

New Primary & Secondary School at Lyde Green

SITE LOCATION PLAN



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SITE DESIGN STRATEGY

KEY AREAS

- **Primary school playgrounds**
- **Secondary school playgrounds**
- **Access for pupils, staff and the community.**
- **Main car park for staff and community users of the sports facilities.**
- **Visitor car park & Coach parking**
- **Sports Pitches**

Primary School Playground

The pupils need areas to play and learn.

- Direct access from all ground floor classrooms.
- An amphitheatre incorporated for play, for outdoor assemblies and lessons.
- Two play areas with equipment nearby a fenced games court.
- An outdoor learning area for supervised outdoor learning, e.g. Forest School, focused on a pond which is part of the drainage system for flood protection.

Secondary School Playground

The secondary school also needs spaces to play and learn, but with a larger emphasis on outdoor social space which include:

- Courtyard includes a variety of seating areas, some of which are covered, in a variety of scales. The planting within the courtyard is a series of interlinked 'Rain Gardens' which is a system to manage rainwater through the space in a more sustainable way allowing water to infiltrate into the ground in a more natural way, as part of the flood management of the site.
- Informal games courts focused on lunch/ break-times with the formal sports catered for within the hall and playing fields.
- Seating, seating areas and terraced seating providing a flexible space for viewing of the courts, socialising, outdoor learning, performances etc around the informal games court.

Access

- Main access from Honeysuckle Road designed as a welcoming combined entrance area for both schools.
- Main pupil access for the start and end of the school day is via five access gates, two for the secondary school and three for the primary school. Both schools have an entrance on Honeysuckle Road. Both schools have an entrance through the public park to the north to reduce congestion of people and make use of the car-free routes through the park. The primary school also has an entrance from the coach parking area.
- Cycling, scooting and walking are prioritised with cycle stores close to the building to encourage car-free travel reducing traffic and pollution.

Parking

- The main car park is for staff only during the school day due to restrictions associated with an underground gas pipe nearby. This will then be used by community users of the school facilities outside of school-hours.
- The visitor car park and coach parking are therefore also shared between both schools.
- Electric vehicle charging is also integrated nearer to the building than standard spaces to encourage their use reducing emissions within the area.

Sports Pitches

The playing fields are part of the public open space designed within the masterplan for the whole development. The schools have given their requirements for sports to the developer team who will be submitting a separate planning application associated with the cricket pavilion.

SUSTAINABILITY

The school has been designed to be sustainable in a number of ways:

- **To maximise value for learning of nature,**
- **For wildlife and,**
- **Rainwater management**
- **Providing an attractive place for the neighbourhood and schools.**

Learning

The outdoor learning area in the primary school includes a pond surrounded by trees in grass to provide a natural sanctuary for the pupils to be able to be immersed in nature for its health and well-being benefits and for study.

Wildlife

The boundaries of the school have been 'wrapped' with hedges and trees to provide wildlife corridors which also screening to views into and out of the site. These will also 'soften' the fencing which will be 2.4m high for the safeguarding of the pupils and security of the site.

Rainwater Management

Flood management for the school site is part of the system designed for the whole Lyde Green development, however this can be incorporated into sites for further benefits. These include additional, 'wetland' habitats which can support a greater amount of wildlife/ biodiversity.

Attractive Place

The trees and plants will mainly be native species with plants from elsewhere for uses in particular areas. These will include the rain gardens in the courtyards and the entrance area where colour, foliage, fragrance, drought and/ or water tolerant.

It is also important that the schools are an attractive addition to the Lyde Green development. Large planting areas have been designed along Honeysuckle Road in front of the car parks and building with trees, hedges and shrubs. Trees are proposed in all available areas where they can grow without causing issues for the building or neighbouring properties.

