Spencers Wood Primary School

Design and Access statement

rivingtonstreetstudio

July 2024

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Please also refer to the following documents within the planning application.

A. Landscape approach
B. Noise Impact Assessment
C. School Travel Plan
D. Drainage Strategy
E. Waste management plan

Design and Access Statement

Document Ref: **UCP-RSS-00-ZZ-RP-A-6010**

Rev	Date	Suitability	Status	Initials
PL1		S4	Issued for Planning	NC

This document has been prepared to be printed and read at A3.

The Site:

Spencer's Wood Primary School
Fullbrook Avenue,
Reading

RG7 1TL

The Client and Applicant:
Wokingham Borough Council

This statement has been prepared on behalf of the client by:
Rivington Street Studio - Architects

1. Introduction

1.1 Overview

Outline planning permission was granted for the Spencers Wood / Three Mile Cross development in 2014 under planning application O/2013/0346. The planning permission included provision for a new primary school. Under the S106 agreement, the developer is required to transfer a serviced site within the development for the delivery of a primary school. Wokingham Borough Council will in turn be responsible for the design, securing reserved matters planning permission and construction of the primary school.

The site identified for the planning school is part of the Land use Masterplan approved at the time of outline planning and sets the Primary School site in the context of the wider development. The residential elements have all been consented and the majority have been or are nearing completion.

This document provides the design and for the school in accordance with Condition 4 of the outline application.

1.2 Brief

The Council's intention is to deliver a one form entry (210 pupils) primary capacity via a satellite school provision. This will serve as a satellite to a nearby primary school and will therefore share some facilities in this respect. The design demonstrates that the site can suitably accommodate the primary school and all associated infrastructure/provisions in line with relevant standards, guidance and Wokingham Borough Council aspirations.

The primary school has been designed to meet the requirements of Building Bulletin 103. The DfE standard design layouts, general design guidance and specific design specifications have been used as baseline designs in order to develop the school specific brief.

The school has a ground floor footprint of 1209m2 GEA and a total gross internal floor area (GIA) of 1,760m2.

The primary school incorporates a 30 pupil FTE nursery and is a resource base for 14 ambulant SEND children (ASD / SEMH primary need). It has the potential to extend to two forms of entry (420 pupils) in the future by extending the building with a northern wing.

The design considers opportunities for dual use of facilities including all of the sports facilities, hall, play areas, learning resource and associated elements by the wider community. The design considers how convenient public access can be provided without compromising school security outside of school hours.

The building is fully inclusive and accessible.

The design generates a 'school' feel without being institutional. It has a strong visual presence from both Fullbrook Avenue (at its main entrance) and along Hyde End Lane.

The site has four secure entry points to the school with a secure visitor main entrance with an airlock as required for safeguarding purposes. Consideration has been given to Secured by Design principles site wide.

The design includes a tank fed sprinkler system for property protection. Means of escape provision has been designed in accordance with the principles of Part B of the Building Regulations.

The brief requires the design to provide good value for money, be efficient and of high quality.

There is on-site car parking provision for one space per full time member of staff (29) plus 16 visitor and 4 disabled car parking spaces. There is a 80 cycle parking spaces, equivalent to 1 space per 3 pupils and 1 space per 5 staff.

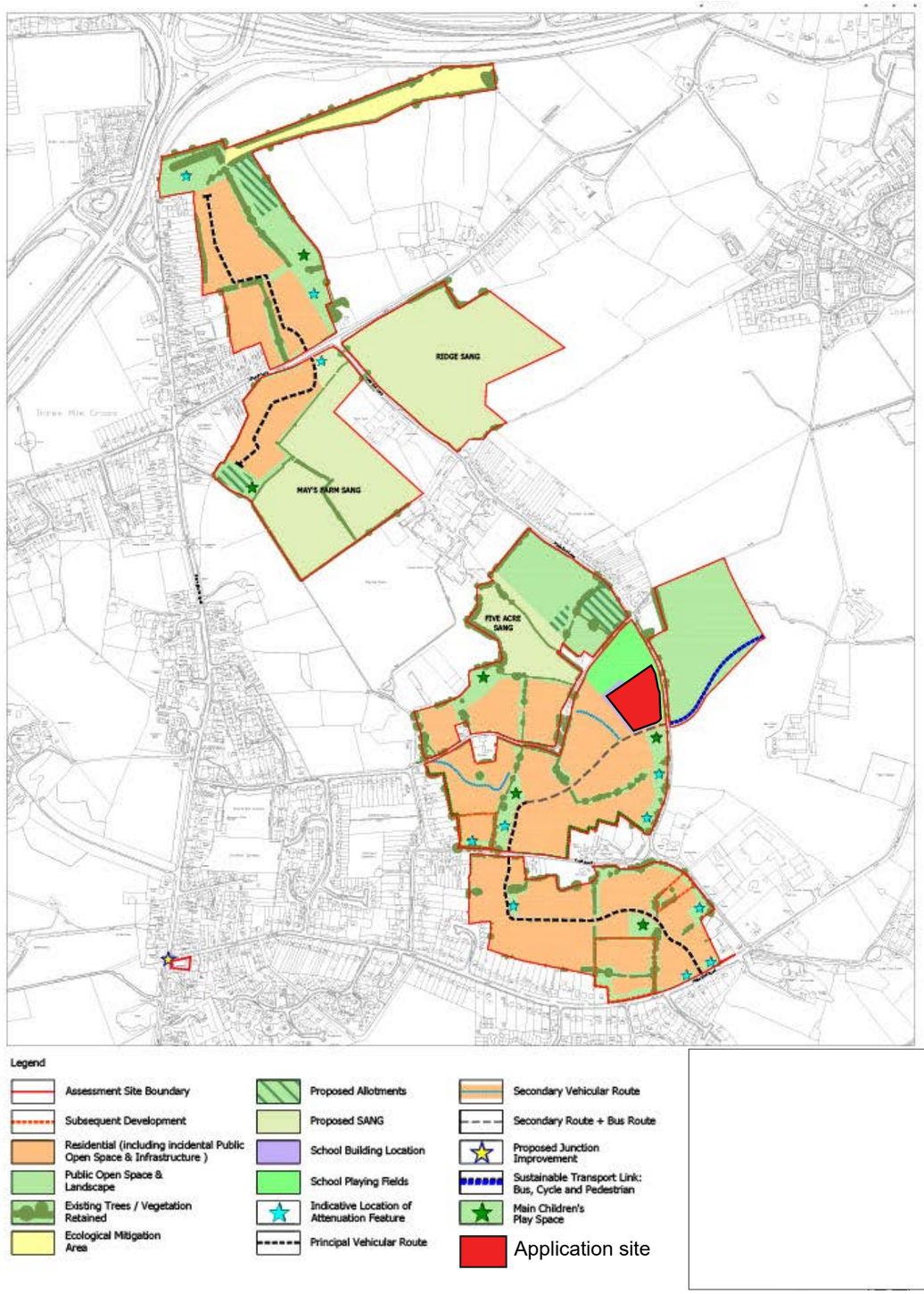
There is also sufficient space for vehicles to pick up and drop off and for the school to be serviced by Wokingham refuse vehicles, kitchen deliveries and for fire tender access.

