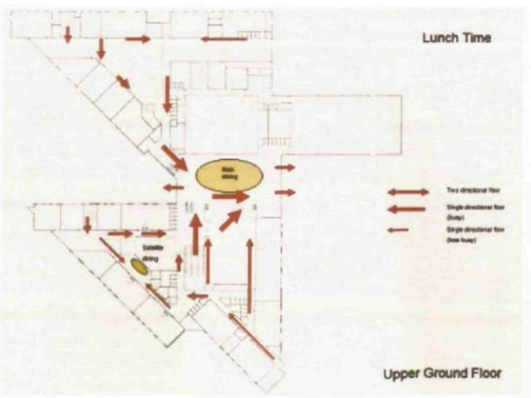






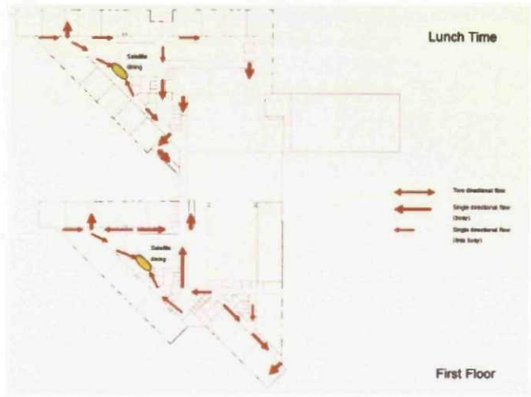
At Lunch Time

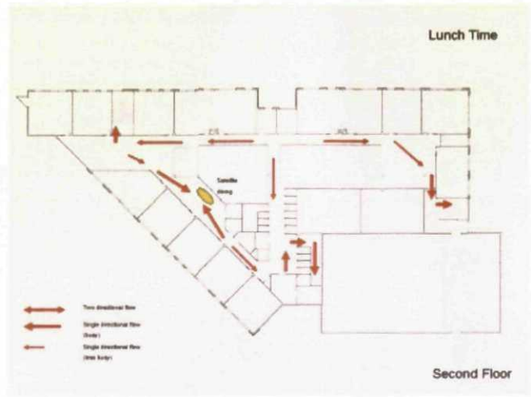




Horizontal movement

As discussed above, the primary source of horizontal movement will be during class change. During these times, depending on timetabling, much of the school will be in motion. However it can be seen from the above diagram that each individual block has at least two entry/exit points to adjacent blocks in addition to the main staircase. The maximum capacity of each floor of block is 270 students, and therefore if we assume that the students move equally between these points, there will be a maximum of 90 students in and 90 students out of each entry point. The minimum width of any doorway along these routes will be 1900mm, which has an effective capacity of 110 in either direction (850mm width required for the escape of 110 people). This capacity is well above the anticipated flow rates. In addition at the points of maximum congestion, immediately outside individual rooms, the creation of large communal learning areas at these points will ensure that there is ample spaces for the students





Vertical movement

At the end of the school day there will be a mass movement of the entire school in a very limited period (similar to fire evacuation) as pupils move towards the ground floor and the exits. Although there will be greater numbers of students using the staircases, the relatively large numbers will be mitigated by the predominantly single direction of travel, thus allowing the stair widths to be used to their full capacity. The widths indicated in the next section will therefore be easily capable of accommodating this movement.

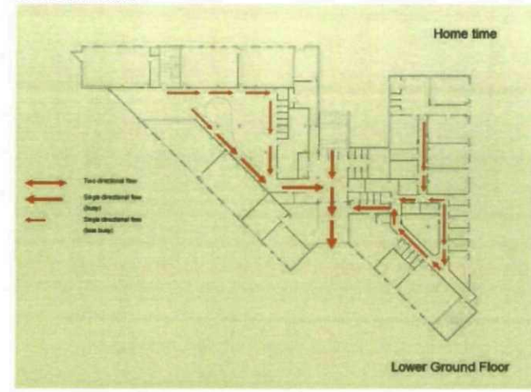
The use of satellite dining and a more flexible approach to lunchtime generally will see a reduction in the traffic to and from the formal dining area located on the ground floor. During the lunch period movement will be down towards the upper ground floor atrium and then out to the external areas. Once again this movement will generally be in a single direction and well within the design limits of the staircases

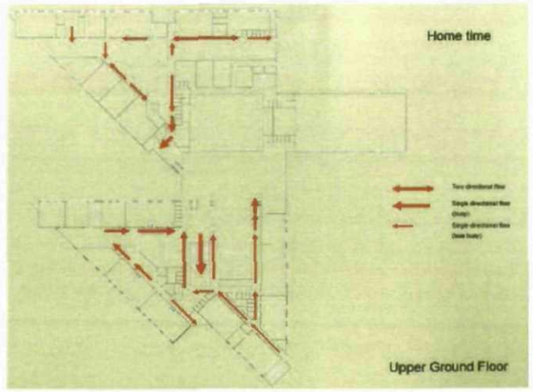
Although it does not generate the highest volume of traffic, the most challenging period will be during class change when movement will be in multiple directions. This will place the greatest load on all circulation routes.

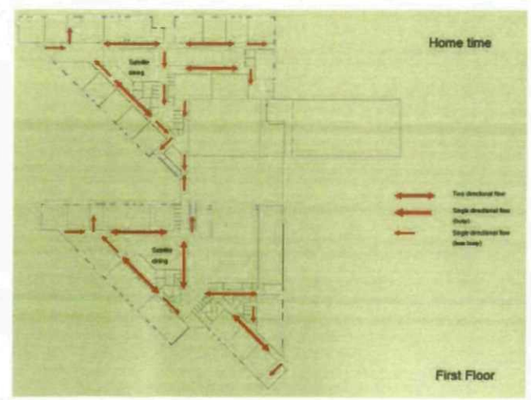
As stated in the introduction there are 6 main staircases of which 4 act as evacuation stairs. The 4 evacuation stairs provide the primary vertical circulation within each block, allowing relatively short travel distances within the two pavillions. In addition the central stairs within the atrium space allow rapid access to the communal functions within and around the atrium, such as dining, sports and LRC. The staircases have been designed for evacuation, with minimum widths of 1600mm between handrails providing a potential capacity for each stair of 420 people. Of course this figure assumes single direction of travel; for every day use a more reasonable capacity in two directions would be two thirds of this i.e. 280 people; With 9 classroom-equivalent spaces in the Small Learning communities at each floor, the potential occupancy of the top floor of the individual block is 270 students. Therefore even if all the occupants of the block chose to move from second floor to ground floor and vice versa, the stair's capacity would not be exceeded. In reality of course there would be horizontal movement between departments, further reducing the pressure upon stair cases. As a result we believe that the location and size of the 4 main staircases will considerably reduce the potential for poor behaviour in these traditional "flashpoints"

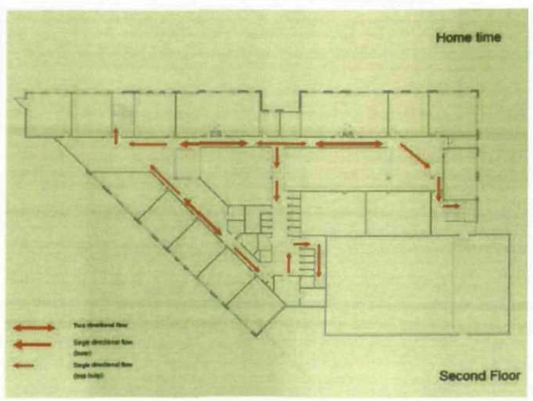
In conclusion we believe that the proposed disposition of staircases and circulation routes will have ample capacity to accommodate the 1600 pupils proposed.