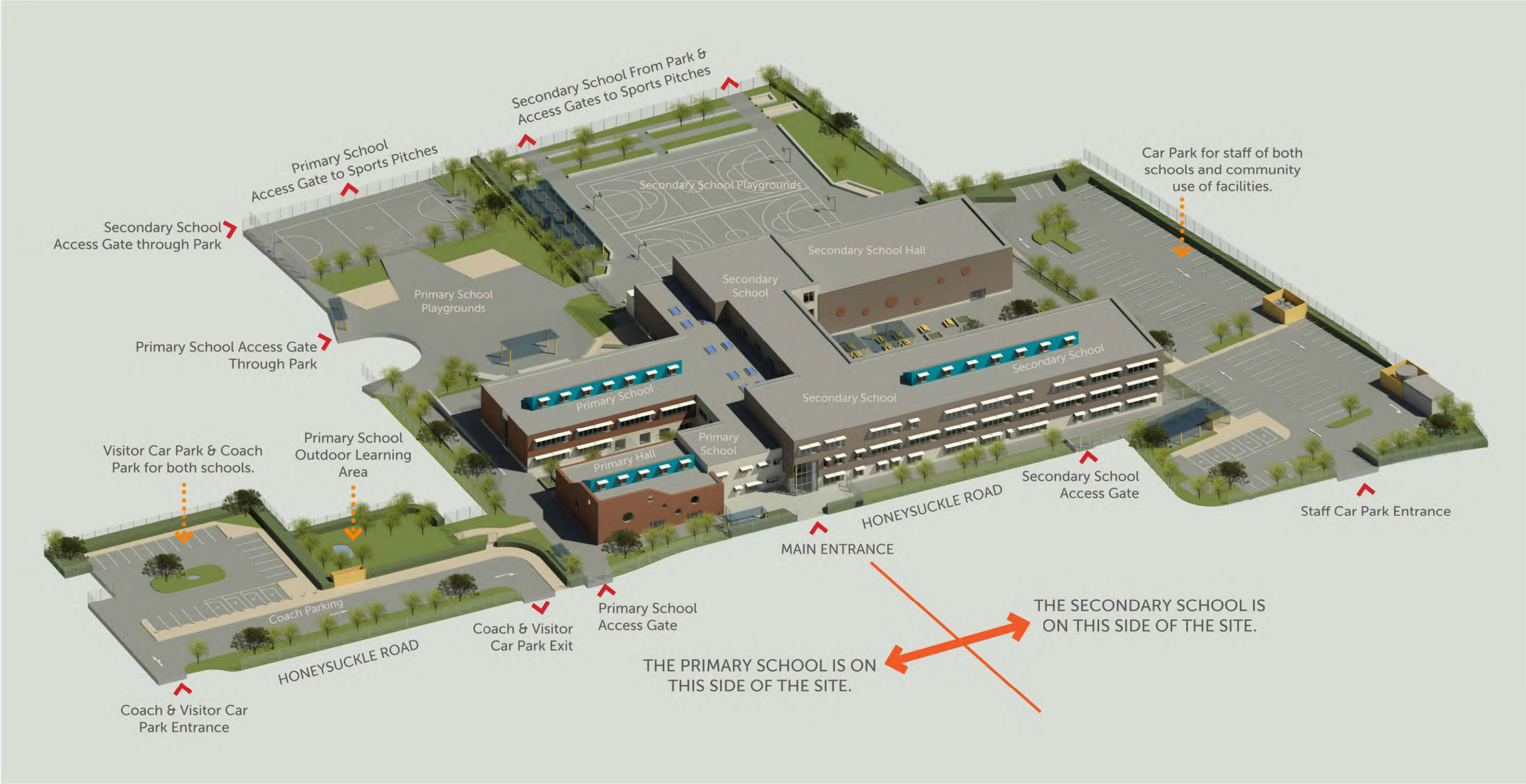
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