Bridgend West Primary Cluster - English Medium (Marlas Site)

Pre - Application Document - Design and Access Statement

October 2023

BR0301-SRA-01-XX-RP-A-00001

Suitability Code: S2 For Information / Revision: P04

WEP co

ares LANDSCAPE ARCHITECTS

SHEPPARD ROBSON

Precedent image - ‘Street’ spaces

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SR Project Number: 6840

Revision	Date	Status	Issue Purpose	Originator
P04	12/10/23	S2	For Information	RLS

1.0 INTRODUCTION

1.1 Overview

This Design and Access Statement (DAS) has been prepared by Sheppard Robson (SR) on behalf of the Welsh Education Partnership Company (WEPCo) and Bridgend County Borough Council (BCBC) Education and Family Support services. Additional input has been provided by Ares Landscape Architects, The Urbanists (planning consultants) and TTP (highways consultants). It accompanies and supports the Planning Application for the 'Bridgend Primary School - Marlas Site' to the Bridgend Local Planning Authority (LPA). The statement explains how the proposed development is a suitable response to the educational brief, the site and context.

In addition to the above, the key purpose of the Design and Access Statement is to ensure responsive design, supporting the role in the delivery of sustainable development through the planning system.

This document has been developed in conjunction with feedback received (to date) from various pre-application meetings held with the relevant stakeholders, Statutory Authorities and various consultants.

Existing Marlas Site Plan

School Operational Boundary

1.2 Development Brief

The 'Bridgend Primary School - Marlas Site' project, is to provide a new English Medium primary school. The below sets out the key project information, as follows:

English Medium Primary School - Marlas	
Participant:	Bridgend County Borough Council
Name of project:	Bridgend West - MIM Project - Marlas Site
Site and Location:	Land at Marlas, north Cornelli
Proposed age range:	3-11
Proposed capacity:	420 primary places, 60 nursery places and 15 ALN places
Proposed no. of teaching staff:	45 teaching staff (45 full time and 2 part time) and 32 ancillary staff (4 full time and 28 part time)

The proposed site for the English Medium school (Marlas site) is a predominantly clear.

The new primary school will consist of: 2 Nursery classrooms, 2 Reception classrooms, 4 Infant classrooms and 8 Junior classrooms. Direct access into the younger years classrooms require these class spaces to be located on the Ground Floor. External play areas will also be located directly adjacent to classroom spaces. The Juniors on the upper floor require a separate entrance.

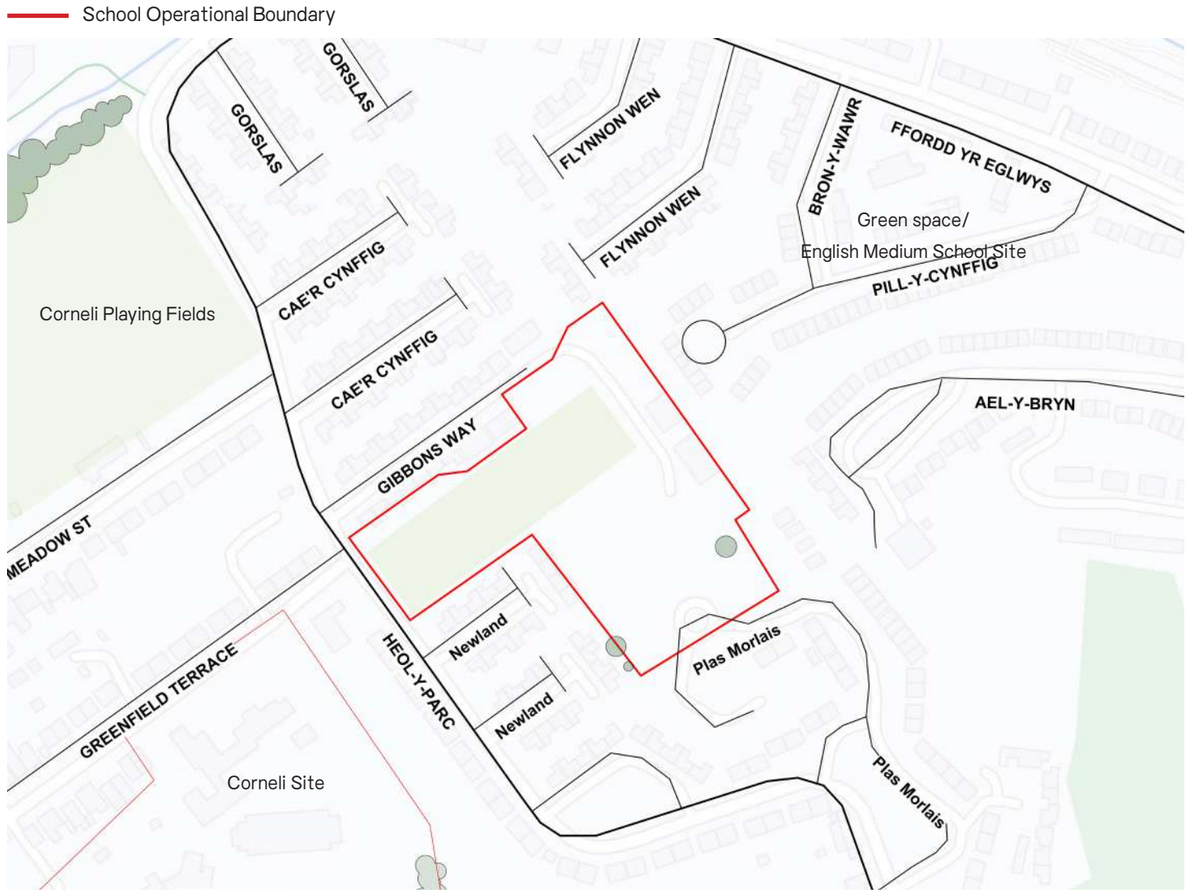
The ALN space located on the ground floor, will require an adjacent vehicular drop-off area and dedicated play space.

Clear arrangements for access / egress and security from the site (for pupils, staff, parents and visitors) have been a fundamental aspect of the brief and therefore, careful consideration has been given to site and landscaping arrangements throughout.

1.3 Summary of Overarching Project Contraints and Opportunities

The below sets out the key constraints / opportunities for the site:

Category	Key constraints / opportunities
Construction	• Construction traffic and deliveries need to be managed throughout the construction period.
School organisation	• 'Steet' space requirement.
	• If the school is to be used out of hours by the community, associated security to be considered.
	• Flexibility of teaching arrangements for future pedagogies - opportunity to efficiently allow for change.
	• Relationship between the internal arrangements and the outdoor learning and social spaces - opportunity to improve landscapes.



Existing Site Context Plan with Current School Buildings Located

1.4 Stakeholder Engagement

1.4.1 Client Engagement Meetings (CEM's)

Below outlines a list of the key Client Engagement Meetings that have taken place. In attendance have been Bridgend CBC, current school Head Teachers, Technical Advisors (on behalf of the Welsh Government), WEPCo Project Managers and the wider Design Team.

Stage 1 -

- 30/03/22 CEM 01
- 13/04/22 CEM 02
- 27/04/22 CEM 03
- 12/05/22 CEM 04
- 26/05/22 CEM 05
- 21/07/22 CEM 06
- Workshops with Welsh Government Technical Advisors Team

Stage 2 -

- 11/07/23 CEM 07
- 25/07/23 CEM 08
- 09/08/23 CEM 09
- 22/08/23 CEM 10
- 05/09/23 CEM 11
- Workshops with Welsh Government Technical Advisors Team

1.4.2 Pre-Application Meetings

In addition to the above, the following preliminary Planning meetings have taken place:

- Pre-Application meeting with the LPA - June 2022,
- Pre-Application meeting with LPA – July 2023
- Highways Officer meeting (Local Highways Authority) – August 2023

Engagement Number & Date (WEPco Stage 2)	Discipline	Outcome	Notes
Kick off 12/06/23	General	Review of Stage 1 – Architectural layouts, Landscape Masterplan, MEP update, Fire * Identify key risks/opportunities* Next Steps* *(LG has issued next steps and actions 12/06/23 following kick-off meeting)*	(* denotes WEPco inclusion by LG)
First 1.5 hours	CEM01 - Re-introductory Meeting - Chris & Gaynor - 04/07/23	Architecture	GA recap, classrooms, cloaks and WCs, main hall, kitchens and development to GAs	
		Architecture	Areas - NIA & GIA	
		Landscape	Site recap and pre-app comments.*	
		Structures	Introduction, general update embodied carbon target	
		Structures	Civils and SAB update	
		M&E	Introduction, general update, NZC, ventilation	
		M&E	Heating and vent strategy, daylighting and acoustics*	
		Fire	Introduction, general update	
		Fire	Review of overall strategy including Street ACR compliance strategy review*	
		AOB (WEPco, CDM,BREEAM, Embodied Carbon, planning, building regs, ACRs, TA clarifications, highways)	PAC/ Planning timescales*, part demolition of Corneli Overall programme & timescales	
Second 1.5 hours	CEM01 - 11/07/23	Architecture	Progression through School concept diagram	
		Architecture	Library/ street review, balustrade type/ heights and stairs	
		Architecture	Security strategy diagrams for internal and external access	
		Architecture	Discuss external façade updates, material selection	
		Architecture	Main entrance/ canopy design & visibility, secondary entrances	
		Architecture/ Landscape	Planning & residential adjacencies	
		Landscape	Site access - security/ community access/ out of hours access	
		Landscape	Site access, secure line, fences	
		Landscape	Vehicle tracking by TTP, pedestrian vs. vehicular site movement	
		Landscape	School entrances, hard and soft play areas, forest zones, community garden and site levels	
		AOB (WEPco, CDM,BREEAM, Embodied Carbon, planning, building regs, ACRs, TA clarifications, highways)		
	CEM02 - 25/07/23	Architecture	Typical classroom design	Potentially remove from CEM02 Plan if SR/ ABM meet with teacher on 20/07/23
		Architecture	Discuss external strategy/ identity of each school etc, doors & windows design, canopy design	
		Landscape	Update to Landscape proposals incorporating CEM01 comments	
		M&E	Discuss heating strategy	
		FF&E	FF&E initial layouts classroom and WC	Potentially remove from CEM02 Plan if SR/ ABM meet with teacher on 20/07/23
		IT	Introduction & ICT requirements (including Annex 7 of PA)	ICT consultants appointed?
		E&S	BREEAM update and discuss targeted credits	
		Fire	Review of fire strategy	
	CEM03 - 08/08/23	Architecture	Semi-freeze layouts/ internals - review/ comment	
		Architecture	Discuss interior design strategy, floor finishes, acoustic strategy, internal glazing & door strategy	
		Architecture	Typical layouts for hall, studio, food room, ALN classroom, library/street, staff room	
		Architecture	Semi-freeze externals - review/ comment	
		Architecture	Review external window and door design development	
		Architecture	Discuss main school entrances and corridors	
		Architecture	Discuss external materials	
		Landscape	**SUDS**	**Moved from CEM02**
		Structures	Structural strategy (columns exposed vs encased), embodied carbon	
		M&E	PV strategy	
		M&E	Typical ventilation and acoustics for classrooms/ street including ceilings, louvres and MVHR	
		M&E	Review heating strategy/ radiator locations	
		M&E	Internal lighting	
		Catering	**First draft kitchen design**	**Moved from CEM02**
		Fire	Out of hours commuinity use, zoning and escape	
		IT	Review ICT proposals	
		Architecture/ Landscape/ contractor	Discuss site enabling works, including temporary site access, hoarding lines, demolition	LG to confirm whether contractor will be on board at this by this point.
		AOB (WEPco, CDM,BREEAM, Embodied Carbon, planning, building regs, ACRs, TA clarifications, highways)		
	CEM04 - 22/08/23	Architecture	Freeze layouts - review typical classroom design, main hall, food room, staff room	
		Architecture	Review interior design strategy, floor finishes, acoustic strategy, internal glazing & door strategy.	
		Architecture	Discuss internal wayfinding strategy	
		Architecture	Review elevational treatment, roof design & proposed materials	
		Architecture	Review CAM strategy	
		Architecture	BREEAM update	
		Landscape	Planting and maintenance strategy*	
		FF&E	Review of FF&E strategy	
		Catering	NA	
		Structures	Structural strategy of site e.g. retaining walls	
		M&E	Plant allocation	
		Architecture/ Landscape/ contractor	Review site enabling works, including temporary site access, hoarding lines, demolition	
		AOB (WEPco, CDM,BREEAM, Embodied Carbon, planning, building regs, ACRs, TA clarifications, highways)		
	CEM05 - 05/09/23	Architecture	Presentation of proposals, both external and internal strategies	
		Architecture	Review wayfinding and signage proposals	
		Landscape	Presentation of landscape proposals	
		FF&E	Presentation of final FFE scheme	
		Catering	Presentation of kitchen proposals	
		IT	Presentation of IT proposals	
		Structures	Presentation of structural strategy	
		M&E	Presentation of ventilation and acoustics, embodied & operational carbon	
		Fire	Presentation of fire strategy	
		Architecture/ Landscape/ contractor	Presentation of phasing plan, and site routes/access	
		AOB (WEPco, CDM,BREEAM, Embodied Carbon, planning, building regs, ACRs, TA clarifications, highways)		

CEM Plan - Stage 2

1.5 Key Site Considerations

The Marlas site is located to the North of Porthcawl and to the West of Bridgend. The site is bounded by the Pyle railway station to the north and the M4 motorway to the south. The immediate surroundings are mainly two storey residential buildings with arable land and the Kenfig National Nature reserve beyond.

Marlas is currently a grassed space, with an existing hard court area.To the East of the Marlas site, larger residential blocks form a cul-de-sac with roads surrounding the site. The predominant feature of the Marlas site is the change in topography from the east end to the west, which is difficult to navigate. The site is poorly used and has no community facilities, with the exception of the court. It is overlooked from all aspects and has two vehicular turning circles encroaching within the boundary of the site.