At Home Time









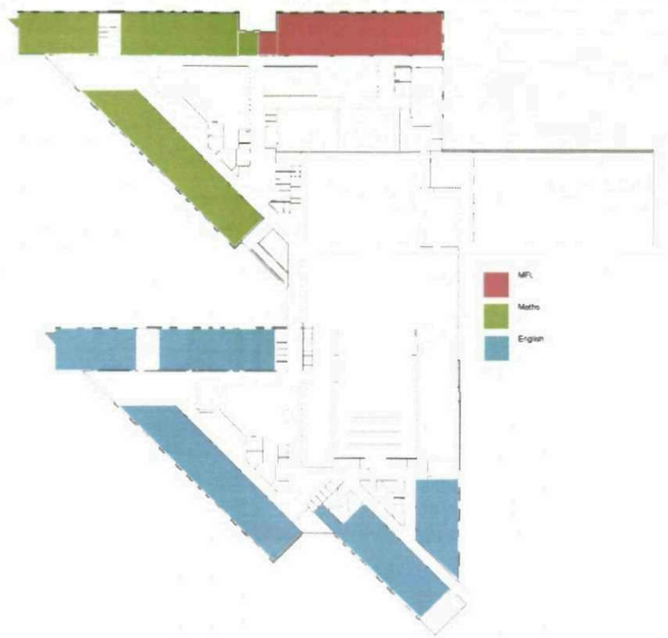
5.10 Future Adaptability

Owing to the ribbon concept of teaching space configuration, the dividing line between adjacent departments can, at certain junctures, move in either direction, thus enabling different numbers of general teaching rooms to be accommodated in different departments.

School buildings do not house static processes. Educational theory is constantly developing. Staff and management change and evolve. Thus the design of any school projects must have flexibility and adaptability at the very heart of it's ethos if it is to remain relevant to the lives of its users.

The use of individual spaces will be in a constant state of flux throughout a typical day, Staff will inevitably have their own preferred set ups for an individual lesson, students will make differing demands upon their environment. These changes will typically be handled by re-organising the loose furniture within the individual space. But we can also foresee that the evolution of a more blended approach to learning will make more stringent demands upon the space. We have sought to accommodate the greater demands of blended learning by providing a rich mix of set- use and multi-use spaces within each department. The twenty "conventional" classrooms located across two floors are grouped to provide 6 double rooms (through the use of moveable partitions); an open plan ICT space is provided to each floor at the "elbow" of each pavilion, with panoramic views across the open landscape. The open balconies which give access to the classrooms provide areas for small clusters of self directed learners. There is also a central LRC shared between the two floors of general teaching. Finally there are individual rooms for individual support. At the ground floor level of each of the two "pavilions, " there is specialist accommodation including technology and science. This range of spaces will allow a wide variety of group sizes and teaching styles to be accommodated, with no physical alteration of the spaces to be undertaken.

The building is constructed as a concrete framed solution, with clear spans created between all learning spaces. This will allow the demolition and relocation of intermediate walls to take place with the minimum of structural modification. In this way whole departments can have the majority of walls repositioned without the need to adapt the existing structure. At one level this may simply be the removal of a wall between adjacent rooms to increase the size of the learning area. We would expect this to be achieved over a half term break.



First Floor Plan Highlighting
a Faculty Based Configuration



First Floor Plan Highlighting
Flexibility of Teaching Accommodation

6.1 Introduction

6.2 Landscape Concept

6.2 External Learning, Social and Sports

6.3 Hard and Soft Landscape Materials

6.4 Access and Transport

6.5 Land Use and Ecology

6.5 Land Use and Ecology

6.1 Introduction

In order to comply with national guidelines, meet the requirements of the BMBC Building Schools programme the landscape proposals have been developed with reference to published guidance such as the DCFS Building Bulletins, which relate to the external environment:

- BB102: Designing for Disabled Children and Children with Special Educational Needs
- BB85: School Grounds. A Guide to Good Practice
- BB95: Schools for the Future. Designs for Learning Communities
- BB98: Briefing Framework for Secondary School Projects

These principles have been integrated to reflect the specialisms and priorities of the school, and have been developed through close engagement with senior school staff and governors.
In addition we have considered the relevant Sport England guidance to inform sports provision and optimise Winter and Summer games within the constraints of the site. This provides quality facilities encouraging use in the curriculum and by the community. The aim is to create a framework for dynamic educational environment that responds to the school's ethos and specialisms and can evolve over time. This is underpinned by the need to create an attractive and safe landscape that provides sheltered spaces and is fully accessible to all users.

The master plan embraces the principles promoted by the 'Learning Through Landscapes' initiative, recognising the whole school environment as a valued teaching asset that plays an important role in supporting the key stage curriculum.

Landscape Philosophy
The landscape setting for the new school plays an important role in providing an attractive backdrop for educational activities, play and social interaction together with providing the first visual impression to visitors. The proposed scheme pays due attention to the principles set out in the 'Learning Through Landscapes' initiative, providing spaces beneficial to the intellectual and social development of learners.

An attractive outdoor environment is proven to have a beneficial effect on the wellbeing of staff and students, and can help support differing learning styles which may not be appropriate indoors.

A strategic approach to the outdoor spaces has been developed beginning at the site boundary, particularly important on this scheme where the main entrance to the school is via a new traffic junction set some distance from the main school site.

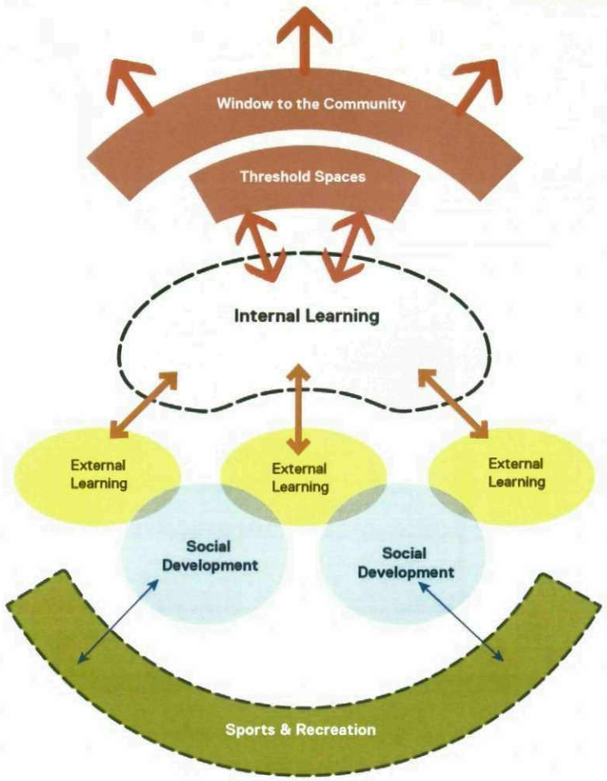
The new road junction is treated as the 'Gateway' for the school with branding signage located at this junction. This threshold space extends all the way up to the school building edge becoming increasingly more formal closer to the school as one travels through the Country Park setting.

In the spaces immediately outside the school it will be possible to express the schools specialism of creativity with student/ project work integrated into the plaza area. Good internal/ external adjacencies support use of the outside spaces, providing ready access and good natural surveillance. Beyond these spaces are opportunities for wider social learning again with good natural surveillance, increasing in scale as the spaces are offset from the building.

Furthest away from the building are the larger scale sport spaces linking through to the natural habitat beyond, again these are arranged with the smaller scale more intensively used facilities closer to the building.

This approach creates a variety of active and passive outdoor facilities for all key stage groups, and open spaces for outdoor teaching. Natural habitat areas link to the schools rural setting and provide excellent opportunities for environmental learning.

The whole school site has been designed site as an educational resource, incorporating flexibility for future change teacher and student development, seeking to exploit the natural characteristics wherever possible.