The arrangement of school formal and informal play space must be such as to permit appropriate supervision by school staff, taking account of the limited numbers of school support staff.

In conjunction with the Council's commitments under its Climate Emergency Action Plan, the primary school has been designed/constructed to the highest efficiency standards. Net Carbon Zero in operation has been incorporated within this design stage and associated costs identified.

1. Introduction

- In 2013 an Outline Planning application was made for the Land at Church Lane, Hyde End Lane and Hyde End Road and Three Mile Cross, for up to 900 dwellings, with up to a three form entry primary school, public open space, and landscape.
- Outline planning permission was granted for the Spencers Wood / Three Mile Cross development under planning application O/2013/0346. The Land-use Masterplan approved at the time of outline planning, is shown to the right.
- Within the wider development, the residential elements have all been consented and the majority have been or are nearing completion. The provision of a new primary school included within the outline planning permission requires that a Reserved Matters planning application be submitted for the school by 22nd July 2024.
- Rivington Street Studio have been appointed to develop the school and work to a brief provided by Wokingham Borough Council.



2. Context and Existing Site

2.1.Site Overview/ Existing Landscape Features

The Spencers Wood Primary School site is a greenfield site along Fullbrook Avenue, Hyde End Lane and Ryeish Lane.

There are another alternative pedestrian routes located along the western site boundary and along Hyde End Lane.

Before the wider development began in 2014, the area around Hyde End Lane consisted of large fields and green spaces. A new residential neighbourhood borders the western boundary of the site.

Refer to photos on the following pages for details.

The proposed site is approximately 1.2 ha and consists of grassland and recently clearly bare ground. No buildings or mature trees existing within the development boundary but there are two veteran trees along the Hyde End Lane boundary whose root protection areas impinge on the site itself.

The site is generally flat with a slight slope down to Fullbrook Avenue.

The site and the surrounding context (2014)