Site analysis is discussed in more detail later in the document, however, the below summarises the overarching site considerations that have been explored, their constraints and the opportunities afforded:

- Proximity to neighbouring buildings,
- Overlooking issues from hogh ground,
- Site analysis including: orientation, wind and sun paths, noise, existing biodiversity, views in and out,
- Site opportunities / constraints including : underground services and existing drainage, wayleaves, topography, surrounding roads, access points, pedestrian routes,
- Opportunities for ‘buildable areas’,
- Landscape strategies, inlcuding car parking, vehicular / pedestrian access, servicing. pedestrian movement.

Marlas Site

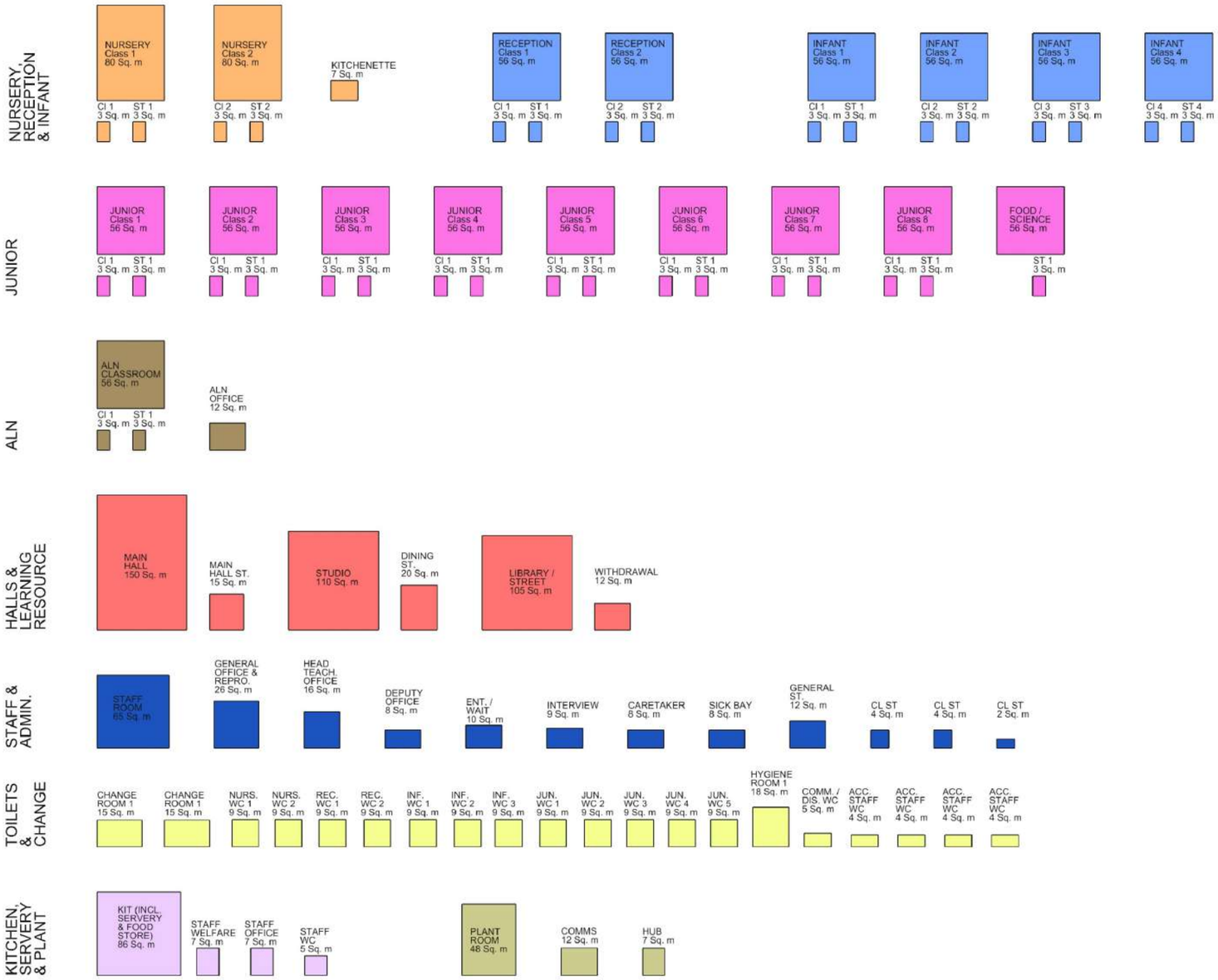
School Operational Boundary

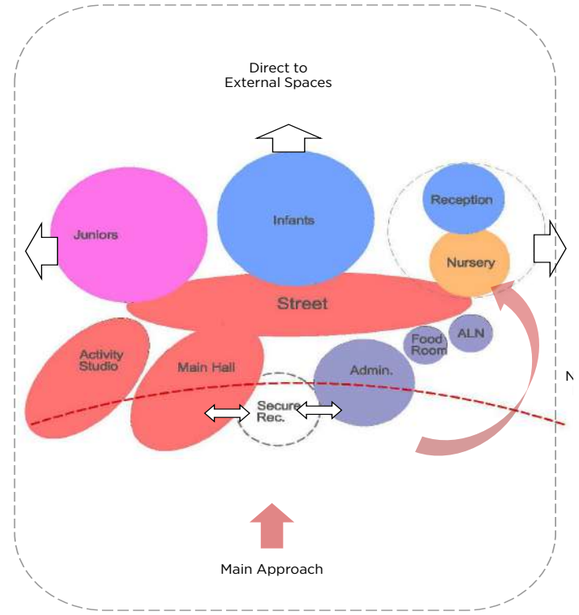
Marlas Site Photos

2.0 EDUCATIONAL BRIEF

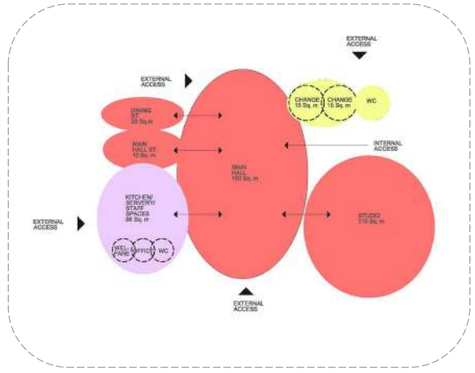
Below is a visual representation of the Schedule of Accommodation with rooms categorised by department and drawn to scale.

2.1 English Medium (Marlas Site) SoA

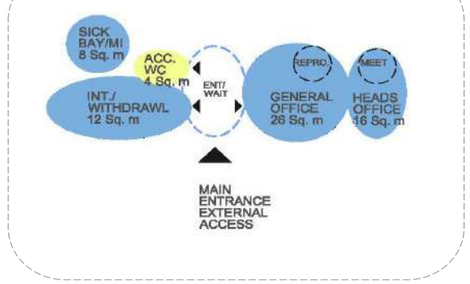




Overall Adjacency Diagram



Main Hall and Studio Adjacency Diagram



Man Entrance Adjacency Diagram

2.2 Key Educational Objectives

2.2.1 Core Teaching Spaces

- 2 x Nursery - 80 m2
- 2 x Reception - 56 m2
- 4 x Infants - 56 m2
- 8 x Juniors - 56 m2
- Withdrawl Room - 12 m2
- Main Hall - 150 m2 and Studio - 110 m2
- Food Science - 56 m2
- ALN - 56 m2
- Street - 105 m2

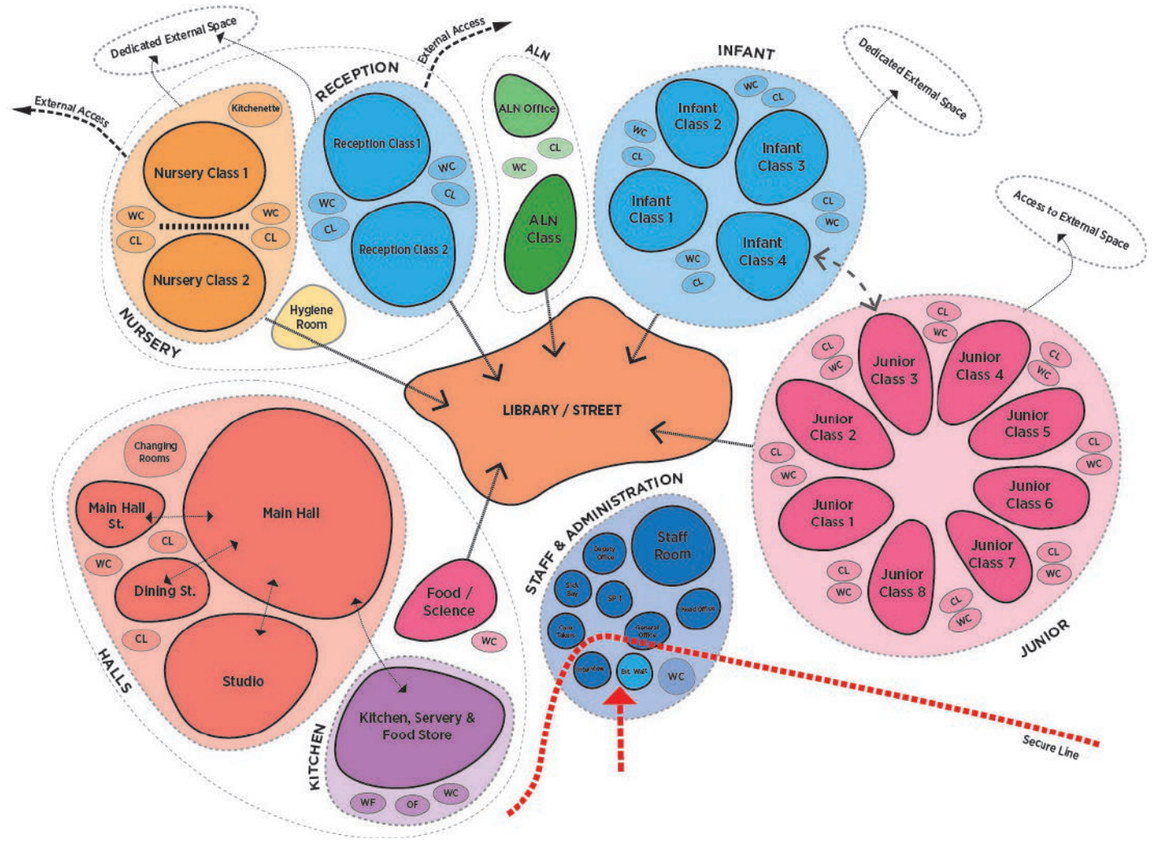
2.3 Educational Vision

- The school should be engaging and welcoming, a place that users will make their own with an atmosphere and sense of scale that is not overpowering, impersonal, or institutional.
- The internal spaces must be flexible along with being secure and controllable.
- The learner will be at the heart of the school.
- The teaching, learning and social spaces shall be considered from the point of view of the learner; maximizing the benefit that their new schools and facilities offer to make their experience as varied as possible.
- The school shall support the changing role of the teacher enabling them to develop their role as facilitators of learning through access to flexible and adaptable learning spaces that will support a wide variety of different ways of learning and teaching.

2.4 Educational Pedagogy

The new schools will support a range of learning and teaching methodologies including:

- Independent study,
- Collaborative team work in small and mid-size groups,
- 1:1 learning,
- Peer mentoring,
- Performance and role play,
- Practical and art based learning, including experiential/hands on learning,
- Open learning and potential for mixed groups,
- Outdoor play/learning spaces.



English Medium Primary (Marlas) - Adjacency Diagram

2.5 Design Requirements

2.5.1 Connections & Shared Spaces

One main entrance to be accommodated for the school. The general office and the interview room to be located adjacent to the main school entrance, off the secure lobby. Equally, access in to an accessible WC is to also be located off the secure lobby.

- The studio, main hall and kitchen to be zoned such that these rooms can easily be accessed during the day without disruption to teaching.
- Street spaces to be created predominantly on the ground floor. The street spaces to be centrally located for ease of access and passive supervision. The layout and equipment to be flexible in order to cater for different group sizes.

2.5.2 Arrival Points

- Site - The approaches to the main entrances are to bring together routes from across the site following pedestrian desire lines from entrances.
- Main entrance - The main entrance to be an open, welcoming, bright and calm space with visual links to adjacent areas of the school to create a positive first experience.
- Ground floor classrooms - Nursery, Reception and Infant classrooms to have an adjacent cloakroom from which toilets will be accessible and which will form the main pupil entrance to the classrooms at the start and end of the school day.
- Secondary entrance - There will be a secondary entrance in to the school for Junior students. This is located opposite the Main Entrance to the rear of the building. There will also be a visual connection between the Main entrance lobby and the secondary entry point.

2.5.3 Main Entrance

- At the main entrance, visitors and parents to enter via a secure lobby with an “airlock” design. A secure glazed screen to be provided between reception / general office and the entrance areas, before releasing remote access to inner doors into the school.
- Outside school start and finish times, parents to use the main visitor reception to drop off and collect pupils (e.g. for medical appointments) and to gain access to the school for meetings.

2.5.4 Main Hall and Studio

- The Main Hall and Studio are to be used as multi-purpose spaces that will be used for the following functions on a daily basis: Assembly / Dining / Sports and PE / Drama and performance.
- The Kitchen is to be located adjacent to the Main Hall with the servery connecting both areas.
- For drama and performance, the Main Hall shall accommodate a collapsible raised stage; fixed performance lighting; a retractable screen and ceiling mounted projector.
- The Studio is adjacent to the Main Hall. A retractable partition has been located between the two spaces,to enable flexibility.

2.5.5 Classroom Spaces

The Nursery classrooms to be linked via a retractable partition between two classrooms to enable a larger single space to be created. A hygiene room to be directly accessible from one of the Nursery rooms and also from the main circulation area. All Foundation Phase classrooms to have direct access to the protected outside play area.