Grounds for Change: A Whole School Campus

Entrance and Approach

Ethos and Identity

Outdoor Classroom

Ecology and Environment

Social Development and Play

Vocational Space

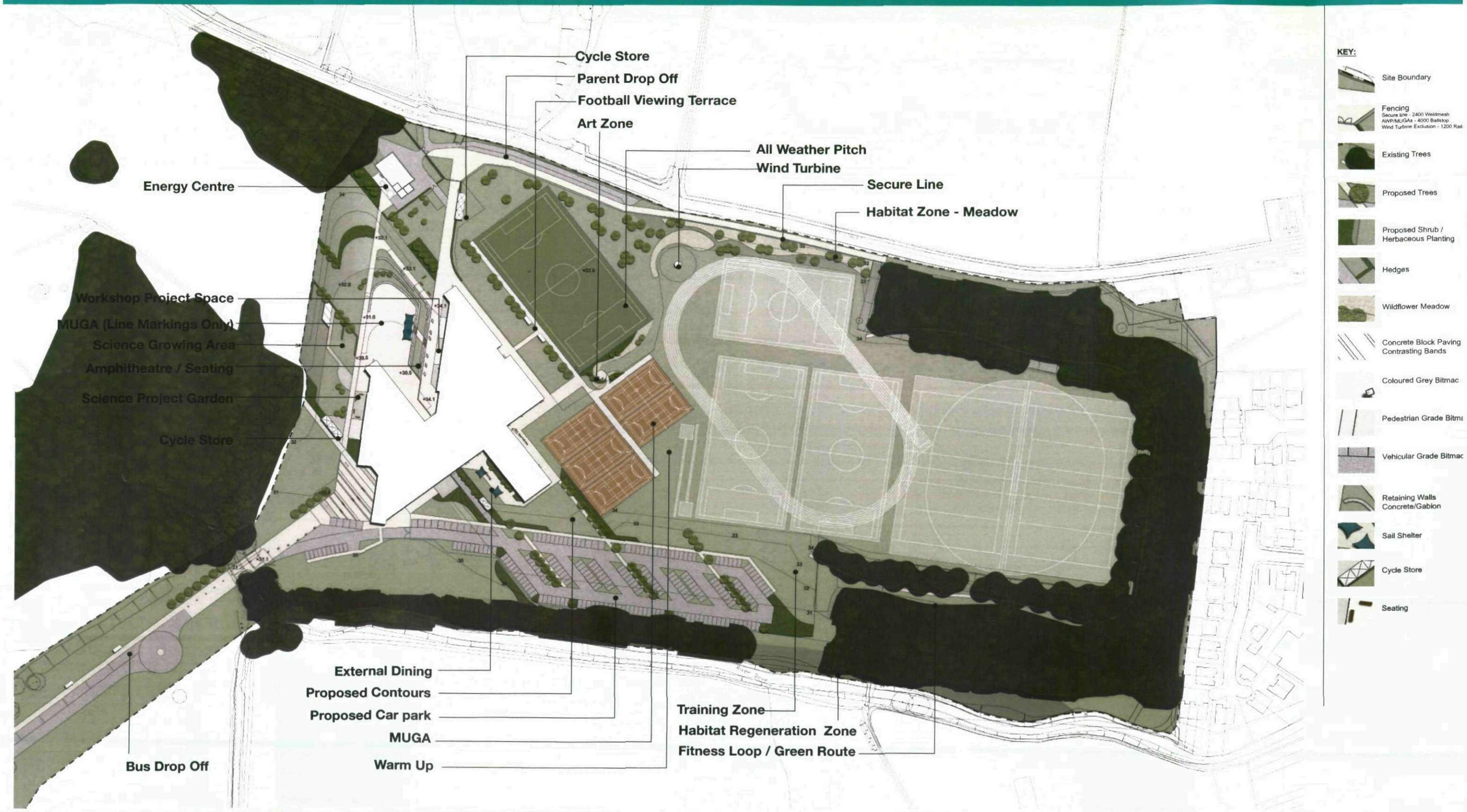
Sports and Recreation

Security and boundary treatments

Sustainable Community

Biodiversity

Schedule of BB98 recommended areas		
description	BB98 recommendation	Proposed provision
Nr of students 1765 Main site area 122,488 sqm		
Grass Sports pitches and All Weather Pitches	71,775 sqm	71,095 sqm
Hard Games	4,130 sqm	4,130 sqm
Hard informal Social Space	3,048 sqm	3,205 sqm
Soft Informal Social Space	5,213 sqm	5,800 sqm
Habitat	1,965 sqm	4,000 sqm


Cycle Store
Parent Drop Off
Football Viewing Terrace
Art Zone
All Weather Pitch
Wind Turbine
Secure Line
Habitat Zone - Meadow
Energy Centre
Workshop Project Space
MUGA (Line Markings Only)
Science Growing Area
Amphitheatre / Seating
Science Project Garden
Cycle Store
External Dining
Proposed Contours
Proposed Car park
MUGA
Warm Up
Training Zone
Habitat Regeneration Zone
Fitness Loop / Green Route
Bus Drop Off
KEY:
Site Boundary
Fencing
Secure line - 2400 Weldmesh
AWP/MUGAs - 4000 Ballstop
Wind Turbine Exclusion - 1200 Rail
Existing Trees
Proposed Trees
Proposed Shrub / Herbaceous Planting
Hedges
Wildflower Meadow
Concrete Block Paving Contrasting Bands
Coloured Grey Bitmac
Pedestrian Grade Bitma
Vehicular Grade Bitmac
Retaining Walls Concrete/Gabion
Sail Shelter
Cycle Store
Seating

6.2 Landscape Concept

The site for the new school is located in Netherwood Country Park, partly public open space, and partly agricultural land. Formerly the site has been a colliery but since closure there has been landscape restoration work involving significant areas of woodland planting.

The site slopes down from the northern edge bounded by Pitt Street towards the river Dove along the southern edge. The main body of the site is fallow restored agricultural grassland bounded to the east by tree planting over significant landscape bunds and beyond that some recent housing development. To the west of the open area is a plantation of dense woodland. It will be necessary to remove significant areas of this tree cover to construct the new school. As part of the Outline Planning Application areas for compensatory tree planting have been identified in the Country Park and on agricultural land near to the school site.

The landscape concept is to create a new school building within this parkland setting, integrating the landscape of the school into the wider landscape of the Country Park creating a seamless join between the school and the landscape setting rather than creating a landscape that is in conflict with its context.

A new access road is to be constructed from Mitchell's Way to the south. This will require a new roundabout junction off Mitchell's way and a new pedestrian bridge crossing over the carriageway. Closer to the School the new access will cross the river Dove requiring a new vehicle and pedestrian bridge. Because the school will serve two communities, Wombwell and Foulstone, there will be a requirement for entry from the northern and the southern edge. The school site acts conceptually as the link between these two communities.

Planting will be of a native woodland type reflecting the local Biodiversity Action Plan and the landscape of the Country Park. Nearer to the school building more formal and smaller scale planting will be incorporated to create a more visually stimulating environment.