Aerial view of the site facing North

2. Context and Existing Site

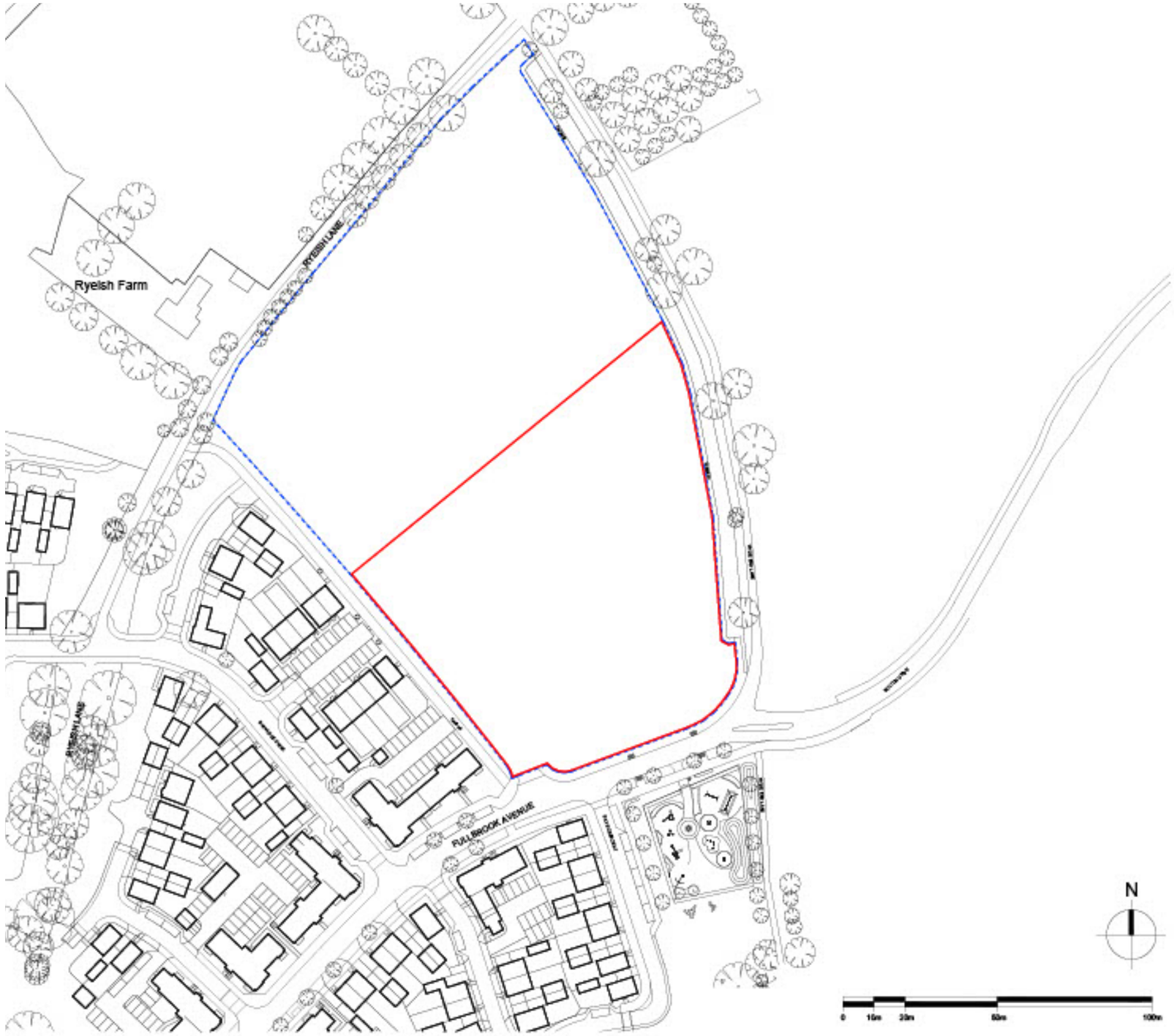
2.2 Development area

The site identified for the planned school is indicated by a red line on the site plan shown in figure 2, right.

The blue line indicates the overall area initially safeguarded for the school site, in the event that a 3-form entry school was required.

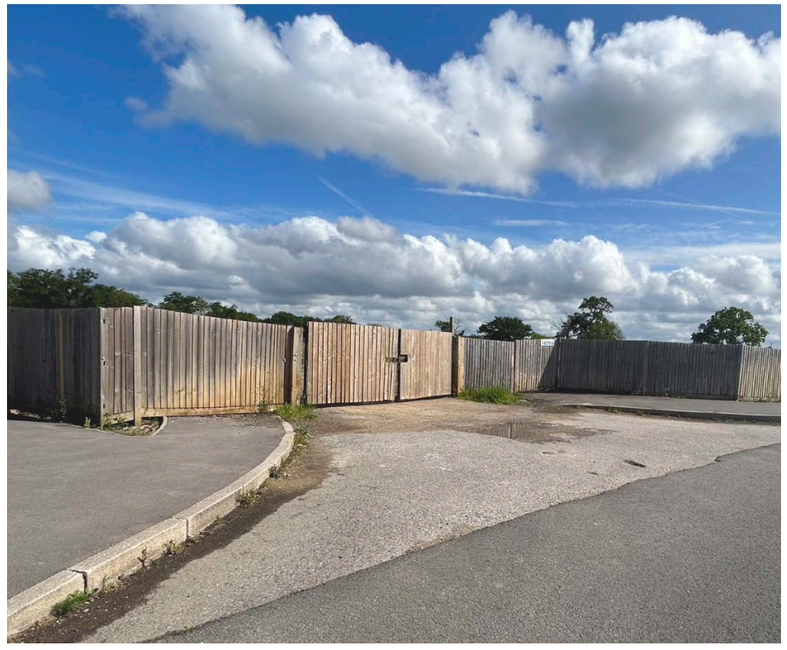
Vehicular access is provided via a crossover at the south-west corner. Vehicles can only enter the site from Fullbrook Avenue, as a newly constructed footpath along Hyde End Lane prevents this.

Fullbrook Avenue is served by bus routes and is part of a cycle lane network.



2. Context and Existing Site

2.3 Site Photos



View of the site boundary frontage and vehicular access

View facing east of Fullbrook Avenue

View facing west of Fullbrook Avenue of the surrounding residential buildings

View of pedestrian pathway along the western boundary of the site

View from one of the side roads off looking towards the site

View of pedestrian pathway alongside the eastern boundary

2. Context and Existing Site

2.3 Site Photos

View of one of the houses on Fullbrook Avenue, opposite the existing site entrance

View of the front of Hyde End Lane

View facing Ryeish Lane

View of the temporary fencing along the eastern boundary

View of the site from the existing vehicular entrance

View of Bays Crescent Playground and surrounding estate.

2. Context and Existing Site

2.3 Site Photos

Panoramic view of the site facing west

General view

Panoramic view of the site facing east. Note Veteran trees on Hyde End Lane

View facing the western boundary

3. Development Proposals

3.1 Site observations

After inspecting the Spencer's Wood Primary School site, the following observations were made.

Opportunities

1. Potential vehicle and pedestrian access from Fullbrook Avenue.

2. A connection between the school and Bay Crescent Playground

3. Multiple pedestrian and cycle paths at different axis of the site.

4. Access from Shipridge Drive.

5. Bus route from Fullbrook Avenue

Constraints

1. Potential overlooking from immediate residential properties

2. Noise pollution from vehicular use.

Site observations sketch

3. Development Proposals

3.2 Design Principles

The following sketch options were created to determine the following points.

1. The access and approach for pedestrian and vehicular use

2.The shape and orientation of the school building and MUGA pitch,

3. The orientation of the school building and MUGA pitch,

4. The arrangement of the school playgrounds

5. Preventing the impact of overlooking and noise pollution along Hyde End Lane.

Conclusion

The Straight shaped option follows the same axis as the surrounding residential properties and Fullbrook Avenue.

- Not enough space for parking and vehicular access in Option 1 and Option 2

- For Option 1, the classrooms facing west will be experiencing solar gain.

- The MUGA pitch is more efficient when it is aligned to the Northern boundary

- A buffer can be created between the playground and the car park.

- Option 3 provides more playground space.

- Some of the classrooms for Option 1 are too close to the boundary. There will be limited morning sunlight due to the short distance between the classrooms and the existing pedestrian route..

After analysing the three different options, we believe that Option 3 was the most successful.