Infant classroom FF&E to be flexible to allow different learning zones to be laid out. Practical work and learning will be undertaken in the classroom rather than in specialist spaces.

In Junior classrooms, practical work and learning will be undertaken in the classroom rather than in specialist spaces. Classrooms to have an adjacent cloakroom and toilets.

2.5.6 Street Space

It is anticipated that the street will be heavily used at ground floor level, predominantly by the students in Reception and infant classes. The space will also be used for independent learning and small group work, working with teachers and learning support staff.

The ‘Street’ will be an engageing space for the students to occupy, learn and play. It will form a pivotal space within the teaching wing, allowing for a ‘home base’ for the students to gather. This space will be supported by the FF&E consultant to create the vibrancy intended in the design.

Precedent image: Main Hall

2.5.7 ALN Spaces

A suite of ALN spaces have been provided for the Marlas School. These include an ALN room and an office. The Withdrawal room has also been located as close to the ALN as possible.

2.5.8 Flexibility & Adaptability

The proposal has been designed with the ability to accommodate flexibility and future adaptability.

This expands from the design of the building form, through to structure, Mechanical Electrical and Power strategies and the various other building components.

The building design should be capable of allowing internal spaces to expand or contract, as necessary. Primarily, the cross wall between classrooms are to be of light weight construction (avoiding concrete or block-work) to enable the flexibility of spatial reconfiguration - in line with evolving pedagogies. Structure, MEP and other disciplines are to be designed with this in mind, to support and future proof potential changes.

2.5.9 External Areas

Free flow play areas to nursery and reception classrooms to be separated and fenced from other external spaces. These areas shall also be provided with a soft play surface and sheltered area. External play areas for infant and junior classrooms to be provided adjacent to the pupil entrances.

External pupil areas to be restricted from access from parents and third parties during the school day whilst pupils have free access to these areas.

Provision of bin storage is to include for storage of recycled materials.

The location of external plant areas are to be included in the overall maintenance and access strategy.

2.5.10 Benchmark Project - Pencoed

As suggested by the Bridgend Council Team, Pencoed Primary School was visited and referred to as a benchmarking scheme. A number of similarities in the brief can be seen between Pencoed and the English Medium requirements.

Precedent image: Street space

Precedent image: Street

3.0 HISTORIC CONTEXT

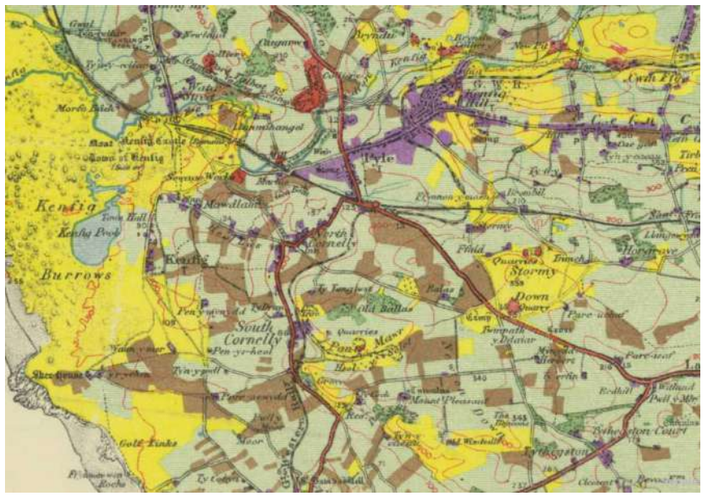
3.5.1 Bridgend

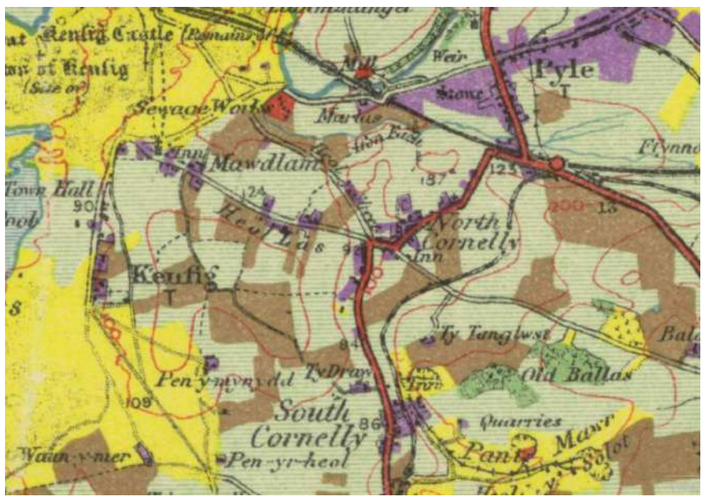
Historically a part of Glamorgan, Bridgend town has expanded in size since the 1980s and is currently undergoing a redevelopment project.

Named after the medieval bridge over the river Ogmore, in Roman times, Bridgend was a route from Cardiff to the forts and harbour at Neath. This road has now become a section of the A48.

The 17th Century saw the discovery and mining of Coal in the South Wales Valleys. Just north of the town this mining led to industrialisation and consequently, to the great western railway. The town grew predominantly as an agricultural market town with a large farmers market remaining until the 1970s.

Since the millennium the town has invested in its public realm, restoration of buildings and a new bus station. The pedestrianisation of the town centre has led to many continental markets and festivals. Alongside this, European funding was used to create a riverside café culture along the River Ogmore.





3.5.2 Marlas

The roundabout on Plais Morlais served two blocks of flats which have since been demolished and replaced by houses. The site has changed little since the 1980s apart from the addition of a basketball court and community building (which has since been demolished). There has also been two properties built to the south side of greenfield terrace.

School Operational Boundary

4.0 LOCATION AND CONTEXT APPRAISAL

4.1 Marlas Existing Site Plan

4.2 Marlas Site Photos

5.0 SITE ANALYSIS

5.1 Wider Context and Surroundings

The Corneli and Marlas sites are in close proximity to each other, located to the North of Porthcawl and to the West of Bridgend.

The sites are bounded by the Pyle railway station to the north and the M4 motorway to the south. The immediate surroundings of both sites are mainly residential with arable land and Kenfig National Nature reserve beyond.

Predominantly, both sites sit within residential areas of two storey buildings. To the East of the Marlas site, larger residential blocks form a cul-de-sac with roads surrounding both.

Densely planted vegetation / trees occupy a corner of the South East area of the Corneli site, whilst on the Marlas site tree planting is sparse. The predominant feature of the Marlas site is the change in topography levels. Beyond the red line boundary, residential buildings occupy the higher levels outside of the site.

Site Context Map

School Operational Boundary

5.2 Immediate Existing Sites

Marlas - The road to the West is the Marlas site's main road and address (Heol-y-Parc) whilst the other secondary vehicular roads are predominantly for the surrounding cul-de-sac areas.

Gibbons Way and Plas Morlais both enter the site and inhabit a round-about within the site's red line boundary.

A basketball court sits to the East within the site, whilst the central part of Marlas is mainly a grassed area.

Existing accesses (vehicular and pedestrian) to the site

School Operational Boundary

Marlas site access from Heol-Y-Parc, Google Street Images

Marlas site access from Plas Morlais, Google Street Images

5.3 Site Constraints

From inception, the site constraints and opportunities for both sites were reviewed and assessed. The various constraints were ordered and prioritised to gain an understanding of the aspects that were flexible, and others that were not.

As discussed previously in the document, these can be summarised as follows:

Marlas:

- Topography of the site,
- Access to the site,
- Utility easements,
- Proximity to residential properties,
- Existing right of ways.

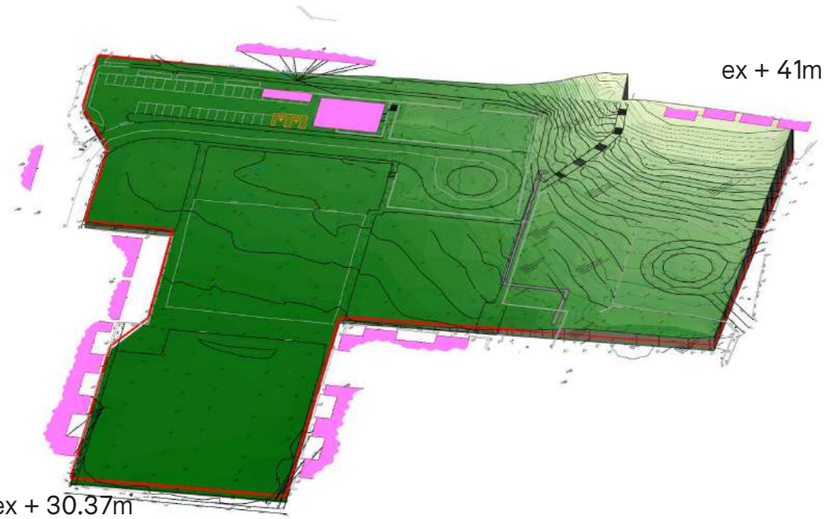
5.4 Topography

The Marlas site has a dramatic topography which has dictacted some of the design decisions.

There is a steeply rising mound in the south east corner of the site with a level change of over ten metres.

The north and west of the site is much flatter with a gentle gradient falling down towards the north west edge.

Marlas Existing Topography



Marlas Existing Terrain Model

5.5 Buildable Areas on the Sites

A thorough analysis was carried out by overlaying the site constraints, client's requirements and initial masses exercises to build a picture of the areas that could potentially be problematic, unachivable and costly, should construction take place in that particular zone. This included incorporating comments from the Pre-Planning consultation and Technical Workshops.

The Marlas site access, topography and existing easements fed in to the establishment of the 'buildable areas' defined on the sites.

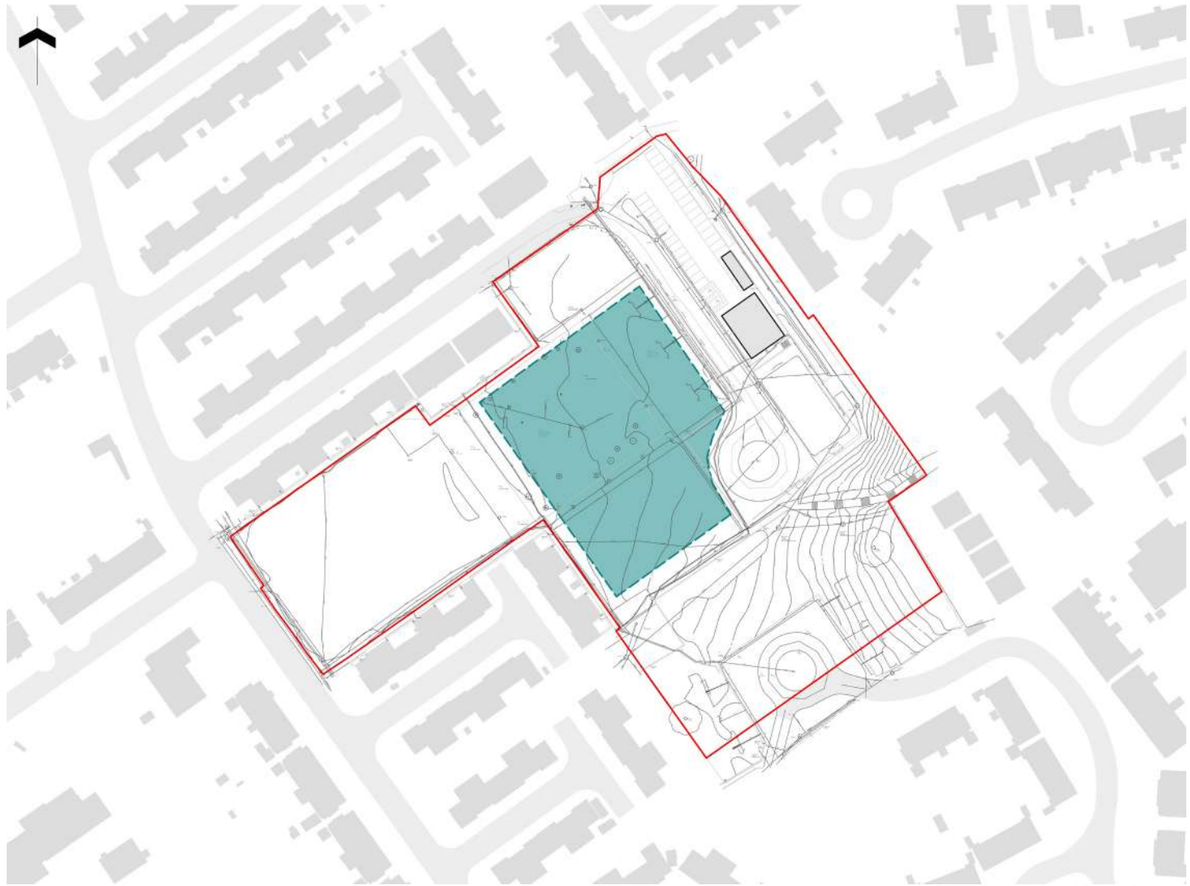
These led to a zone being identified as the most optimum solution for the new build school. As below, the key factors for selection were as follows:

Marlas Site - Buildable Area -

- Accessability to the site,

- Reduced earth works and retaining features,

- Minimal utilities diversion.



6.0 MASSING AND BUILDING FORM - TESTING

6.1 Massing on Site

Post the establishment of 'developable areas' - massing was tested on the site. This was initially tested via 'block massing' to understand the extent of foot print. A combination of the building's orientation for daylighting/heat gain/ PVs etc, the site constraints/parameters and the buildings area requirement - were all tested to find the optimum position.