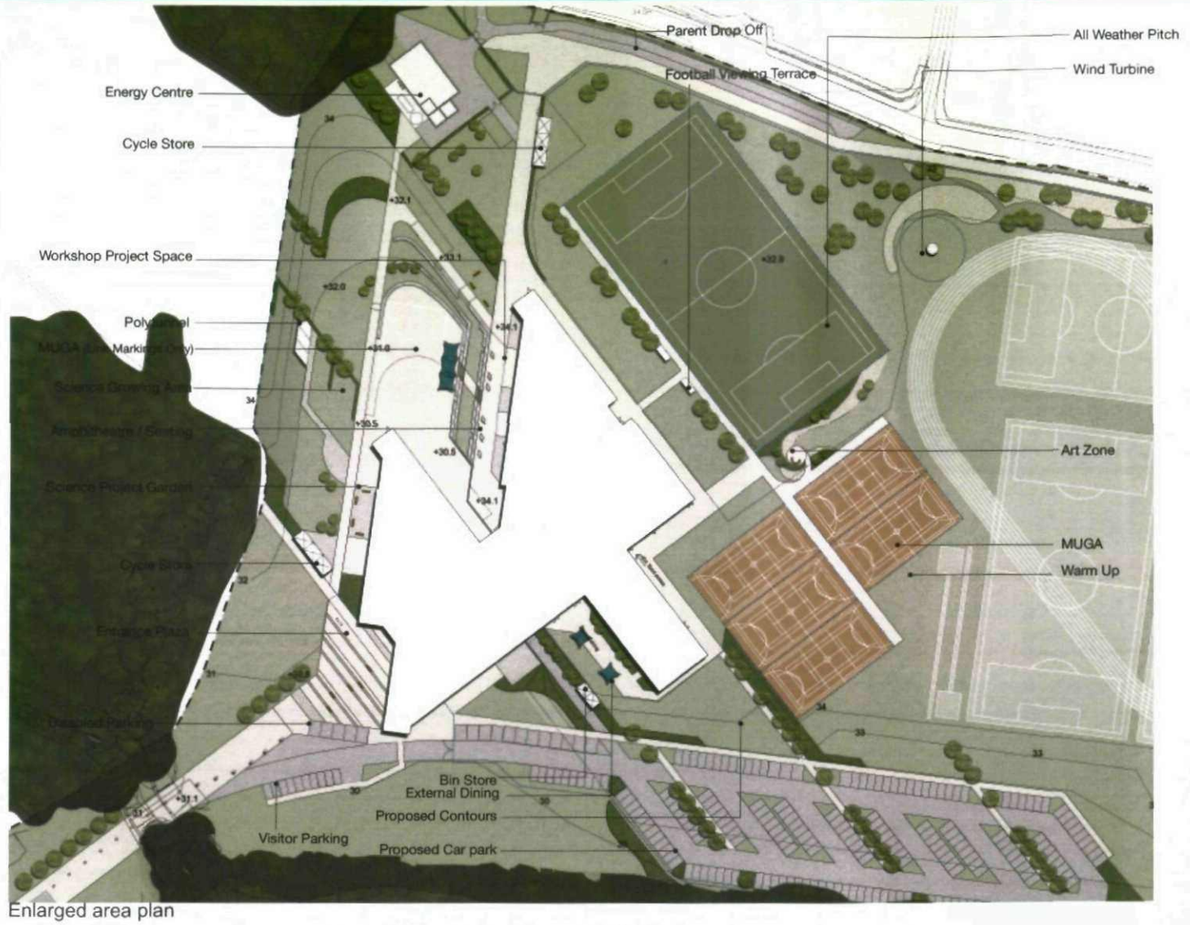
The site wide planting concept will be to create three zones round the building coupling the school academic year with the seasons. The first zone will be the approach from the roundabout up to the school front door, which will focus on plant species, which are of particular interest in the winter season, welcoming new pupils and returning pupils alike. The second zone will be the area in close proximity to the building, which will focus on plants of interest in the spring term encouraging outdoor use of the spaces close to the building when weather improves slightly. Lastly beyond these two zones in the summer term planting will highlight species of particular interest in the summer months when weather is more likely to encourage pupils and staff into the wider landscape.

All playing field areas will be newly created as this a new school site, with pitch drainage compliant to Sport England recommendations.

6.3 External Learning, Social and Sports

Approach from the South

Signage and soft landscape will announce the schools presence from the roundabout on Mitchell's way. This route to the school will accommodate bus access pupil drop off and staff and visitors. Pupils from beyond Mitchell's way will be able to cross the road via a new pedestrian footbridge linking to the main approach, Alongside the carriageway is a designated cycle route and pedestrian footpath. This route is lit and designed to maximise pupil safety with all access routes in close proximity to assist natural surveillance. No dense or high planting will be included near the main routes to keep an open aspect.



Enlarged area plan

Main Entrance Plaza and Access Route
Beyond the bus arrival area traffic is restricted by a control barrier to authorised visitors and staff emphasising pedestrian priority. The shared route then crosses the new bridge over the river Dove and opens up to an entrance plaza with disabled drop-off and vehicles taken to the side. The building façade is the secure line along this edge to provide a fully accessible welcoming arrivals space for all visitors. This space is surfaced in unit paving, with banding representing the Barnsley seam coal measures, linking to large linear bench seats and visitor cycle parking hoops.

External Play Areas
The building responds to level changes across the site with a lower ground floor to the front and an upper ground floor to the rear. Between these two elements is the internal 'Heart' space and principle dining area. These functions are reflected externally with an external 'Heart' space which links the two building levels. Level changes are accommodated externally with a terraced amphitheatre comprising large seating steps. This feature supports performance with various size audiences and informal social use. This space is equipped with tensile canopy structures to provide shelter and shade. Outside the dining hall a protected sheltered area facing south is provided with fixed bench seating and tables and tensile shelter canopies to create a pleasant external dining area.

Project Gardens
The school is organised internally with specialisms on the ground floor each specialism has a defined 'Garden' space treated as a project garden. Southern most is the science block, with a science demonstration garden for large experiment work or project introduction. Further away from the building is an area for growing experiments and market garden equipped with a poly tunnel as part of 'growing' sciences. The technology zone has a technology garden area where larger scale project work could be carried out. This links to the sustainability route running around the site as a linking theme connecting various elements on the site such as the energy centre, wind turbine habitat areas etc. supporting the link between modern 'Green' technologies and learning.

The art zone is equipped with an art garden a semi-sheltered space with opportunities for art classes externally and an area where art project work could go on temporary display. The sports hall and changing rooms link directly with the All Weather Pitch and the Multi use games areas. Beyond the hard surface courts is the grass pitches and playing field.

As mentioned above there is a 'green' trail linking many of the features throughout the site is which brings together features which contribute to sustainability and environment can be used as a learning resource. This includes green travel such as the cycle shelters, the biomass boiler, wind turbine, technology & science gardens, through to the various ecological elements of the soft landscape such as meadows, woodland areas and views to the river Dove. Finally the patterning on the arrival plaza representing the Barnsley seam coal measures relate back to the industrial heritage of the region and past forms of energy generation.

Sports Complex and Games Courts
New playing fields are provided as part of this development in accordance with the output specification and discussion with the senior teaching staff. The existing area to receive the pitches is to be re-graded to provide and flat area with appropriate fall in accordance with Sport England guidance. MUGA's with fences will be provided with an open porous tarmac surface to create a high quality play surface for tennis, basketball, netball and 5-a-side football. A '3G' All Weather surface football pitch will be provided as part of the works it is expected that these facilities will be available for use by the community. The new grass playing fields will have the team games areas and appropriate margin drained.

A list of the facilities provided is scheduled below

- 1 nr. 3G All Weather Pitch with 4m high perimeter fencing and floodlighting
- 2 nr. Senior sized grass pitches
- 2 nr. Senior size rugby pitches
- 1 nr 400m grass running track
- 1 nr. Junior grass pitch
- 1 nr. Cricket pitch with artificial wicket
- Training grids
- 6 nr. MUGA's to accommodate 6 tennis, 6 netball, 6 basket ball, 6 5-a-side courts

Drainage will be provided to the new pitches

External dining
Immediately alongside the internal dining space with direct access is an outdoor dining area equipped with tensile canopy structures to provide shelter helping to extend the usability. Fixed seat and benches are also provided with enough space for additional moveable furniture to be accommodated in particularly fine weather. Soft planting of ornamental shrubs and trees will help to create a pleasant space with a 'Café style' semi sheltered character.