Sketch option 1 - L Shaped school building

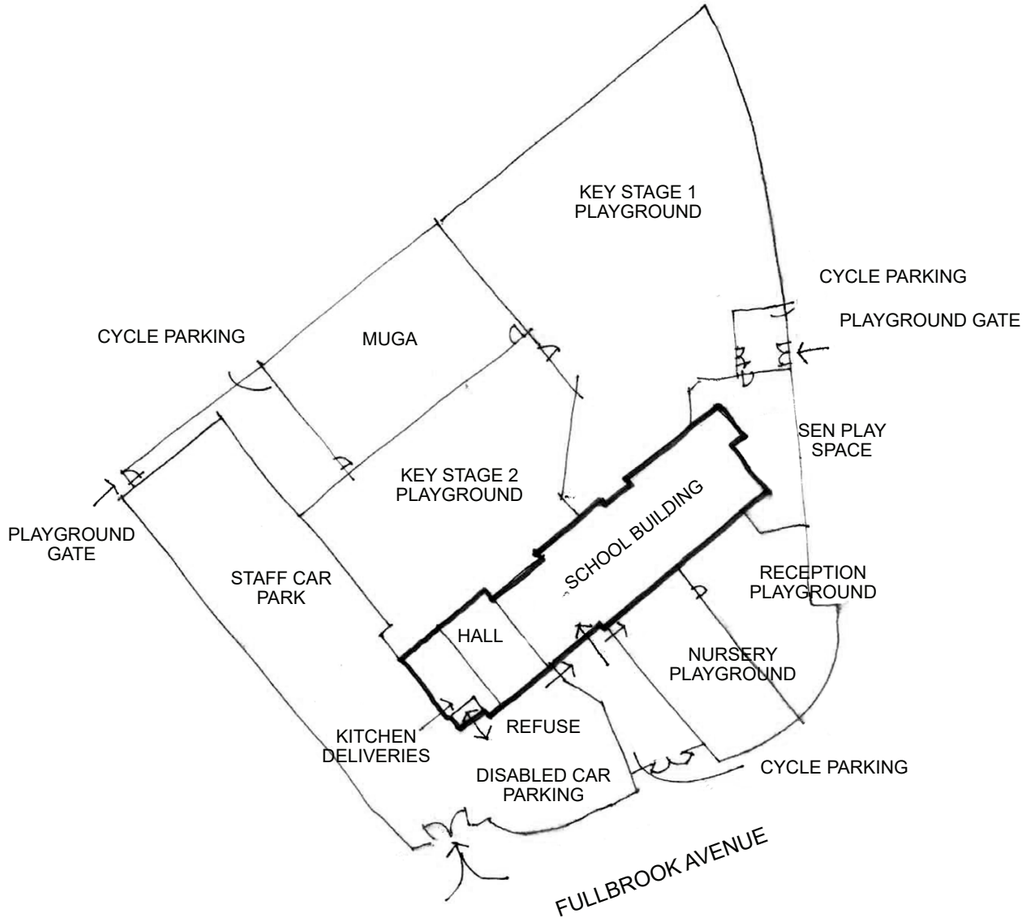
Sketch option 2 - V Shaped school building

Sketch option 3 - L Shaped building

3. Development Proposals

3.2 Design Principles

Proposed General philosophy



Proposed General layout

3. Development Proposals

3.3 Proposed plan

- School Site 12091m2
- Proposed 1760m2

Parking Provision

Staff parking - 29 spaces

Visitor parking - 16 spaces

Disabled parking 4 spaces

Total 39 spaces

Bicycle provision

10 bike spaces

Pupil bike spaces - 70 spaces

Total 80 spaces

Proposed Site Plan of the Proposed Primary School

3. Development Proposals

3.4 Material experimentation

In order to determine the material palette of the proposed primary school, a experimentation exercise was carried out. The following options consisted of

1. Red brick and cream render (to match existing context)

2. White brick, dark grey render, and gold recessed elements

3. White brick, cooper brown render and recessed elements

4. Textured cream brick, dark grey render, and gold elements,

Conclusion

After analysing the different options, we believe that Option 4 was the most successful. The use of textured cream brick as the primary material complements the existing context. It also provides the school with a distinctive appearance.

Option 1 - Red brick and cream render (to match existing context)

Option 2 - White brick, dark grey render, and gold recessed elements

Option 3 - White brick, cooper brown render and recessed elements

Option 4 - Textured cream brick, dark grey render, and gold elements,

4. Transport and Accessibility

4.1 Transport

The existing site location is in Reading, Wokingham Borough Council. The main access roads are Fullbrook Avenue, Hyde End Lane and Ryeish Lane and lies approximately 2.5km from Spencer's Wood and 3.6km from Shinfield. The school is surrounded by residential neighbourhood to the west and

Only 1 bus route travels through Fullbrook Avenue.

Reading Station (Network Rail and Elizabeth Line) is the nearest main station. There are local rail stations nearby such as Earley and Wokingham Station.

Further details have been provided within the travel plan, included within this application.

4.2 Accessibility

The proposal will comply with the Equality Act 2010, using as guidance Approved Documents Part M, and the guidance found in British Standard 8300:2009 Design of buildings and their approaches to meet the needs of disabled people.

4.3 Construction management

The location of the building on the site allows for contractor set-up on the site itself. There is sufficent space avaliable on the proposed car park area to provide site cabins, materials storage and vehicular, access and egress.

The existing crossover from Fullbrook Avenue will be used so no off-site contractor requirements are needed. Additionally, the constructyion will be kept away from the protected trees and hedgerow on Hyde End Lane.

A full construction management plan can be provided as part of a condition discharge.