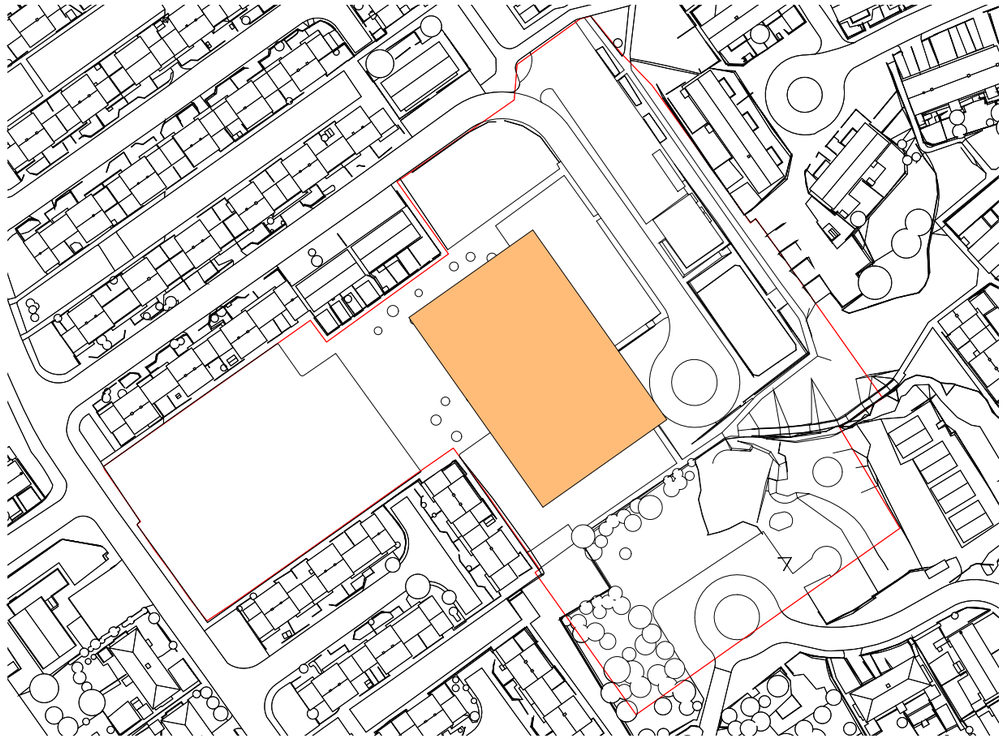
Both single storey and two storeys were tested to ensure the footprint sat as close to the 'build-able area' as possible - allowing for context and surrounding parameters, as follows:

Despite the site being relatively empty the presence of numerous existing site constraints quickly established the build-able area on the Marlas Site. Fundamentally, several underground utilities and services crossing the site - were mapped out to understand where easements were located. The changes in topography, particularly to the east of the site, further encroached on the available constructable area.

These constraints and a number of others, also meant that the new school would need to be two storeys.

Equally important, the orientation of the building was constrained by several factors. This meant the building form was not able to be orientated in the optimal position.

However, the building form and massing sits well on the site and through careful consideration of the site and its boundaries, the current proposal has maximised its potential. One way this has been achieved is via the entrance plaza, which allows the community to clearly see the school building and its grounds.



One storey massing

School Operational Boundary

Two storey massing

6.2 Tested Building Forms and Typologies

The team tested building forms in a logical and methodical way. This included understanding (from the outset) the educational drivers in the form components (i.e. cluster / courtyard / finger approaches) and which of the configurations best suited the educational requirements.

The building forms were discussed with the team educationalist to understand the opportunities and constraints these would offer, whilst maintaining an overview to keep the building form simple and legible.

Spatial adjacencies, functionality and the positioning of the street space were reviewed against each typology. Main circulation routes, access / egress and relationships with the external spaces - were also all considered when carrying out the analysis.

The site was tested simultaneously with the same building form / typology, to establish an approach to standardisation but with the ability to apply flexibility for site specific requirements.

The following forms / typology were tested across the board:

- The Linear

- The crank

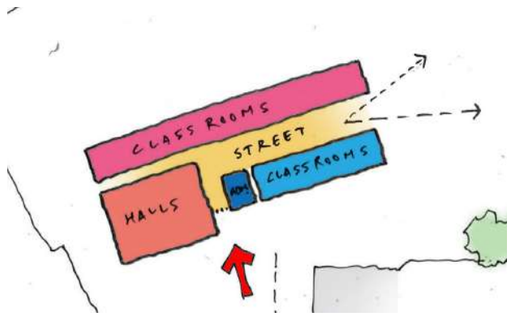
- The 'L'

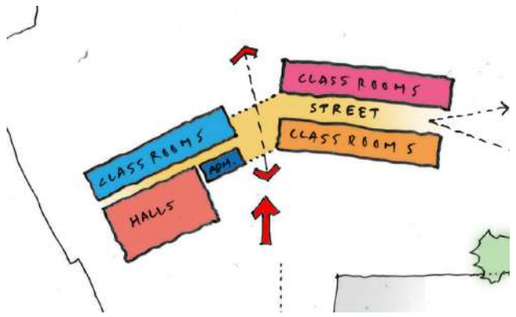
The preferred option ('L') provided a number of benefits and merits which could be translated to different sites. As described previously, the 'L' was able to provide an efficient and standardised form - whilst being flexible and adaptable.

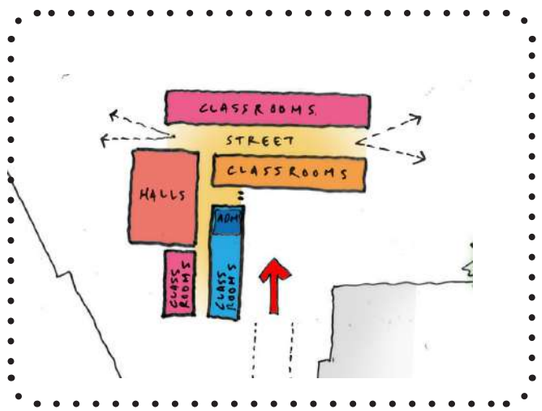
The street space (key to the design) was able to be located as part of the teaching wing, allowing for good access and visibility across the building - as described :

- L approach: One wing of classrooms, with street space between classrooms adjacent to an assembly wing mostly comprising of administration, entrance spaces, Studio and adjacent Main hall - at the 'elbow' of the two wings.

6.2.1 Tested Massing Forms







6.3 Testing and Concept Design Development of the 'L' Option

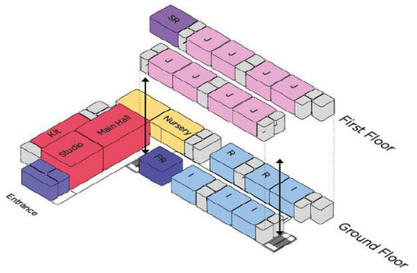
Following on from the preferred building form, variations of adjacencies were tested. The location of the Main Hall and Studio (suite of spaces), in conjunction with the inter-connecting Nursery classrooms, were positioned at various points. This was to understand the optimum location for main entrance, security lines and routes to the Nursery entrances. In conjunction with site access and movement, the placing of these spaces was important to establish.

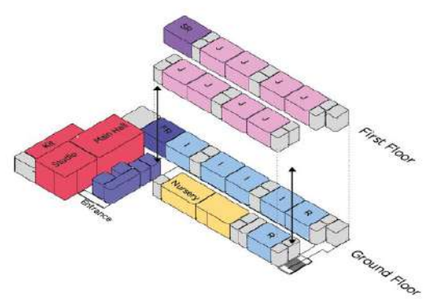
Testing the location of the above spaces also assisted in understanding volume (double heights), form and massing.

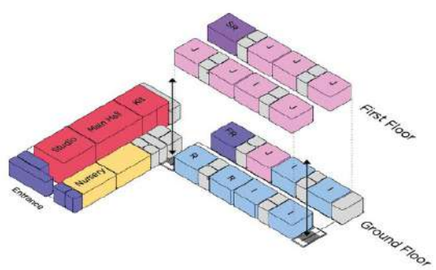
The location of the nursery spaces was also important to establish early, in order to determine the route of 'progression' throughout the school.

The 'Street' was located in the centre of the 'teaching wing' between the classrooms. This offered the maximum access, visibility and good passive supervision. The 'teaching wing' developed effectively, by stacking classroom suites (including WC's and cloaks) and working in conjunction with the structural approaches and ventilation strategies.

The development of the 'L' also aided good access points in to the building for both Main Entrance and other secondary entrances. This, alongside establishing a visual connection with the outside, enabled the ends of the 'teaching wing' and at the 'knuckle' of the building to open out.



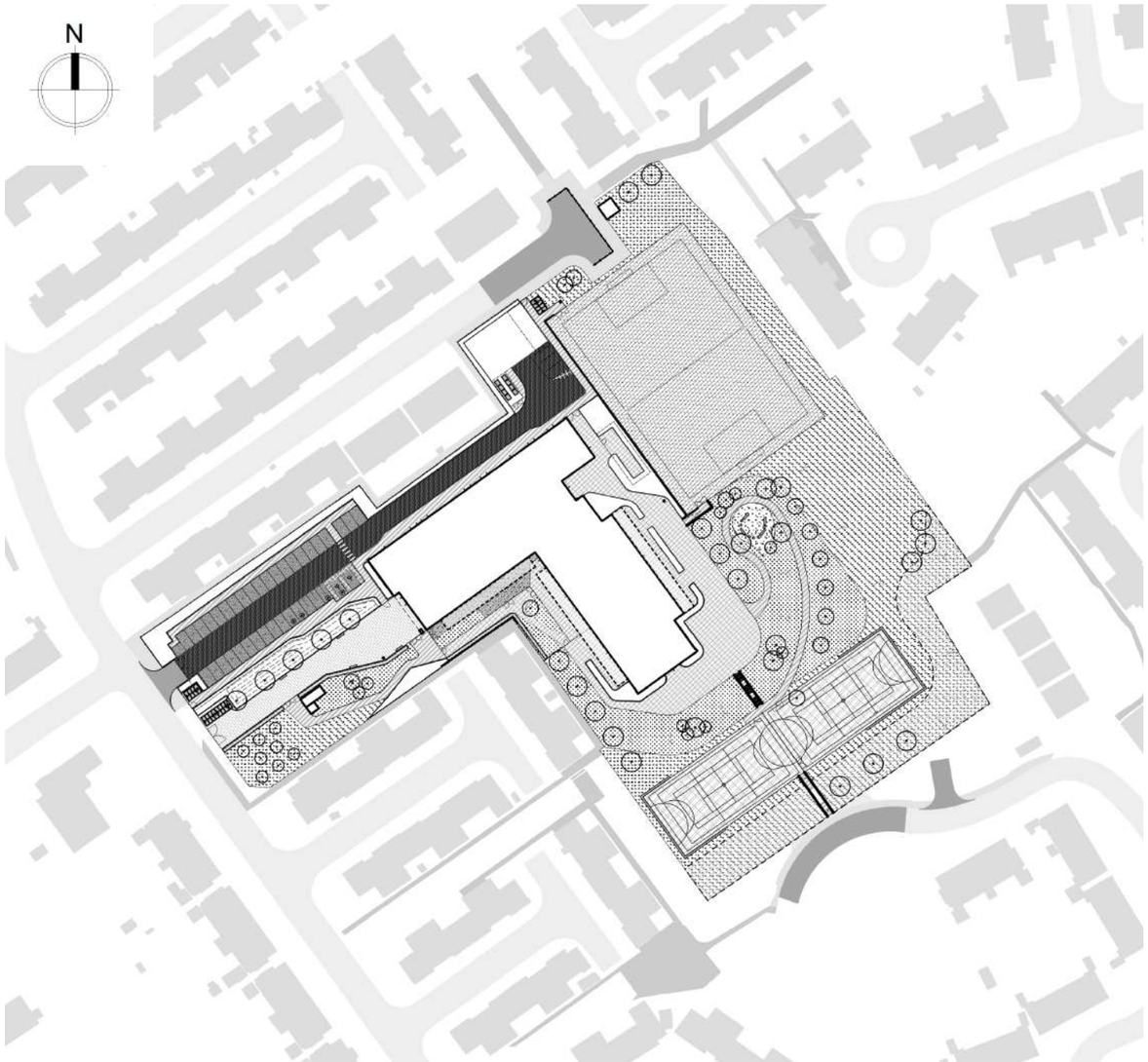


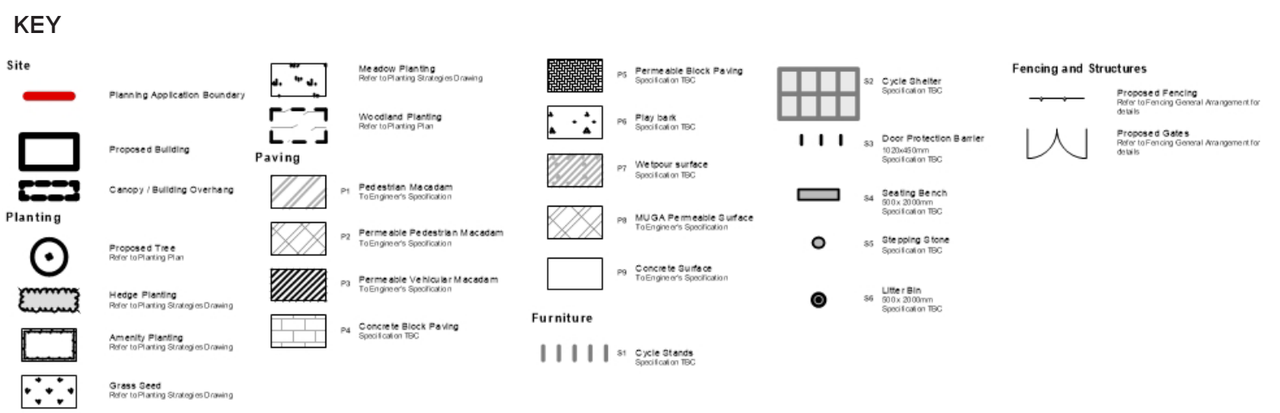


7.0 MASTERPLAN CORE OBJECTIVES

7.1 English Medium Primary School (Marlas Site) - Proposed Masterplan

- The perimeter of the site (red line boundary) will have high level fencing around it, as will other inner parts of the site to delineate zones.
- The new school building has been off-set (as far as possible) from residential properties within the constraints of the site.
- The proposed masterplan has been carefully considered to work with the existing topography.
- A new pitch has been positioned to the east of the site, away from the residential properties along Gibbons Way and Newland.
- The MUGAs have also been positioned away from residential properties to the south of the site, adjacent to the sites secondary entrance.
- Some boundary planting will be introduced to create buffer zones and screening, at sensitive parts of the site.
- There is a separate pedestrian and vehicle access into the site to ensure safety in separation.
- The main vehicular access is from Heol-y-Parc and leads to the parking zone towards the fron of the site.. The maintenance and delivery areas are towards the back of the site.
- The main pedestrian entrance on Heol-y-Parc leads to a plaza which provides the school with a strong presence within the local context and opportunities for the community.