Social Spaces
Both key stage 3 and 4 pupils will mix in the large external heart space positioned alongside the two upper and lower ground sections of the building. This space incorporates an amphitheatre with tensile shelter canopies, hard landscaped play surface, grass terraces, grass banks with views into the internal heart space and outward toward the parkland landscape. Peripheral play areas are located adjacent to this and further around the edges of the building, creating smaller, less busy spaces for quiet passive play. Natural surveillance of all the play spaces will be provided through the close proximity of the building. Beyond the hard play space is located soft play areas with sculpted landform to create shelter with informal planting.

Habitat Zone and Woodland Planting
Habitat areas will be in accordance with the local Biodiversity action plan and complement the parkland setting and scale of the local landscape. The main priority will be retention of the extensive existing tree cover wherever there this is not in conflict with the requirements of the school. The wider site area includes large areas of woodland that are within the secure line, these provide a great learning resource without the need for additional planting. Biodiversity within the woodlands can be further improved by varying maintenance regimes. This is another aspect where engagement with the pupils can facilitate ecology learning with potential to support the Environment and Land Based Studies Diploma.

Planning and Community Issues
The proposed secure site boundary extends around the edges of the school site but back to the building façade at the ends of the elevation for the main entrance. This creates a welcoming inclusive entrance space for the building which will be accessible to the general public 24 hours a day. This area is enhanced with an entrance plaza of banded paved surface with robust seats and benches and some public cycle stands. Disabled drop-off some disabled parking is located immediately next to the plaza providing easy access to less mobile visitors.

6.4 Hard and Soft Landscape Materials

Hard Material palette

The landscape masterplan illustrates the site layout and key elements of the scheme in terms of materiality and soft landscape provision. Hard and soft landscape materials have been selected to provide interest and longevity. The materials and species will be robust and easily maintained to ensure the success of the scheme into the future. Hard surface materials will be mainly macadam with areas of surface graphics to enliven. Some areas will incorporate coloured chippings to help define main routes. Highlight paving will be included at the main entrance with banding to reflect the various seams of the Barnsley Coal Seam as a historical link with the sites former use and to provide visual interest and legibility to the entrance doors.

Site furniture will be robust and of a scale and size appropriate for the location. Materials will be predominantly natural with benches and tables fabricated from timber sourced from FSC suppliers. Seating units will link in with other landscape elements where possible such as the level changes around the amphitheatre space.

Trees and Soft Landscaping

The landscape scheme has been developed to retain as much of the existing tree cover on site as possible to provide a mature visual boundary between the site and adjacent residential areas. A large area of existing tree cover will be removed as part of the development due to its position in relation to the new school building. As compensation for the tree loss of this area to be cleared, the planning application identifies two areas of replacement woodland planting off-site. Both areas are close to the school and are part of the Country Park or adjacent agricultural land. The large groups of woodland planted on the eastern bund and along the river bank will be retained to provide screening to residential properties and screening to the public footpath that runs along the south bank of the river.

The retained trees will be invaluable as part of the landscape context surrounding the school and will assist with providing an attractive setting for the school from the opening. The existing mature landscape will have a high habitat value and this can be enhanced through future management.

Planting within the site has been designed to link the larger scale open spaces through to smaller scale open spaces around the building, linking the building into it's context and creating pleasant outdoor spaces within close proximity.

6.5 Access and Transport

Access and Transport

Access and personal security has been given a high priority within the design process. All routes to the school have been developed to be clearly legible to cyclists pedestrians and motorists with appropriate separation and clear demarcation. Where pedestrian routes are set within the rural landscape away from the immediate vicinity of the school it has been judged that proximity to cycle routes and vehicle routes will enhance personal safety and reduce bully by creating busier routes where natural surveillance will occur. High vegetation will be avoided near pedestrian routes, which will also share street lighting.

Site perimeter fencing will be new weldmesh type fencing 2m high at the southern entrance this will meet the edge of the façade so that the building becomes the secure line at the main entrance. The new fence line is located alongside planting to minimise the visual impact wherever possible.

The energy centre will be accessed through a separate gated route off Pitt Street.

Secure cycle parking is provided behind the secure line to both the northern and southern entrance.

All vehicular access will be from a new approach road of Mitchell's Way. This route will accommodate private vehicles, buses and staff vehicles. Cyclists & pedestrians will have designated paths along side the vehicular route. Pupil drop-off will be at the new car park located along this route, and will be sited furthest away from the school as lowest priority. Buses will be permitted to drop off pupils in a designated zone leading directly to the main entrance. This area will be equipped with robust shelters for waiting pupils. This drop-of is located directly before the new bridge over the river Dove with a clear strong visual connection to the school entrance. Just in front of the new bridge there will be a control barrier restricting all vehicles at this point the approach becomes a shared space to ease pedestrian flow at the pinch point of the bridge. The only vehicles allowed beyond the bridge are staff and disabled visitors parking is provided for 231 vehicles including 17 disabled. Outside the school day this barrier can be lifted to allow community parking in the staff car park. The parking is located in the lowest area of the site to minimise visual intrusion. There is also tree planting within the car park area to further reduce it's visual impact and existing mature woodland cover to screening the southern edge. The parking is located above the 100-year flood level to avoid problems during periods of extreme weather.

Service access to the energy centre will be off the northern drop-off area off Pitt Street, but no private vehicles will be allowed to enter the site from here. Emergency and maintenance access will be from both the north and south due to the split ground level of the building. Kitchen servicing will be via the southern access route adjacent to the staff parking.