5. Design Proposal

5.1 Area accommodation with designated SEN provision

	Average area of space (m^2) NIA	supple-mental area m2	Total no. of spaces	Total Area (m^2)	Total non-net area	total area excl supp & non-net area
Basic Teaching Area						
Nursery Playroom	62.0		1	62.0		62.0
Reception Classroom	62.0		1	62.0		62.0
Extensive Infant Classroom	62.0		2	124.0		124.0
Junior Classroom	55.0		4	220.0		220.0
Specialist practical/ other						
Food/ Science/ DT area	34.0		1	34.0		34.0
Primary SEN classrooms (ambulant)	41.0	82	2	82.0		0.0
Total		**82**		**584.0**	**0.0**	**502.0**
Large Spaces: Halls, Studios and Dining						
Main Hall	180.0		1	180.0		180.0
Total		**0**		**180.0**	**0.0**	**180.0**
Learning Resource Areas						
Library	20.0		1	20.0		20.0
SEN therapy/ MI room	12.0	12	2	24.0		12.0
SEN resource base	12.0	12	2	24.0		12.0
Small group room	9.0		1	9.0		9.0
Small group room (nursery)	9.0		1	9.0		9.0
Total		**24**		**86.0**		**62.0**
Staff and Adminstration Areas						
staff room (prep and social)	34.0		1	34.0		34.0
				0.0		0.0
head's office (meeting room)	16.0		1	16.0		16.0
Staff workroom nursery	8.0		1	8.0		8.0
Staff workroom specially resourced	11.0	11	1	11.0		0.0
general office (1 recep desk)	13.0		1	13.0		13.0
reprographics room	5.0		1	5.0		5.0
entrance/ reception (50% circ)	6.0		1	6.0	3.0	3.0
interview room	6.0		1	6.0		6.0
sick bay	4.0		1	4.0		4.0
kitchenettes, bay (nursery)	4.0		1	4.0		4.0
Total		**11**		**107.0**	**3.0**	**93.0**
Storage						
teaching store (off nursery)	4.0		2	8.0		8.0
teaching store (off reception)	3.0		1	3.0		3.0
teaching store (off infants and juniors)	1.5		6	9.0		9.0
specialist store (food, sci, DT)	5.0	10	3	15.0		5.0
PE store(s) (off hall)	15.0		1	15.0		15.0
PE store(s) (off small hall)						
external PE store	4.0		1	4.0		4.0
non-teaching storage						
servery/ dining furniture store	7.0		1	7.0		7.0
wheelchair/ appliances bay(s)	1.5	1.5	3	4.5		3.0
personal storage (coat hooks)	3.0	3	7	21.0		18.0
cloakroom (early years, 50% circ)	12.0		1	12.0	6.0	6.0
cleaners' store(s)	1.5		2	3.0		3.0
general store (stock/ maintenance)	6.0		2	12.0		12.0
Total		**14.5**		**113.5**	**6.0**	**93.0**
float		37.0				6.0
Total Net Area		**168.5**		**1070.5**	**9.0**	**936.0**