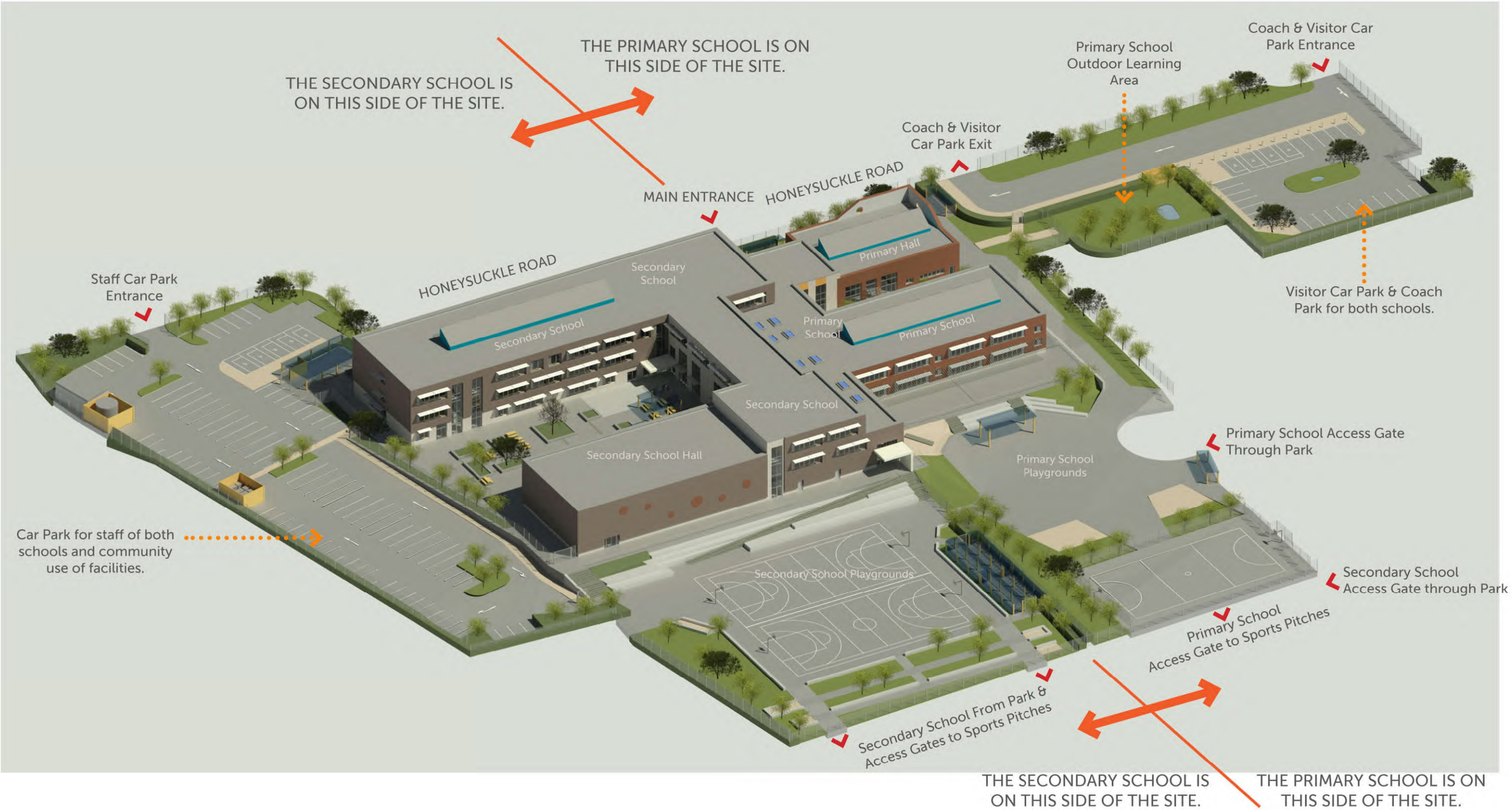
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AERIAL VIEW 1