DDA and Inclusive Access

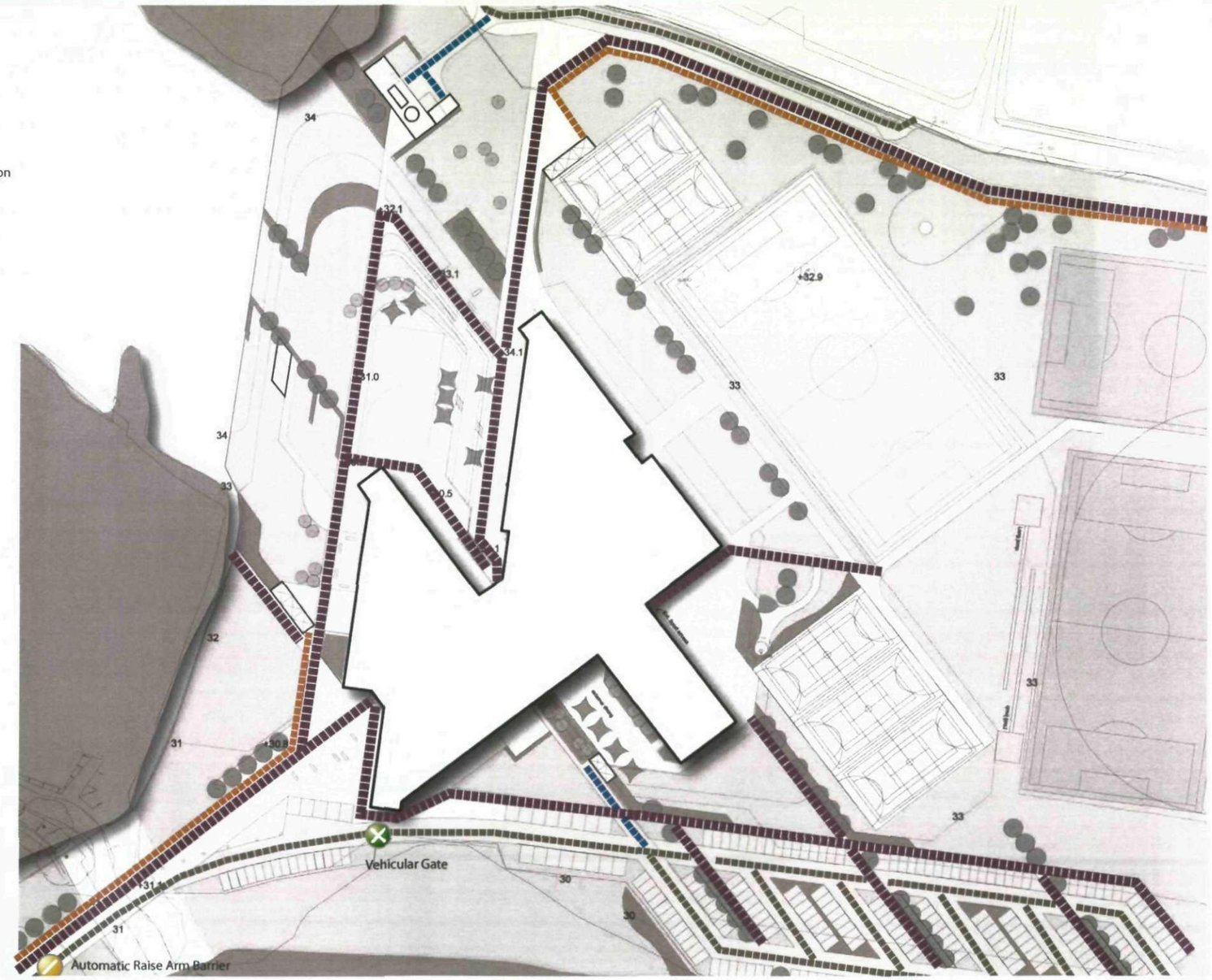
All external spaces will be compliant with current DDA regulations to allow "access for all" within the secure line and on all immediate access routes adjacent to site. This will include level thresholds between internal and external spaces, maximum cross falls of 1:60 across all hard play surfaces and where possible maximum gradients of 1:21 on all access footpaths in and around site. Where external ramps are required these will be compliant with Building Regulations Part 'M'

Pedestrian Circulation

Cycle Circulation

Vehicular Circulation

Service / Maintenance Circulation



Movement and Access Control

6.6 Land Use and Ecology

The design team has appointed a fully qualified ecologist to ensure:

- Existing ecological features found to be present on the site are protected where possible and to provide additional habitats for local species known to exist in the area
- Construction activities have minimal impact on any ecological features present on site with all retained vegetation protected in accordance with BS 5837.
- The design philosophy incorporates measures that enhance the ecological value of the site.
- Compliance with LE3-LE6 of the BREEAM School calculator

A Phase 1 Habitat survey has been carried out on site and throughout the coming design stages, advice will be sought from the consultant ecologist to ensure sound ecological principles are encompassed within the scheme.

As a preface, the design team carried out a review of the local Biodiversity Action Plan during the Stage 1 process to assess what ecological elements could be included. Some of the priority habitats referenced within the BAP have been highlighted for incorporation within the landscape scheme as follows.

Species Rich Hedgerow – The design incorporates opportunities for inclusion of hedgerows linking in with the agriculture vernacular of the local landscape for some perimeter and internal boundaries.

Upland Oak Woods – widely spaced tree planting to create intermittent views along the Pitt Street boundary. This approach links to the large groups of existing woodland to create ecology corridors to assist species migration.

Lowland Grassland – The proposed maintenance strategy for the under story of habitat areas and marginal grass areas shall allow for provision of species rich grassland to be incorporated. This will also provide a good visual link between the parkland and the school landscape.

The intention is that the above strategy will be developed throughout Stage 2 in conjunction with the ecologist. This will ensure that the intentions are carried through into the detail to gain maximum value from the proposed habitats.

An ecology report will be produced to include the following:

- Assessment of the ecological value of the site through the application of the BREEAM ecology calculator and in relation to the Barnsley Biodiversity Action Plan
- Assessment of the measures adopted by the principal contractor to preserve and protect existing ecological features
- Identify measures to enhance the ecological value of the site in accordance with the BREEAM school 2006

A 5 year maintenance and development strategy to protect and enhance the ecological value of the site. This will include feedback from any local wildlife groups.

The management and development of the ecology of the site can be a useful learning tool for pupils. It is intended that input into habitat management can be linked to ecology learning for the pupils where practical results can be analysed as part of the science and maths curriculum.

7.0 Sustainability

7.0 Sustainability

The design team is committed to designing schools based on sustainable environmental principles from the basic concept through to detail design. The form of the building is designed to passively manage; day lighting and direct sunlight, solar gains and climatic control, ventilation, water management, acoustics and energy use. The design will also utilise green materials from sustainable local sources where ever possible, and will be built from precast concrete and prefabricated elements for reduced embodied energy.

Biomass will be used to generate heat and power throughout the life cycle of the building. Our initial BREEAM assessment shows that it is likely that we will achieve a "Very Good" rating as a minimum.

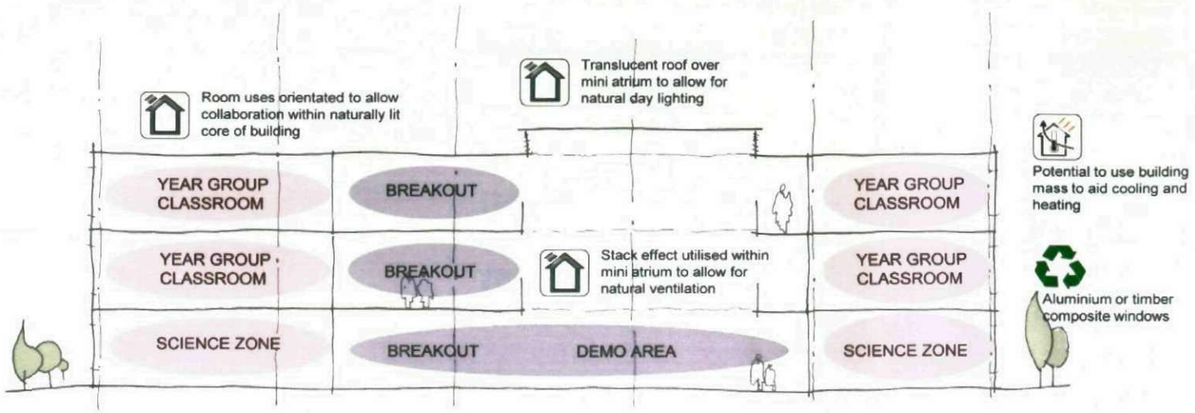
All rooms are designed to be naturally ventilated wherever possible The classrooms within the small learning communities (SLC's), are located around small central atria spaces which utilise the natural 'stack effect' to draw hot air out the louvered panels around the perimeter of the rooflights.

Perimeter windows have top and bottom openings to allow for natural ventilation with rapid purge if required to meet BB101 requirements for temperature and CO2 levels.

It is proposed that 100% of the schools heating and hot water load will be generated from biomass. The heat generated will be measured using a heat meter and this will be recorded on the Building Management System. Further sub-meters will also be connected to the domestic hot water system to identify these specific uses. Similarly additional energy will be generated by the on-site wind turbine, this will also be metered.