An Early Schedule of Areas Plan 1FE School with designated SEN provision

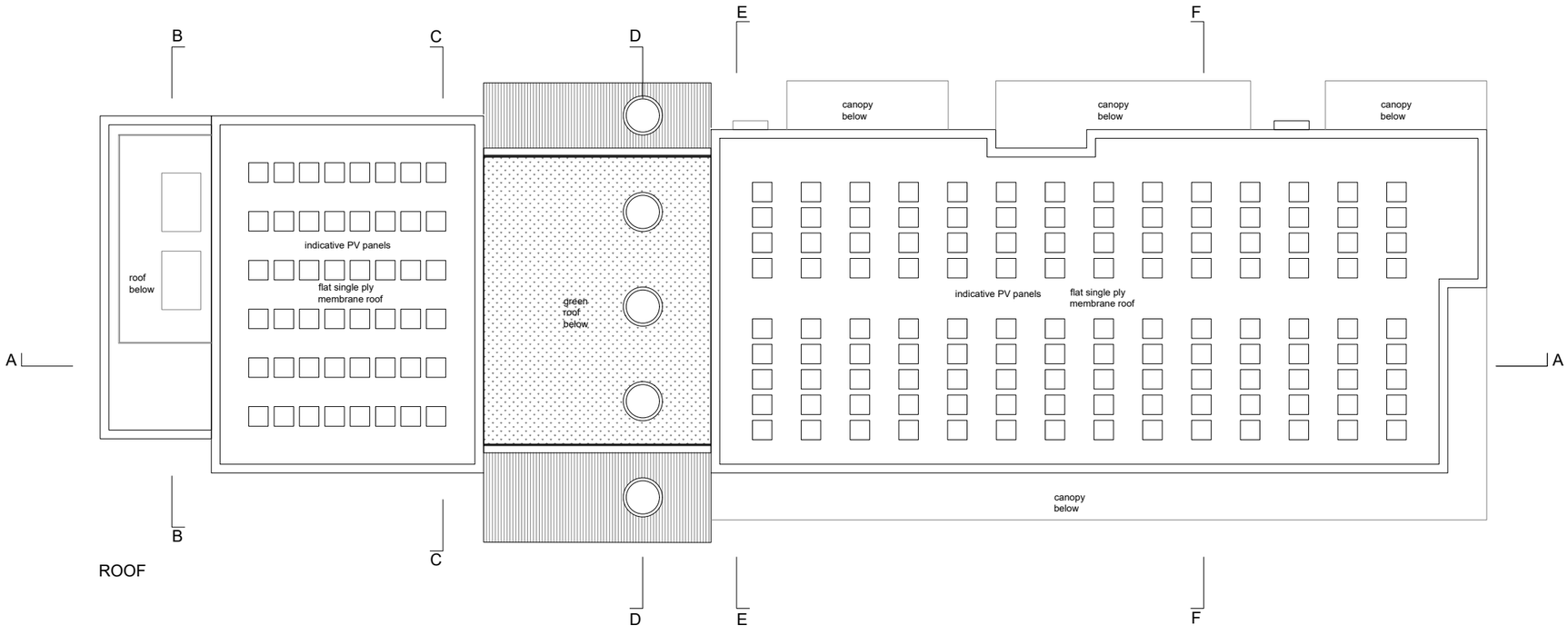
5. Design Proposal

5.2 Proposed plans

Proposed Roof Plan of the Proposed Main Entrance

5. Design Proposal

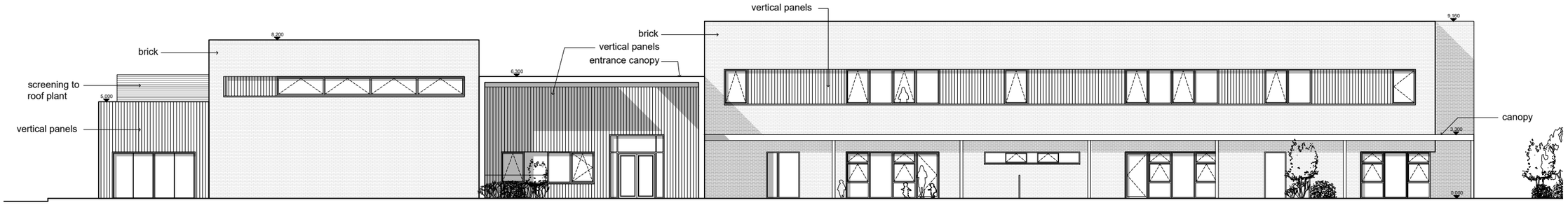
5.2 Proposed plans



Proposed Roof Plan of the Proposed Main Entrance

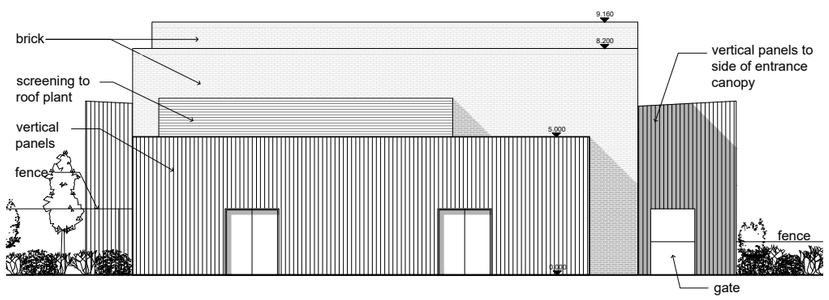
5. Design Proposal

5.3 Proposed elevations and sections



SOUTH ELEVATION

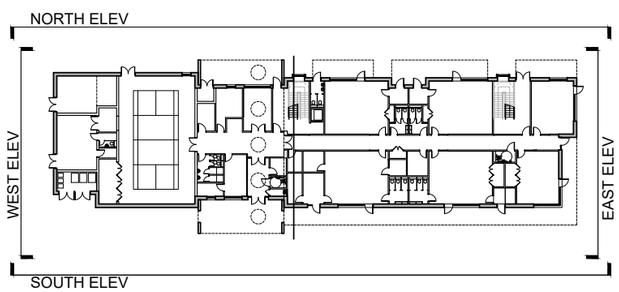
NORTH ELEVATION



WEST ELEVATION

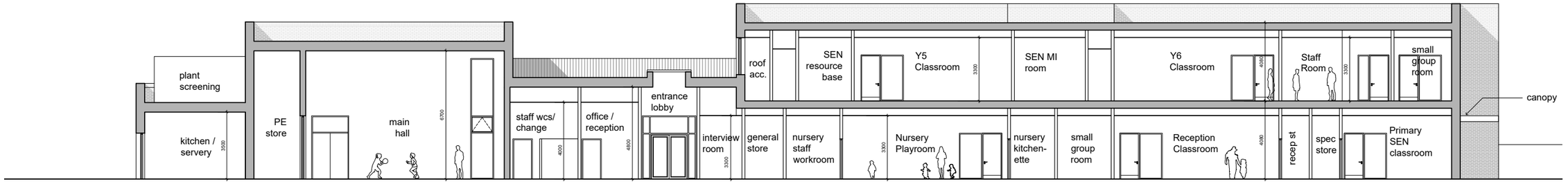
EAST ELEVATION

KEY

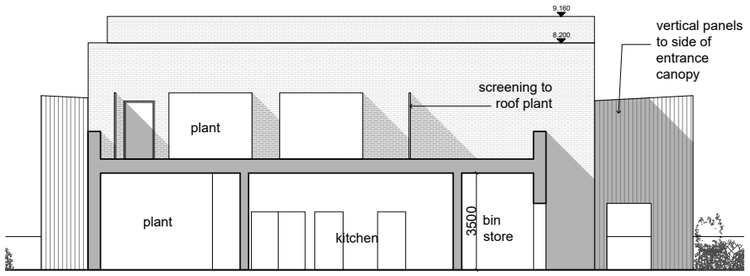


5. Design Proposal

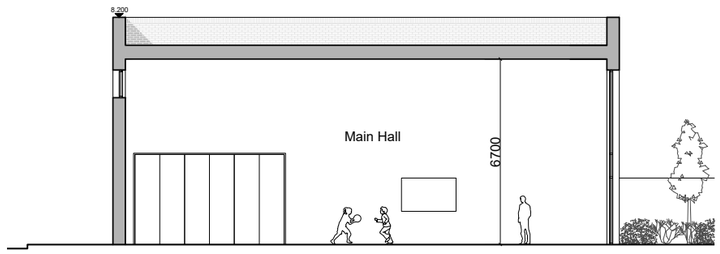
5.3 Proposed elevations and sections



SECTION A



SECTION B



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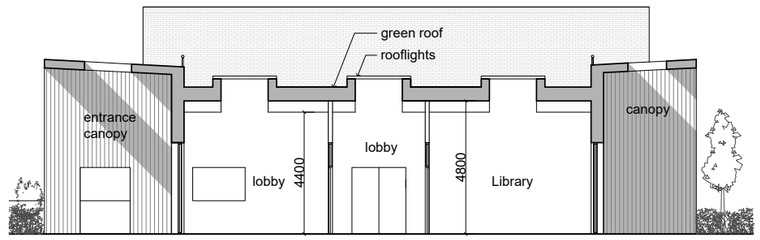