8.0 LANDSCAPE AND SITE LAYOUT OVERVIEW

8.1 BB99 Analysis

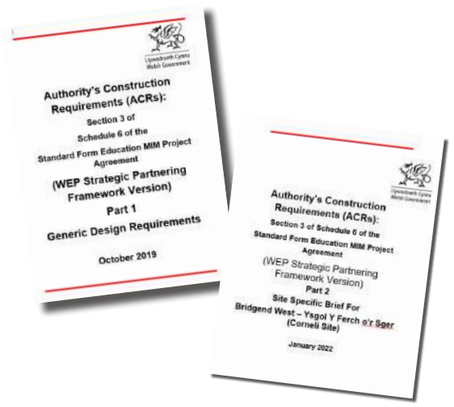
The proposed landscape design will meet the requirements as set out in the New Project Request and as described in the Authority Construction Requirements (ACR's) and the Site Specific Brief (SSB).

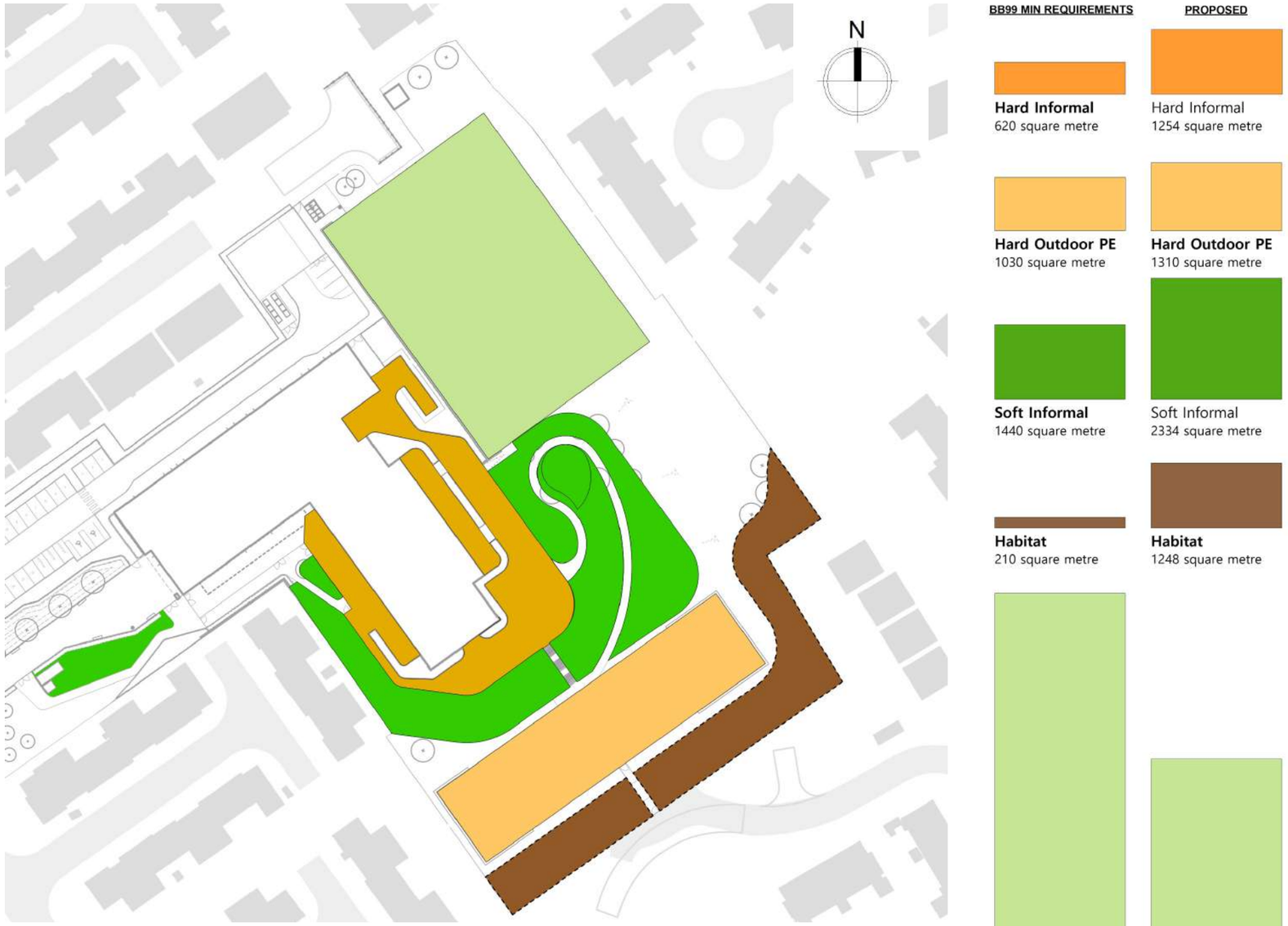
A standardised approach has been taken towards the provision of external outdoor spaces whilst corresponding to each site character and surrounding context.

Access to the site, and circulation strategies were carefully considered to make sure it is easy and legible for pupils, staff and visitors to move around.

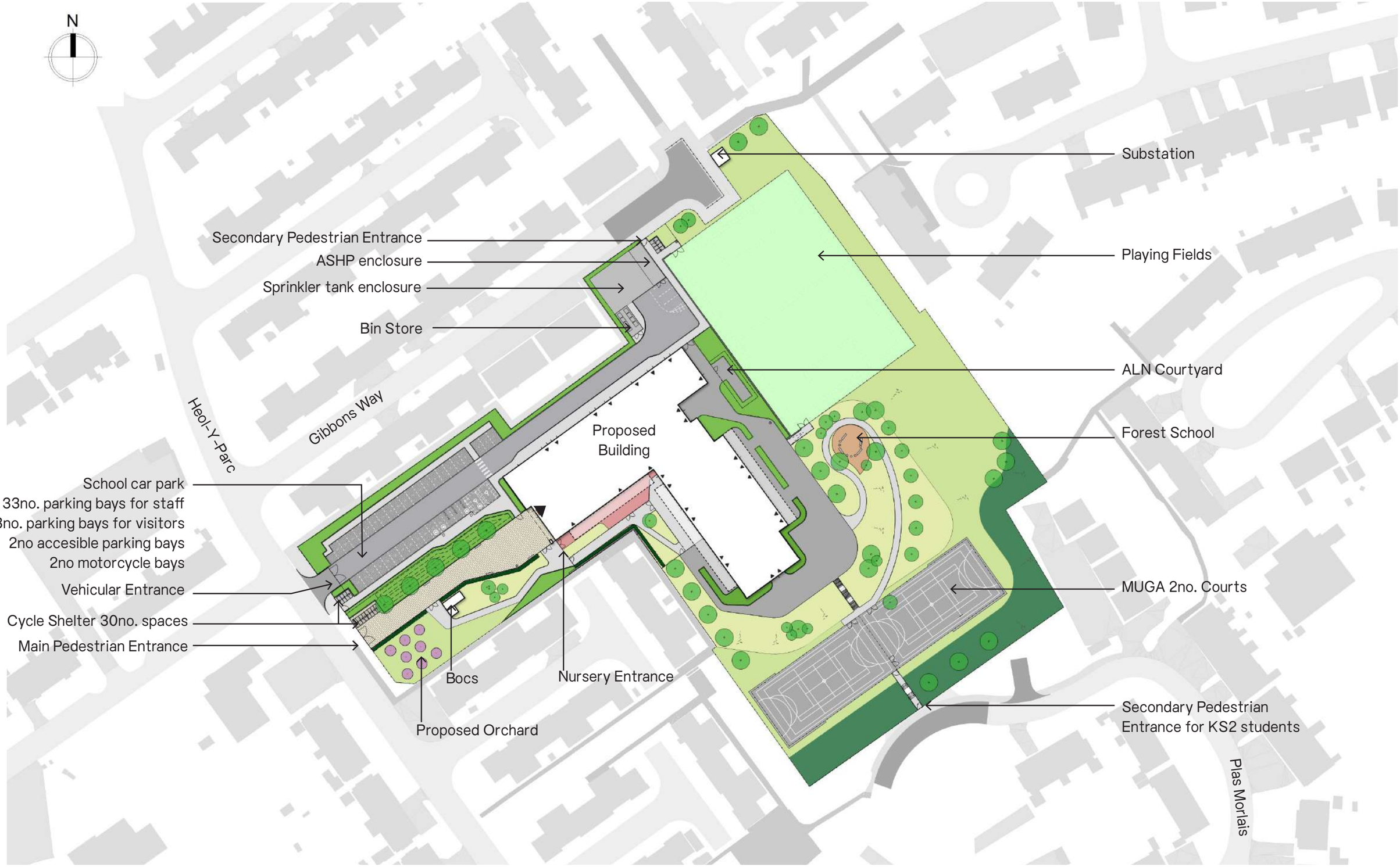
The footprint of the building provides opportunity to create external spaces for each of the schools and key stages, and the building façade itself will form part of a natural secure line within the site to separate publicly accessible areas of the site, such as the carpark from the external pupil sport and social spaces.

An analysis of externals areas has been undertaken in relation to Building Bulletin 99. This gives us confidence that the site can accommodate all the hard and soft social spaces, and hard courts for a site with this number of pupils.





9.0 MARLAS ILLUSTRATIVE MASTERPLAN



9.1 Pupil social spaces

All external play areas are entirely secure and during the school day can only be accessed from the school.

The nursery, reception and infants have free flow to external play areas from classrooms. The nursery and reception play is to the south of the building. The infant play areas are to the north and west.

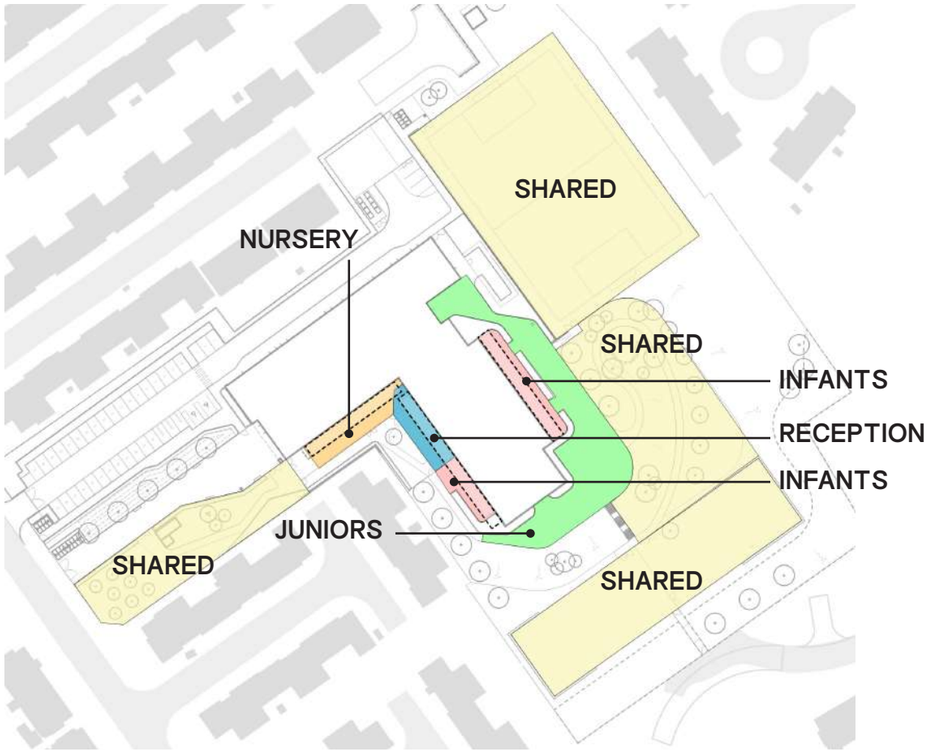
An external area for the juniors wraps around the infant play areas with a strong relationship to the internal ‘Street’.

The play areas comprise hard surface finishes, grass areas, planting and trees. Care has been taken in the design to place any grass and planting, so it responds to pupil movement and play.

Hard surfaces in play areas are generally macadam but with wet pour surfaces to nursery spaces.

Shelter structures for external spaces are integrated within the building façade.

Shared spaces include the MUGA, orchard and Big Bocs Bwyd area.



External play provision

9.2 External sport

A new Multi Use Games Area (MUGA Macadam) is proposed. This will be a fully fenced 2 court space with a macadam hard surface.