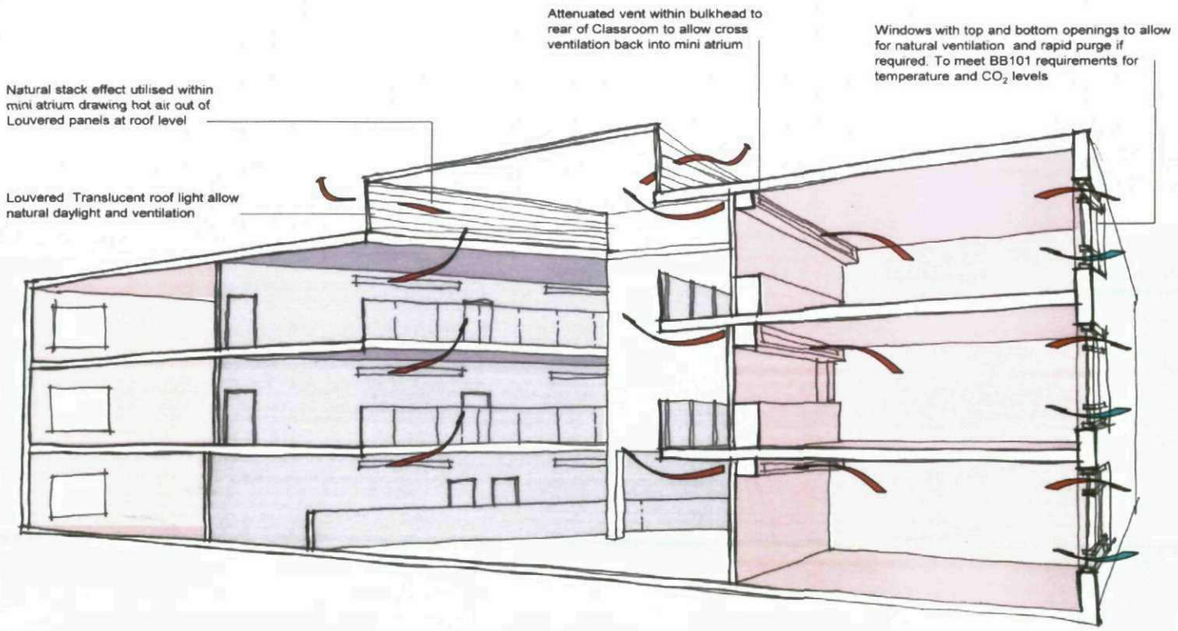
The main incoming supply of water will be metered at the boundary and on entry to the building. This will provide a diagnostic tool to identify any leakage in this part of the system. Rainwater will be harvested and used for toilet flushing. The provision of sub-meters on the pumped supply to the WC's and on the mains water top-up will enable the amount of water harvested to be recorded.

It is important to educate children about energy usage and how it can be reduced. Therefore the usage of biomass, electricity, gas and water, and the energy generated by the wind turbines will be displayed in reception to raise staff and pupil awareness of the schools energy profile to foster ownership and create a desire to reduce usage. In addition the amount of rainwater harvested will be displayed as well.
It will be possible to continuously record all the meter readings which will be invaluable in understanding how energy is used throughout the school. This continuous recording will generated daily profiles of usage in graphical format. A typical daily pattern will emerge from which it will able to identify abnormal events, i.e. equipment left on overnight, a tap left running or a leak. This has clear benefits to the school operators, furthermore this information will be made readily available to teachers and pupils to facilitate science projects.





- Passive Solar design via orientation
- Local materials to be sourced where possible
- Activity zoning and planning
- Natural ventilation to be used where possible
- Natural light to be maximised
- Re-cycled materials where possible



8.0 Accessibility Design & Access Statement

8.1 Entrances

8.2 Access For All

8.3 Way-findings and Signage

8.1 Entrances

It is vital to the success of any building that entrances are clearly defined and unambiguous. The creation of a large atrium space which extends from the main (visitor) entrance to the Heart space provides the opportunity for such a clearly defined entry to the building.

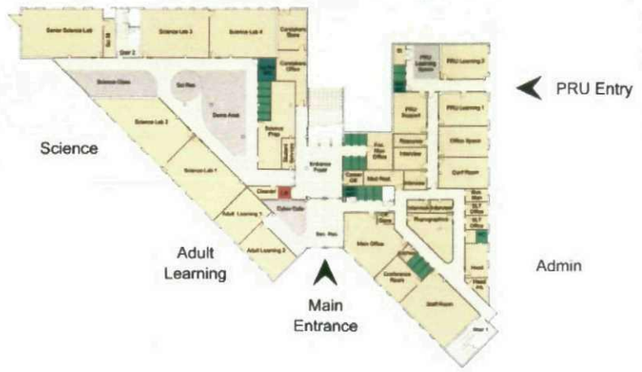
For all visitors to the ALC, the entrance to the building will be via southern glazed element which sits between the two learning wings, on axis with the approach route over the river Dove. This space will provide a welcoming experience, appropriate to a building designed to be at the heart of the local community. It will act as a shop window, a gathering place and somewhere to orientate oneself.

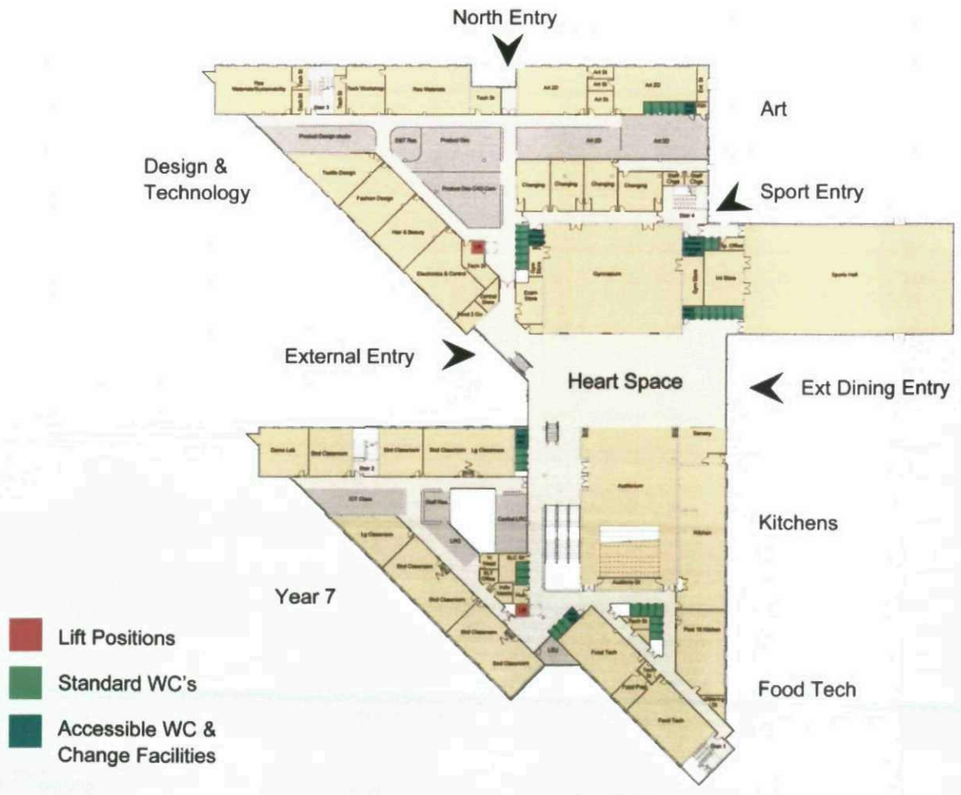
As much as the entrance to a building is designed to be welcoming, it is also a point of control. In this instance the control must accommodate a wide range of needs from individual visitors and parents, to small groups of community users, through to large gatherings.

The building has two primary means of access: a supervised lobby with sliding power operated doors has been designed as part of the southern (visitor) approach and then for students a set of large capacity doors straight into the heart space. The building also has two secondary entrances; one to provide discreet access to the pupil 'short stay unit' and one to allow safe and secure access for staff directly from the secure staff car park.