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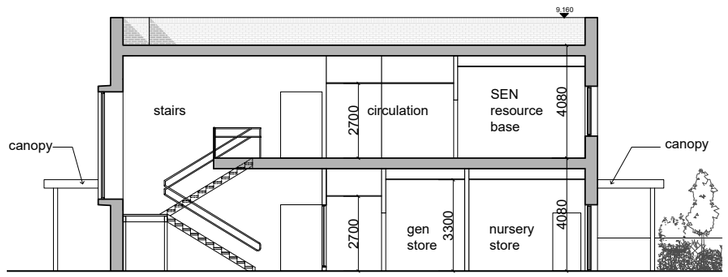
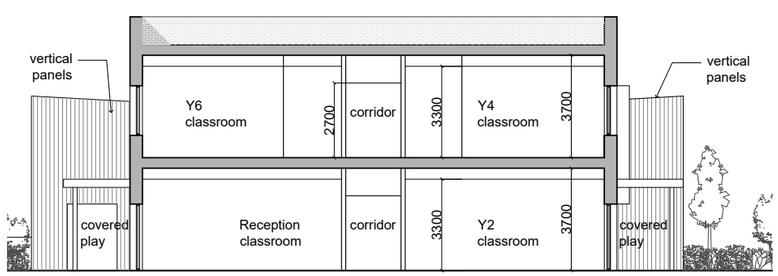
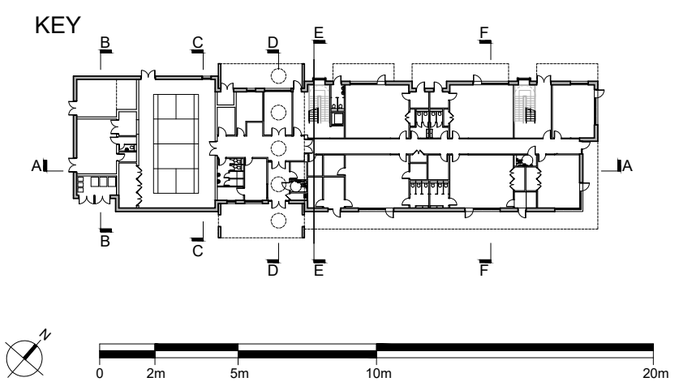


SECTION E



SECTION F



5. Design Proposal

5.4 Visualisations

View from Fullbrook Avenue across car park

5. Design Proposal

5.4 Visualisations

View from Fullbrook Avenue across early years playground

6. Environmental impact

6.1 Landscape masterplan

New building

Key proposals:

An extensive green roof to the entrance portion of the building, providing habitat that can be looked on by pupils within the main section.

The Main Site

Key proposals:

Structure planting to the southern and western site boundaries, to integrate with the wider Spencer's Wood landscape and screening parking areas;

Planting and seating opportunities within all play grounds. Sensory planting species together with ornamental trees 'soften' the outdoor spaces whilst seating niches provide a range of spaces;

The creation of a Forest School in the larger play space, including creating a living willow tunnel, a native copse and providing robust raised 'Grow Your Own' planters;

Extensive planting to the northern and eastern boundaries, to enclose the site visually and create a more calming environment for pupils. This includes planting incorporating a range of native species.

Please refer to the landscape architect, ME Landscape Studio's report for more details.

Proposed landscape Plan of the Proposed Primary School

6. Environmental impact

6.2 Landscape character

Forest School

- Potential to develop a Forest School area to the north eastern side of the school grounds, close to Hyde End Lane. This would provide spaces for group activities.

- The area can have robust raised planters as growing areas for the pupils. Herbs can also be grown.

Sensory Planting

- Key points of the approach to the Sensory Planting:

- A series of sensory planting areas interspersed with seating

Hard Materials/ Furniture Strategy

- A range of surfaces are proposed, including standard tarmac, permeable tarmac, resin-bound gravel, play surfacing and permeable pre-cast concrete blocks. These will be in calming complementary colours to not be visually ‘busy’. The final selection of surfaces is to be co-ordinated with the school.

- Different seating types are proposed, including shaped seats and seating at different heights for various age groups. The final selection of the seating is to be co-ordinated with the school.

Planting - Buffer Planting to Car Park

- Typical low maintenance shrub and ground cover planting, including evergreen hedging to the site boundary.

Native Planting

- A range of native tree and shrub species to the eastern boundary adjacent to Hyde End Lane, to reinforce the existing planting. The species are as outlined in the Spencer’s Wood & Three Mile Cross DAS.

We are extending the existing hedgerows to help enclose the site and reduce views into the site from the public footpath..

Planting - Trees

An indicated a range of native and ornamental tree species across the site, to reinforce existing tree planting and provide more interest during the year.

There is a group of ornamental cherries within the Car Park/ drop-off area, with native cherry to the entrance.

- The key trees within the Western Entrance are Sweetgum, which has amazing red and orange autumn colour and interesting leaf shape.

- The sensory planting within the Playgrounds.

The Forest School is to have fruit trees including apples, as well as native cherry trees (Prunus avium).

Ecological Enhancements

- Enhancements for wildlife considered appropriate may include;

• Boxes for hole or crevice nesting birds, possibly integrated into the building façades;

• Loggery or log pile habitat features for invertebrates, possibly on the extensive green roof;

• Bat roost boxes;

• Insect boxes, possible on the extensive green roof;

• Hedgehog houses, and

• Installation of a biodiverse extensive green roof.