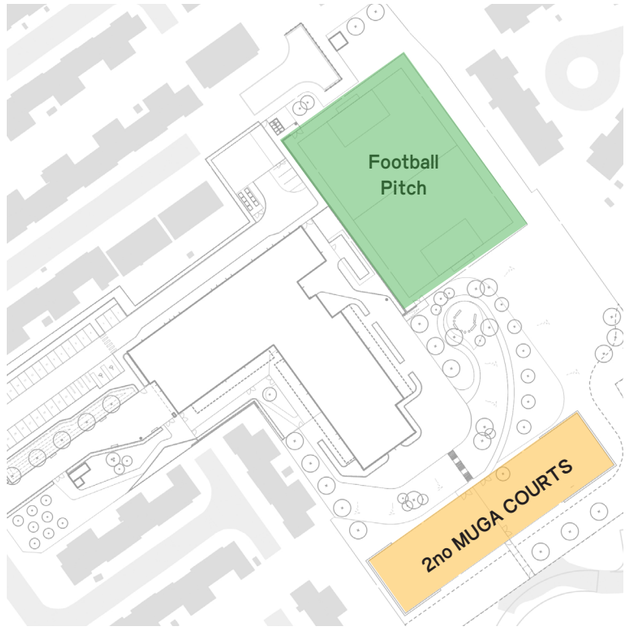
The MUGA will be located in the south east of the site with direct access to the hard play areas surrounding the school building.

Due to the site constraints, soft PE comprises of a football pitch (61 x 43 m).

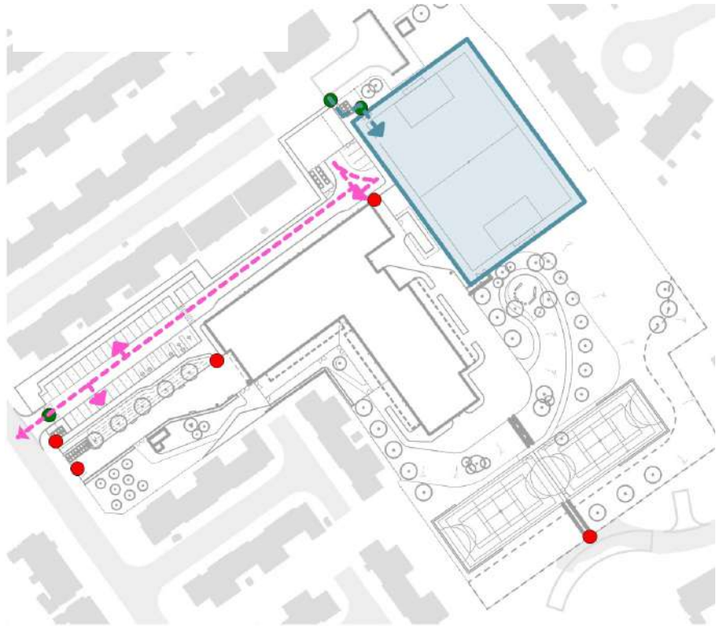
9.3 Potential Community Use

The external football pitch could be available for use by the local community.

These could be accessed from the Heol-Y-Parc access or Gibbons Way pedestrian access with a secure line seperating them from the rest of the school for out-of-hours use.



School Use - School Hours



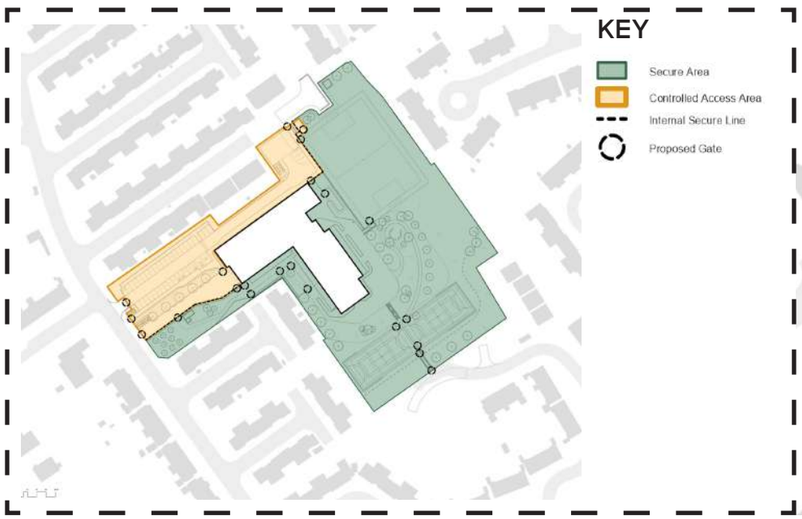
Potential out-of-hours community use

9.4 Secure Line and Fencing

The objective is to provide a safe site that provides maximum security and safeguarding for pupils, whilst also recognising the importance of the school to the local community and ensuring that the site is welcoming to visitors.

The overal strategy includes a secure area (in green) that can be locked during school hours and opened at the beginning and end of the day only. In addition to this secure area, there are two controlled zones (in yellow) which provide vehicle access to the car park and delivery/ services area.

The above strategy will be managed through the fencing arrangement and operational management by the school.



9.5 Access and Circulation

There is a single site access for vehicles via Heol-Y-Parc. This access is proposed to be dedicated to staff car parking, school visitors, disabled parking bays, taxi drop-offs, deliveries, and refuse collection.

At this stage, the design proposals include the following parking provisions:

- 33 staff parking spaces
- 3 visitor parking spaces
- 2 disabled parking bays
- 2 motorcycle bays

Additionally, 40 covered cycle parking spaces are provided, with 30 cycling parking bays at the Heol-Y-Parc entrance and 10 cycling parking bays accessible from the Gibbons Way secondary entrance.

The refuse store is proposed to be located to the north of the site for ease of access by refuse lorries and for the proximity to the kitchen.

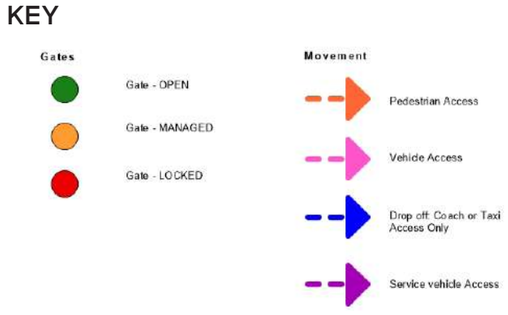
The proposed site layout emphasizes pedestrian movement and cyclist provision to ensure that the approach to the site and the school is not dominated by vehicles.

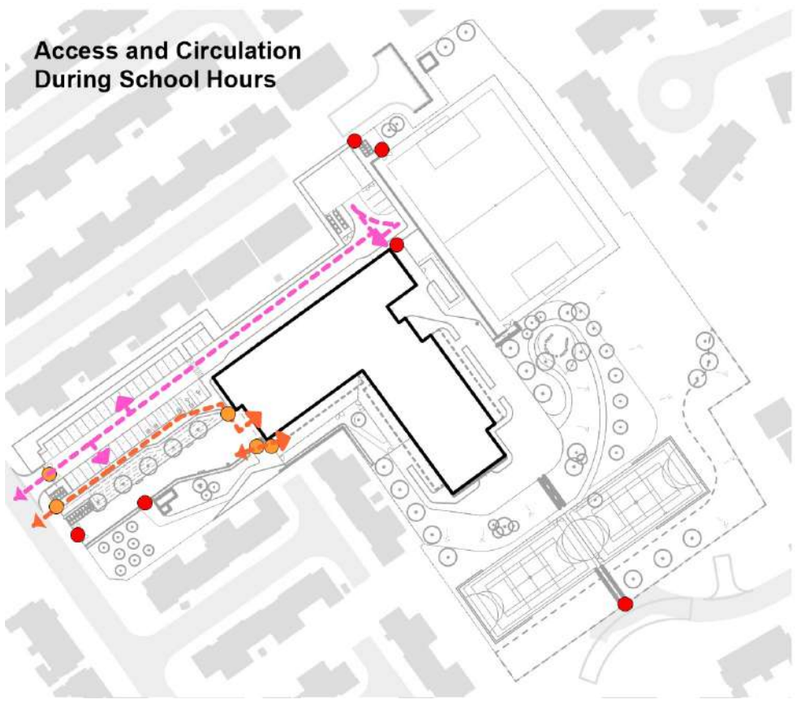
A pedestrian plaza via Heol-Y-Parc leads to the school's main entrance and provides a civic address to the building.

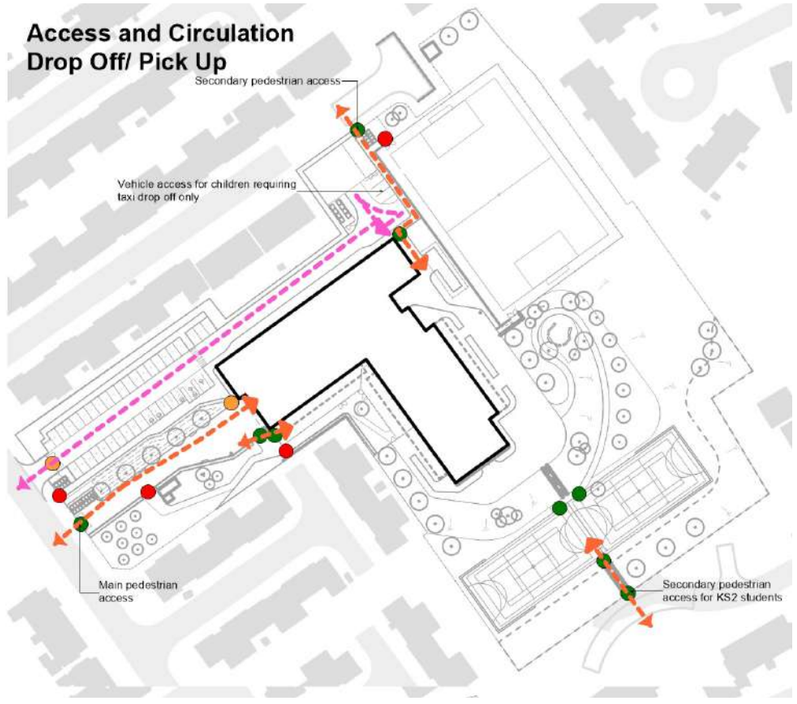
The nursery entrance is at the front of the site via the main entrance plaza, with independent access for parent pick-up and drop-off (pedestrian) during the main school day.

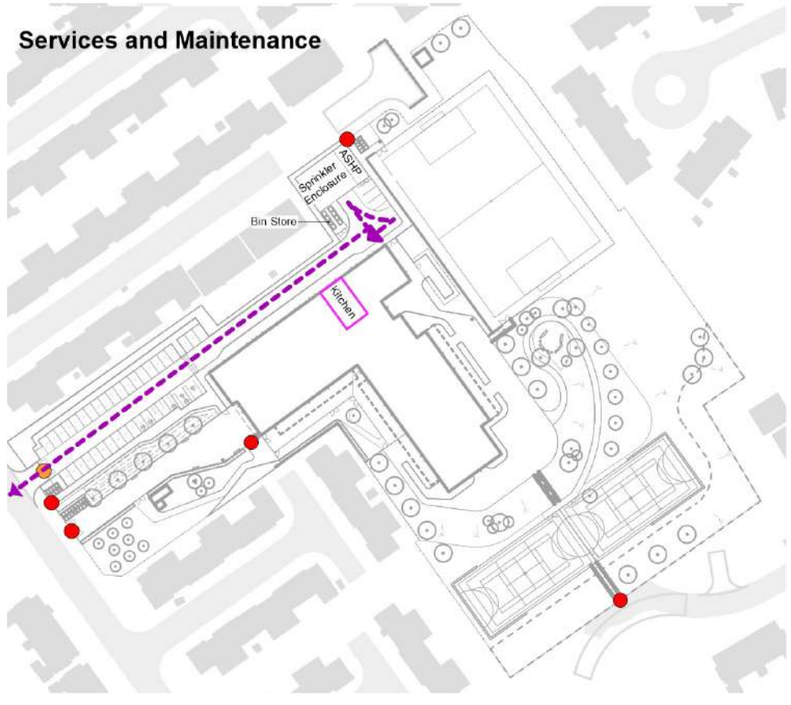
There are two additional secondary pedestrian accesses: one via Gibbons Way and another via Plas Morlais. These aim to connect existing pedestrian routes. They will be managed by the school during drop-off and pick-up hours and closed during the school day.

The proposed secondary access from Plas Morlais will be dedicated to allowing access for KS2 children only, enabling them to spend time on the Multiple Games Courts before moving to their classrooms.









9.6 Planting Strategy

The plan opposite shows the proposed planting strategy for the school. The planting design has been designed to meet the brief as set out in the Welsh Goverment Authority Construction Requirments (ACR's) and also through Consultation with the school andBCBC.

The intention is that the proposed planting is appropriate for it's intended use in a school environment taking into account:

- Year round interest
- Educational value
- Integration with SUDS
- Maintenance
- Biodiversity (Ecological enhancements in coordination with Ecological Impact Assessment Report)
- Safety & Security

KEY

Trees to be retained

Trees to be removed

Proposed trees, species to comprise a mix of native (to increase biodiversity values) and non-native species (for a resilient to climate change scheme). The proposed species will no comprise more than 10% of a single specie.

Proposed Orchard Trees, species to include heritage species of fruit trees. These species will contribute to biodiversity and heritage conservation. The proposed trees will also provide outdoor learning opportunities.

Hedge Planting, proposed hedges and hedgerows across the site have two main objectives:

- Screening, evergreen species will be proposed to support privacy to sensitive playground areas, species proposed without berries and thorns will be specified.