The supervised Lobby
The central circulation spine is expressed on to the southern elevation as a glazed space, nestling between two learning blocks. The school's branding has been located on the adjacent gable of the western learning zone which further delineates space and is designed to directly express the nature of the ALC. This panel also designates the visitor's entrance and the supervised lobby.

The doors into the space from the entrance plaza are controlled electronically from the reception. Once a visitor has been allowed into the lobby, they can be welcomed at the reception and then either granted further access to the rest of the college or wait in this area until they can be met by a member of staff.
As part of the security strategy visiting students, late students and outreach support staff will be expected to use this entrance.
Large Capacity doors
At peak times (generally viewed as the hour prior to the start of the school day and the fifteen to 20 minutes during "home time") We anticipate that arrival (and departure) of students will be from two directions; these are via the main plaza from where the southern coach drop off can be accessed and via the informal play areas to the north. In order to accommodate up to 1500+ students during these limited periods, the capacity of the two sets of doors will need to handle a flow rate of between 25 and 50 people/minute. During other times these doors will be secured via electronic locks which will be released at peak times (or in the event of emergency). The design team advises that the doors from the Heart space should be the primary access and egress point for students and we would encourage the school to pursue this option. These doors will afford easy access to external routes going north and south and to the secure bicycle storage located at the perimeter of the secure boundary.
Secondary entrance door – controlled access
Staff will arrive prior to the students and will leave after they students have gone home. Before school starts the main doors (described above) will be locked, however depending upon the timings of community access it is likely that the Main doors will remain open after the students leave. We have therefore designated the door off the southern most stair core to be released by staff passes to allow them free access during designated hours.





8.2 Access For All

Within the education sector integration and accessibility for disabled pupils is firm government policy. This policy has now become a duty imposed on local authority providers and the aspiration and expectation of the general public. Implementation of this policy requires barrier free environments and support mechanisms to deliver services and manage resources.
The recent legislative changes actively promote the inclusion of pupils with special educational needs and impairments within primary, secondary, higher and further education in full-time, part-time, vocational or academic courses.
The design allows support of SEN students also to take place in each learning zone by creating supported teaching and calm / quiet spaces by the creative use of furniture and screens. Specialist support and intervention on a personal basis can also be given in the Well being suite if required e.g. hearing testing or speech and language therapy and with small group teaching in each zone

The implications of the Disability Discrimination Act and Special Educational Needs and Disability Acts are that disabled people generally should be able to access any educational service provided within a building or within site boundaries constituting the school environment. With many buildings and different activities taking place at different times of the day, schools are often complex multi-use places.
Our intentions have been to provide buildings which meet the current requirements of the legislation in the provision of services, education and employment, within the scope of the brief and the site conditions. The overall approach to the design will aim to meet the min access standards set by the BS8300.2009 as precedent over Building Regulations Part M, which is in the process of being updated.

Critical to the success of the project is the design of means of escape for disabled persons. The local authority has the ambition for the all of the building to be accessible to all users. This will be particularly challenging with the building having a number of levels and the strategy will be proposed by a specialist Fire Consultant.
SENDA

The philosophy of the DDA and SENDA is that disabled people, including children, should be able to use any service or function provided within a building or environment. The DDA is an evolving piece of legislation which given changes in expectation, case law and new technological advances will require service providers, educators and employers to re-evaluate their premises and management procedures continually. Currently there are no strict technical criteria (only case law) against which DDA matters can be judged, each is an individual case which is built up to support decisions .

The designs are based upon the brief, good practice and information received to ensure that reasonable measures are taken. The level of accessibility of the schools provides for the responsibilities under the legislation, within the constraints of the brief limitations and current known standards.

Consideration has been given to access within the site boundary from arrival at the site by visitors, staff and pupils who will arrive in a variety of different ways. Pedestrian routes will have suitable gradients and where needed resting points will be provided.

Safe movement on foot has been a key consideration in locating the pedestrian entrances to the school site, particularly in relation to the locations of bus stops, public footpaths and busy roads. There are just two potential directions from which visitors, staff and pupils will approach the site. Visitors, staff and pupils will arrive from the south via the new access from Mitchells Way and pupils will also arrive from the north from Pitt Street.
From the North the existing public footpath along Pitt Street will be extended and expanded via an un-adopted footpath and a separate cycleway

The main entrance is defined by an extensive plaza which forms a level approach from the coach drop off and southern cycle routes. Visitor and disabled car parking is located directly off this space, within 20 m of the entrance and bus drop off is located to the south of the river Dove, all routes have graded / level access to the main entrance.

After entering the site the perimeter of all the buildings at lower ground and upper ground floor have a safe access zone of level, continuous hard paved space that is separated from any vehicle movement routes. This enables easy, safe access to defined external teaching spaces immediately adjacent to the building's footprint and beyond to those more informal learning areas contained between the building and the pitches.

Within the building all levels can be accessed via the lifts installed in each of the two "pavilions" located either side of the Heart space, ambulant circulation can also be via staircases which will be designed in accordance with the BS8300.2009. All circulation spaces and doors have been designed to the guidance within this document; as well as other good practice guides e.g., Building Sight (RNIB). The environment will be a "safe environment" with the minimisation of projections into circulation routes, together with tactile coding of changes in level etc.

The provision of wheelchair accessible WC's has also been considered ensuring that these provide excellent coverage across the whole building with aiming to have no travel distance being beyond 40m. This provision has been enhanced by the inclusion of facilities that allow assistance and use of a hoist.

As described above we have attempted to ensure that approach routes to the buildings are clear, distinct and direct for all potential users, including those with mobility and sensory impairments and learning disabilities. This philosophy will be carried through into the building in the way finding and signage strategy.
The buildings will provide a variety of support facilities e.g. Hearing loops and sound fields, some facilities may be mobile for the students to be able to enjoy the whole learning experience of the school. Best practice guidance and regulations will be followed in this regard and the designs will be audited at several stages of design and construction by an independent access consultant on all accessibility issues.

For those visitors and pupils with visual impairments, the building can be easily understood, with the concept of small learning community organisation clearly apparent. The two "pavilions" which house the small learning communities can each be accessed via the Central Heart space. Directional lighting and careful choice of contrasting colours and tactile surfaces will also be used to ensure that users get a full understanding of the internal space around them.
The building has been designed to show all that the new facility has to offer, without a person being overwhelmed by the scale of the whole school, thus reducing anxiety and helping the visitor to gain a rapid understanding of the building organisation. Way finding is clear and the design promotes visual connection to the outside world where possible to assist in familiarity.
The design incorporates all the best practice guidance of the RNIB 'Building sight' documentation, clearly defining the differences between surfaces, walls and floors and enhancing directional guidance. Lifts will also incorporate auditory notification and brail markings. Room signage will be located at an appropriate level and should also incorporate brail.

Particular regard will be given to the ergonomic design requirements for ensuring independent use of the building; all cross corridor doors will be on hold open devices connected to the fire alarm system, whilst those doors lying within firewalls will have "swing free" operation linked to the fire alarm system. The aim is to create a barrier free environment.

8.3 Way-finding and Signage

Effective Way-finding has been one of the key principles (along with managing circulation) that have informed the resolution of our design. The central Heart space allows us to organise the school in an entirely legible manner. Circulation revolves around and through this space giving access to all Small Learning Communities. General teaching spaces are located on the upper floors and specialist spaces e.g. Science or technologies are visible from this single space allowing easy and intuitive way finding.

We believe that the need for signage will be minimal, and see its main function of reinforcing the visual clues described above. However we propose that colours and graphics are also incorporated into the circulation spaces to further reinforce the users understanding of the building. Statutory signage and way-finding signage will be carefully coordinated together. It is also intended to use the ICT systems to provide information points at key locations within the building, such as at the north and south ends of the Heart space.



Indicative Southern Entrance Approach Leading from Bus Drop-Off