The key enhancements within the landscape are:

1. Tree planting including fruit-, seed-and nut-bearing varieties to provide foraging resources for birds and other wildlife;

2. Incorporation of native plants and those of known benefit to wildlife in to the landscape scheme to provide foraging opportunities for birds, invertebrates and bats;

3. Incorporation of a ‘tapestry’ hedge along the eastern boundary, with a range of native shrubs;

4. Provision of bird and bat boxes, and insect boxes on building walls to provide habitat opportunities for bird and bat species and a variety of invertebrates;

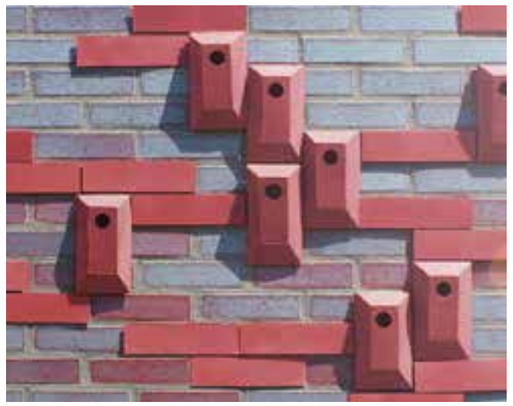
5. Provision of night-scented plant species for bats;

6. Provision of gaps (c. 13 x 13cm) within new fencing to enable dispersal of hedgehogs and other wildlife into the wider landscape.

Please refer to the landscape report for more details.

Ecological Enhancements - Extensive Green Roof

Pakring Bays - Permeable blocks



Encouraging Wildlife - Bat and Bird Bricks

Hard materials Furniture Strategy - Curved seating

6. Environmental impact

6.3 Noise Impact Assessment

Introduction

A noise assessment has been carried out by Jomas for the proposed Spencer's Wood Primary School.

The results of the noise measurement study have been utilised to identify:

• The requirements for facade sound reduction of the proposed building envelope in order to achieve the requirements of BB93.

o The external facade will be designed to achieve a sound reduction of at least 45 dB – 50 dB Rw.

o Minimum glazing acoustic specification 20 dB Rw.

o Open windows should be acceptable for ventilation and mitigation of overheating, or a hybrid acoustic trickle vent/ mechanical ventilator system could be used.

• Maximum noise rating levels for plant associated with the school building in line with the BS 4142:2014 methodologies.

Conclusion

The site is very quiet with distant road traffic noise, natural noises such as bird song and leaves rustling as well as distant aircraft. Occasional noise from the adjacent residential construction site was audible during the site visits.

Please refer to the Noise Impact Assessment by Jomas for more details.

6.4 Operational Waste Management Plan

A Operational Waste Management Plan (OWMP) was produced by Jomas to put in place the management tools required to allow residents of the proposed development to make more informed decisions about their waste choices, and therefore they are able to minimise the adverse impacts of their actions on the environment. To achieve this, a strategy will be developed in order to eliminate barriers that prevent residents from efficiently managing their waste and impact on the environment. The plan includes incentives to promote employees to reduce, reuse and recycle their waste.

The key aims of this OWMP are to:

• Provide estimations on the anticipated waste generation within the proposed development;

• Provide a strategy for the management of the anticipated waste generation within the proposed development, from the point where waste is generated to the point where it is collected for off-site treatment;

• Allow waste to be disposed of easily, and be stored and collected in an efficient and discreet manner;

•Ensure that the proposed development has adequate facilities and space to adapt to any future waste management trends and practices;

•To contribute towards achieving Wokingham Borough Council's current and long-term targets for waste minimisation, re-use and recycling; ·

•To ensure compliance with guidance and standards for the handling and management of operational waste; ·

• To promote high levels of recycling by providing residents and staff with convenient, clean and efficient waste systems that enhances the operation of the buildings

Conclusion

The proposed development will be sustainable with high standards of environmental performance.

As such, due consideration has been given to waste generated by the development during its operational stage, and has established the following aims:

• To contribute towards achieving current and long-term government and local targets for waste minimisation, re-use and recycling;

• To allow that all legal requirements for handling and management of waste during operation of the development are complied with; and

• To provide staff with convenient, clean and efficient waste management systems that enhance the operation of the buildings and promote high levels of recycling.

Please refer to the Operational Waste Management Plan for more details

6.5 Foul and surface water drainage

Introduction

Jomas was commissioned to undertake a Drainage Assessment for the proposed development of land located at Spencers Wood Primary School.

This Drainage Assessment reviews the existing drainage arrangement at the application site and proposes a surface water drainage strategy in line with Local Authority and Lead Local Flood Authority (LLFA) guidance.

Flooding

An overview of flooding has been completed with the sources of flooding assessed and proposed mitigation measures listed below,

Fluvial (Rivers and Sea) - *Very Low. Site within flood zone 1*

Coastal and tidal - N*egligible. Not near coast or tidal waterbody*

Groundwater - L*ow. Proposed finished floor levels are 150mm above external ground levels and natural topography reduces risk.*

Surface water - *Low Low due to natural topography and presence of surface water drainage and falls away from the site*

Sewers - *Medium Medium according to Thames Water with this managed by raised floor levels and pumps*

Reservoirs - *Very Low. Reservoir at low danger of failure*

Surface Water Drainage

It is proposed to discharge surface water to the TW sewer in the street. Discharge will be restricted to no greater than 2l/s. Attenuation will be provided in the paving subbase. Total storage volume is designed to ensure there is no flow off site in all storms up to the 100 year +40% storm event.

A 10% allowance for urban creep has been included within the calculations.

Maintenance/management of all onsite drainage infrastructure has been considered within a separate maintenance plan appended to this report. This will be updated through the

6. Environmental impact

development process. Overall, the proposals provide a high level of water treatment, runoff reduction and flooding protection for the proposed development and are in accordance with all requirements of the Lead Local Flood Authority (LLFA).

Foul Drainage

It is proposed to discharge the foul drainage from the site into the existing Thames Water sewer.

Please refer to the Drainage and SUDs strategy for more details.

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Proposed drainage plan

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