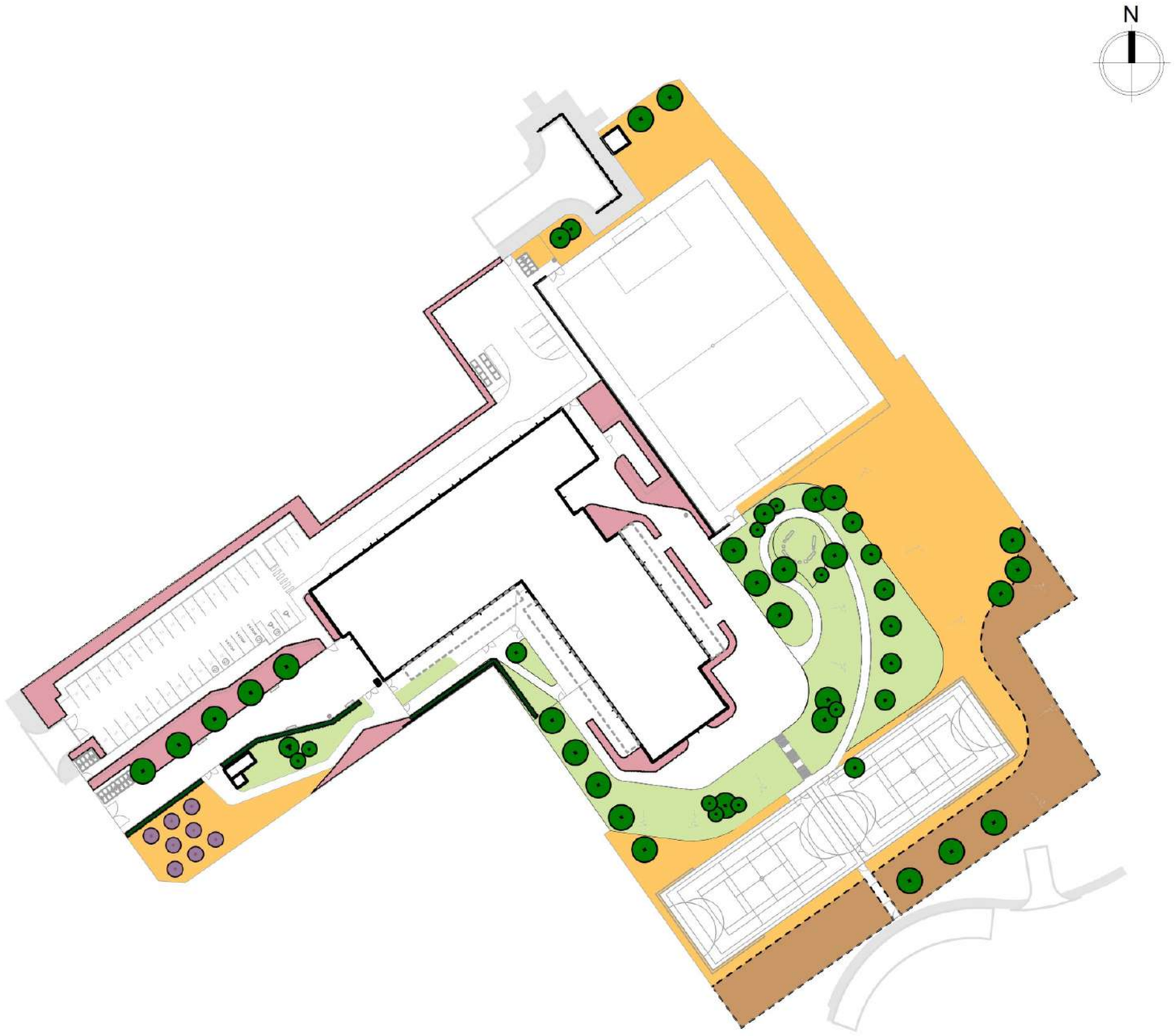
- Supporting biodiversity, native species will be included. these will need to be in areas where students will not have access, as native species include berries and thorns.

Amenity Planting and Rain Gardens, rich shrub and perennial planting with seasonal change interest, sensory. Species to be no toxic, with no berries and without torns.

Grass Seed, low maintenance mix, with uniform seed head growth for low cutting regimens. Amenity grass areas with low accessability areas will be planted with bulbs to increase biodiversity.

Meadow /rich species grass, located in areas with restricted access, species to include native species.

Woodland planting, located to screen MUGAs, native species to be included.



9.7 External Visuals

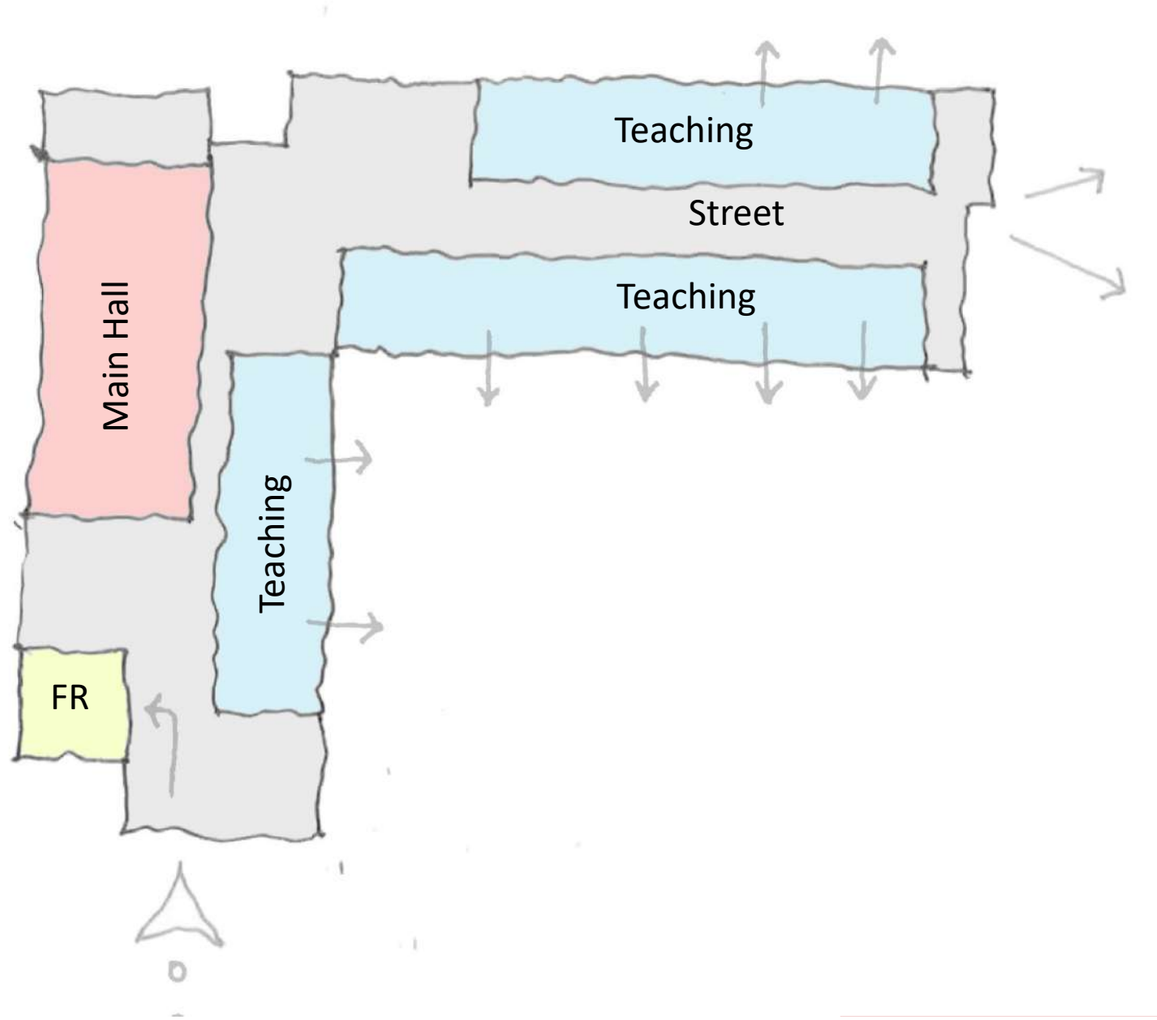
10.0 DESIGN STATEMENT - BUILDING DESIGN

10.1 Marlas Building Design Principles

A number of key design aspects were set by the Project Brief:

- That the new primary school building would be low rise. The school would be efficient & compact in form to maximise external play space.
- The entrance to the site & Main Reception would be visible & welcoming. Good views across the entrance 'Plaza' would be provided for the General Office, to ensure passive supervision.
- Sight lines & security zoning would be a focus for the landscaping proposals.
- The Ground Floor classrooms would have direct access to outdoor (dedicated) play areas.
- A 'Street' would be at the buildings core.
- The ALN spaces would have a dedicated drop-off area and playspace.
- The new building would be of robust construction (particularly at Ground Floor).
- The new building would have pitched roofs.
- That the shape and form of the building, would be reflective of the educational adjacencies required.

The development of the preferred 'L' option, involved testing the building's orientation to establish the best 'fit' and to maximise adjacencies with the external spaces.



10.1.1 Vertical Stacking

The General Arrangement (GA) proposal for the English Medium primary school, has been in response to the educational brief, the required adjacencies & site context. Having tested the buildable area & massing, it was quickly established that the new build would need to progress as a two storey building - to allow the existing school to remain operational during the construction phase.

The premise of the buildings stacking model, has required the younger years (Nursery, Reception & Infants) to remain at ground floor level for accessibility, whilst the Juniors have been located on first floor.

The larger volume spaces such as Main Hall and Studio, are a single storey element.

10.1.2 Adjacencies

The main entrance and pedestrian plaza area have been located opposite the primary entrance to the site. This allows for good visibility. It also enables pupils, parents & visitors to clearly identify the entrance to the school.

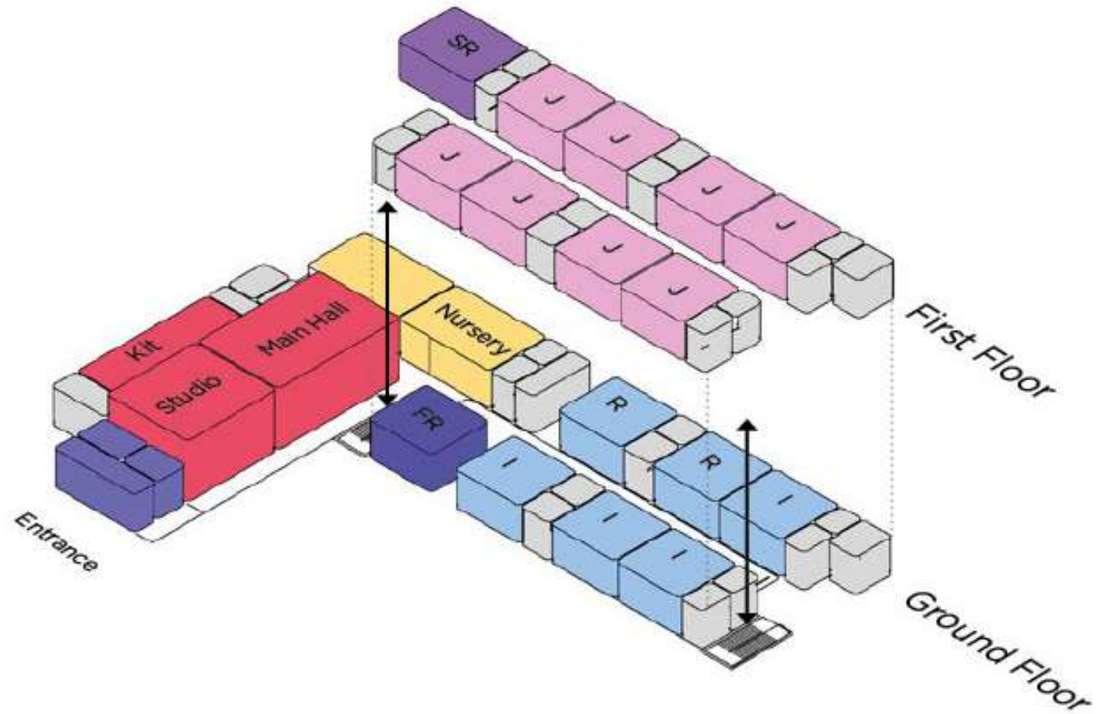
Entrances into the Nursery and Reception areas, have been well positioned for passive supervision from the main entrance and general office.

The ‘Street’ space has been positioned at ground floor between Reception and Infant classrooms, although the Street is to be utilised by all pupils. This centralised location would allow natural light to penetrate whilst providing views out.

The teaching ‘wings’ have been located perpendicular and open at the end for access, natural light and views out. The ‘wings’ are organised to allow for a graduation of age groups, as pupils ‘snake’ around the building and gradually progress to the first floor. This arrangement was carefully developed to enhance a ‘whole school’ culture but equally provide smaller areas of age group clusters.

The Main Hall, Studio and kitchen spaces are located adjacent to main entrance. This predominantly allows for good access but also enables a clear zoning for (potential) out-of-hours community use.

The locations for the different parts of the school building have been carefully considered - in line with their dedicated external learn/play spaces. These were developed in parallel with the site security strategy.



10.2 Marlas Building General Arrangement Plans

The following plans illustrate the overarching functional layouts of the teaching and support spaces. These have been developed from required key adjacencies, feedback during the Client Engagement Meetings process and lesson learnt.

10.2.1 Ground Floor Plan

An entrance canopy defines the arrival point to the school. The Administration rooms have been arrange to provide a suite of spaces to the schools entrance.

To opposite end of the building, the ALN also forms its own suite of spaces. Access to the ALN's dedicated play space is directly adjacent to the suite.

Surrounding the entrances to the classrooms at ground floor level, canopies sit above to provide shelter and additional play space for the younger years (as per the ACR's).

A sequence of spaces have been developed for the 'Main Hall wing', including adjacencies with the Food Room, Kitchen and storage spaces. These adjacencies work well for the school, as well as the community for Out-of-Hours' use.