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AERIAL VIEW 2



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BUILDING ELEVATIONS



3D View 2 with Landscape **FRONT ELEVATION**
1:1



3D View 4 with Landscape **REAR ELEVATION**
1:1

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EYE - LEVEL VIEWS



Secondary School Courtyard



Primary School Courtyard



Primary School Assembly Amphitheatre & Play Area

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GROUND FLOOR PLAN



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FIRST FLOOR PLAN



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SECOND FLOOR PLAN



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DESIGN STATEMENT

This is a summary of the process of designing the school buildings and should to be read alongside the images and plans shown above. Further information will be included within the planning application.

Project Summary

The design for the new schools seeks to create an inspirational environment and a sense of progression for pupils within the joint new Primary and Secondary School. Balancing the changing needs of pupils and staff and the ethos of a Learning village was a key design consideration, as well as the sustainable future for the school, which is under-pinned by a sustainable Passivhaus design.

Design Rationale

The new school is proposed as a partly two and three storey building, set at the upper level of a gently sloping site. The building is designed to create a new landmark whilst being sympathetic to the surrounding community and well integrated to the immediate external landscape. The new development creates a distinctive building in the setting of the new Lyde Green Neighbourhood, offering both educational and community facilities.

Architecture

The new school building has been designed to create an impact on arrival with a feature entrance and a modern and contemporary look. This is achieved through a simple architectural form, clean lines, large glazed openings and a choice of materials and colours that reflect the urban setting. Good design will ensure that the new school is fit for purpose, efficient to manage, as well as being secure and safe to use. The layout will offer a sense of wellbeing, welcoming, opportunity to excel, explore, create and enthuse pupils to want attain higher goals of achievement throughout their academic pursuits.

Materials

The choice of materials has been carefully considered to reflect its urban setting whilst being sustainable and low maintenance. A warm, natural colour palette has been used including a pale brick, coloured high pressure laminate cladding and timber slats on the underside of canopies. A slight different colour nuance distinguishes the Primary from the Secondary. High level windows set on the roof plane within a triangular shape add a splash of colour and an element of fun. All windows and doors are proposed to be powder coated aluminium, high performance and triple glazed. The building will be constructed using cross laminated timber (CLT) for all structural elements including external walls, internal load bearing/shear walls and all floors.

Layout

The building is designed with a shared main entrance that leads into an open, part two storey atrium that forms the spine of the school. This central hub can be accessed by all, creates a sense of community and enable display of learning and shared values. From the main entrance visitors can access both the Primary and the Secondary School. The Primary school is zoned into two wings, the classroom block facing the rear of the site connected to the external play areas and the multi-use halls, kitchen and library at the front of the site with easy access for community use. A covered link connects the library with the classroom block and creates a secluded area for a library garden.

The Secondary school has three main volumes arranged around a large courtyard. At the front sits a three storey teaching block with specialist classrooms on the ground floor, general classrooms on the first floor and Science classrooms on the second floor. The central area connected to the atrium provides a dining area, a multiuse hall (Drama, Dance Studio) and changing facilities on the ground floor, a resource area/ library, SEN and music facilities on the first floor and general classrooms on the second floor. A 4-court sports hall is located at the north side of the court yard with easy access to the sports facilities and playing fields.

Sustainability

The Council has signed a Climate Emergency declaration and pledged to provide the leadership to enable South Gloucestershire to become carbon neutral by 2030. The sustainable considerations applied to this project are listed below.

- 1.Energy -reduction of carbon emissions, including the use of energy efficient building services, plant and equipment, low or zero-carbon energy-generating technologies, and the ability to monitor energy use by sub-metering.
- 2.Health and Well-being - a design that impact on the health or well-being of building occupants, including visual and thermal comfort, indoor air and water quality, acoustic performance, and providing low-risk, safe and secure access to and use of buildings.
- 3.Transport - access to public transport networks and local amenities, along with the provision of information on travel options to building occupants, the provision of cyclist facilities and the limitation of car parking.
- 4.Water - opportunities for reducing water consumption through the use of efficient sanitary ware, the reuse and recycling of water, the provision of leak detection and prevention of leaks, monitoring controls and the provision of water-efficient equipment.
- 5.Materials - consideration for the embodied life-cycle environmental impacts of materials, the use of responsibly sourced materials and the robustness of the building fabric.
- 6.Waste - reducing construction waste, the possible use of recycled aggregates, the provision of space to encourage operational recycling and encouraging the specification of finishes by the building’s occupants.
- 7.Land Use and Ecology - consideration of the environmental impact of site selection including its ecological value and the protection of existing ecological features, mitigating the impact on and enhancing the ecological value of a site and limiting any long-term impacts on a site’s biodiversity.
- 8.Pollution - impacts of surface water run-off from a site and the impact of light and noise pollution on neighbours.
- 9.Ventilation - building design should provide controlled and natural ventilation in most areas supplemented with MVHR. High airtightness.
- 10.Lighting - maximise the use of daylight and provide energy efficient lighting to school premises. There should be an integrated design of high quality day lighting and electric lighting. Ensure electric lighting installation is energy efficient and incorporates lighting controls or switching arrangements to maximise energy efficiency.
- 11.Maintenance - new buildings should be designed for ease of maintenance and reduction of health hazards
- 12.Renewables – use of solar PV panels and possible air source heat pumps