The 'teaching wing' sits perpendicular, with the 'Street' located centrally. This offers maximum access to the 'Street', whilst maintaining a relationship with the classroom spaces above via the floor voids.

nce

ıtrance

10.2.2 First Floor Plan

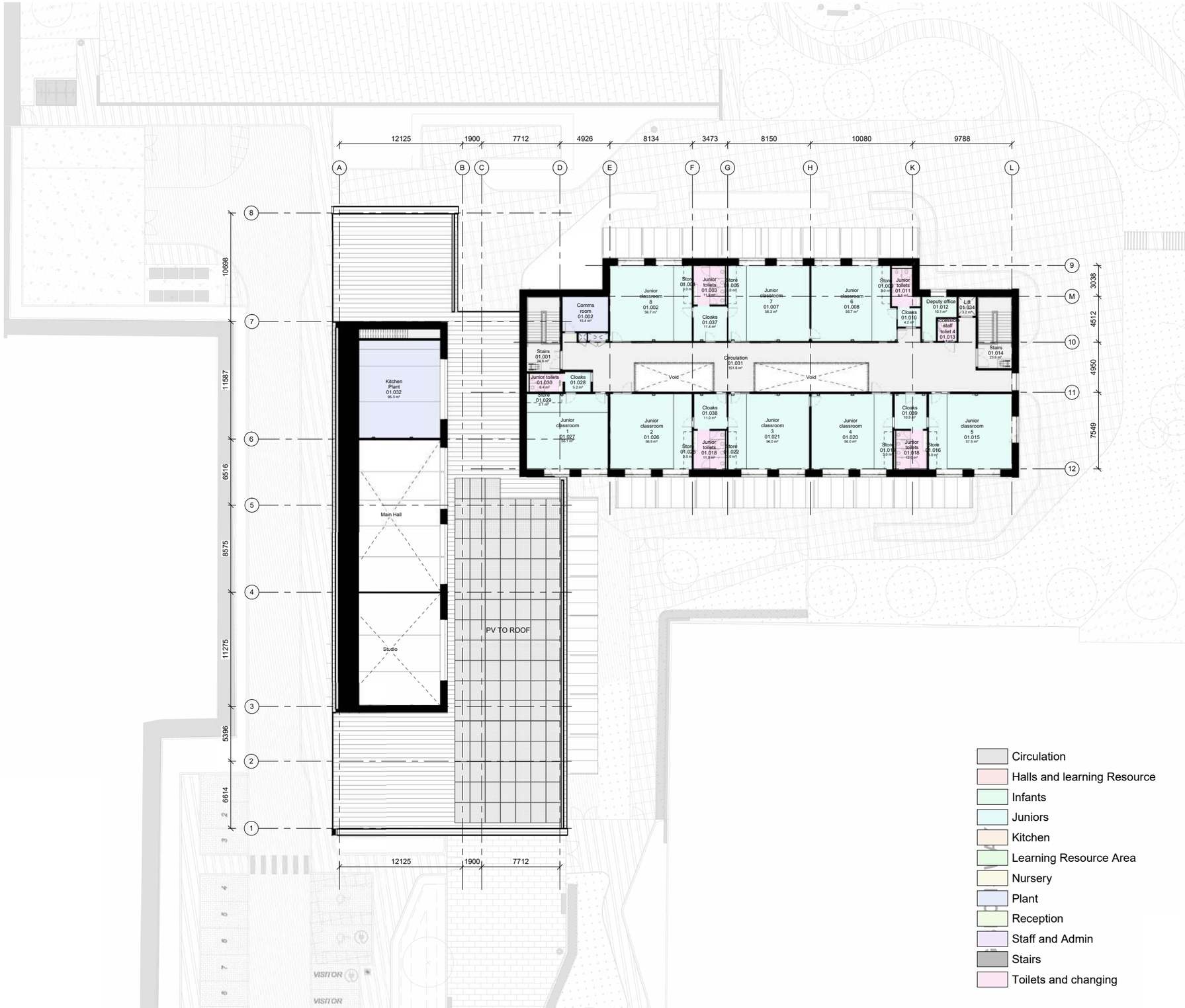
Two stair cores and lift serve the eight junior classrooms which either share or have their own cloakroom and WCs. Voids adjacent to the classrooms and along the circulation route, enable views of the ‘Street’ below .

Access to the first floor classrooms is provided through the cloakroom or directly into the classrooms from the corridor.

Passive supervision is retained through the presence of the deputy head’s office on first floor.

The first floor corridor is punctuated with voids, which aide with providing natural daylight to ground floor ‘Street’ space and form a vital part of the ventilation strategy for the ‘teaching wing’.

Small break out space may be provided in the corridor (if possible to accommodate) through the inclusion of furniture which will be developed during the next stage. The breakout spaces would provide an opportunity for informal (small) groups to gather outside of the classroom.

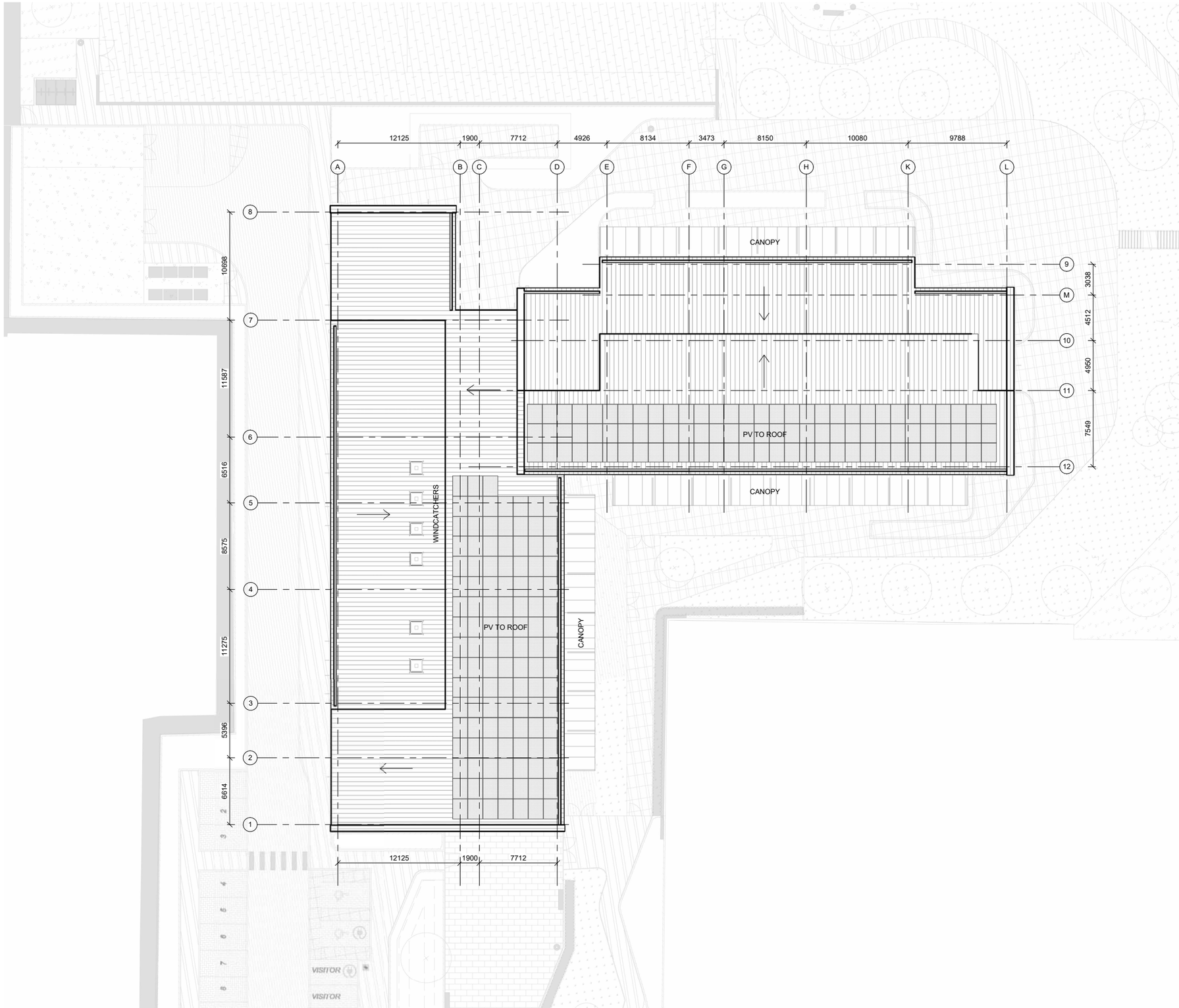


10.2.3 Roof Plan

The roof forms have been developed considering the following, - definition of building entrances, views of the schools, most suitable orientation for PV efficiencies, daylight provision to shared spaces, prevailing wind and simple roof forms to aid with thermal performance of the building envelope. The roofs will be populated with PV, roof lights and windcatchers where needed.

The roof over the Main Hall and Studio spaces projects above the single storey rooms of the nursery classrooms, to provide the floor to ceiling height required of the larger spaces.

The teaching wing has a pitched roof with a pop-up from the ridge above the 'Street' space. This projection aides the ventilation strategy through vertical faces for louvres/windows openings, in addition to providing daylight to the 'Street'.



10.2.4 Internal Strategies

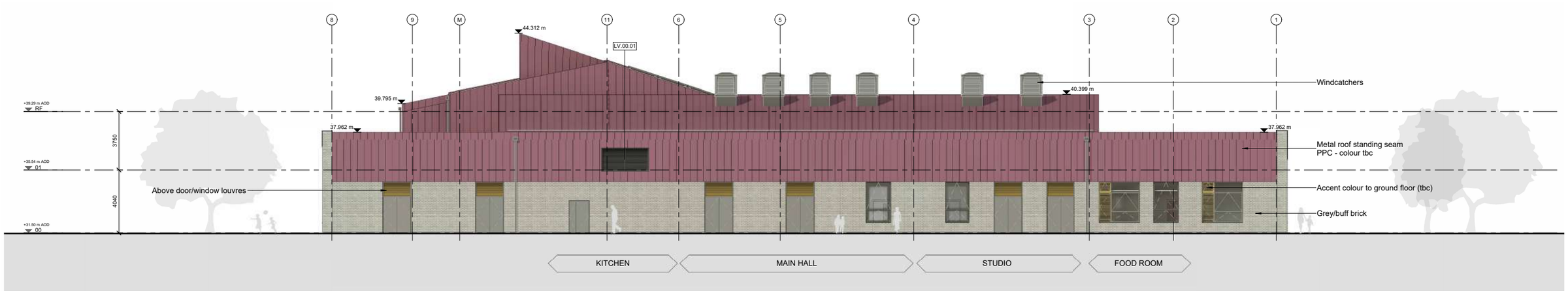
10.3 Marlas Elevations

10.3.1 Long Elevations

East Elevation
1 : 100

South Elevation
1 : 100

NOTE: Colours are indicative only and may change



North Elevation
1 : 100

West Elevation
1 : 100

NOTE: Colours are indicative only and may change

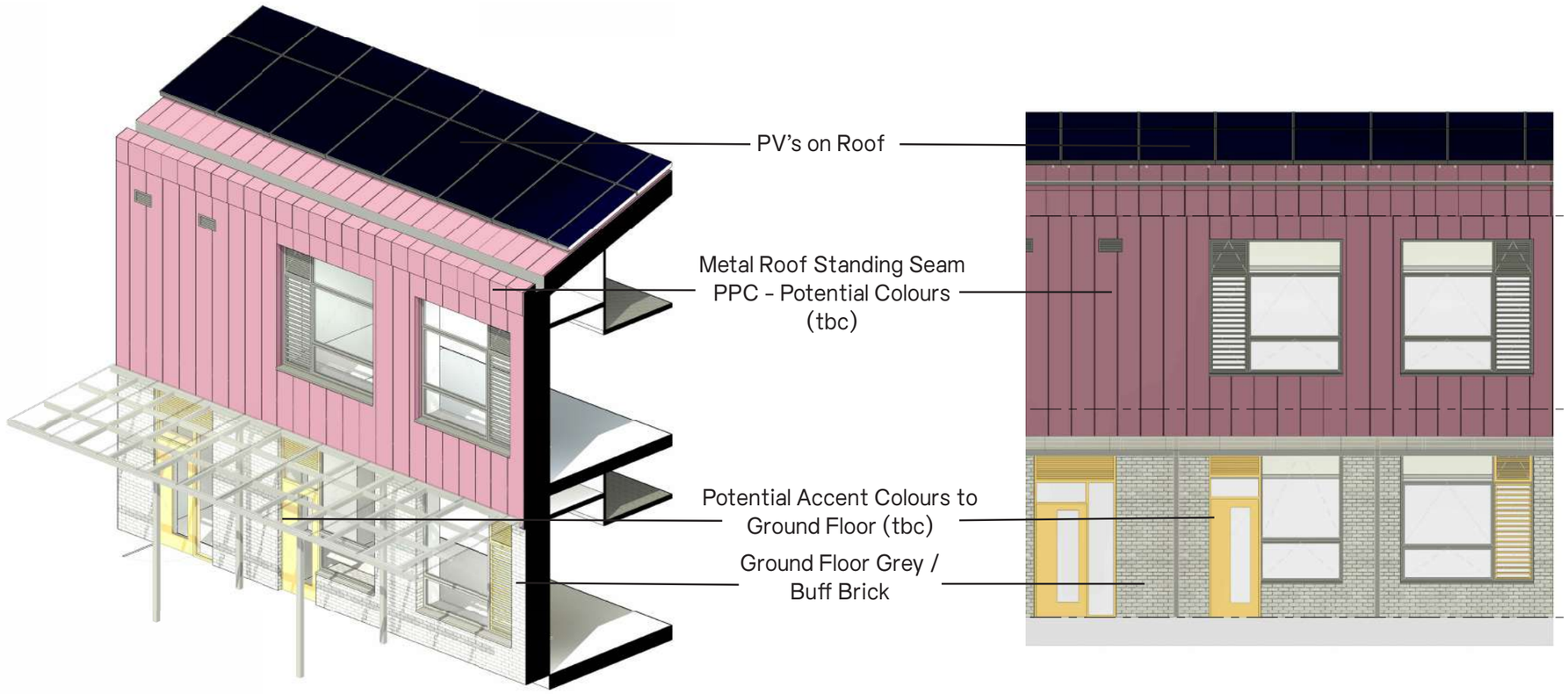
10.3.2 Bay Studies

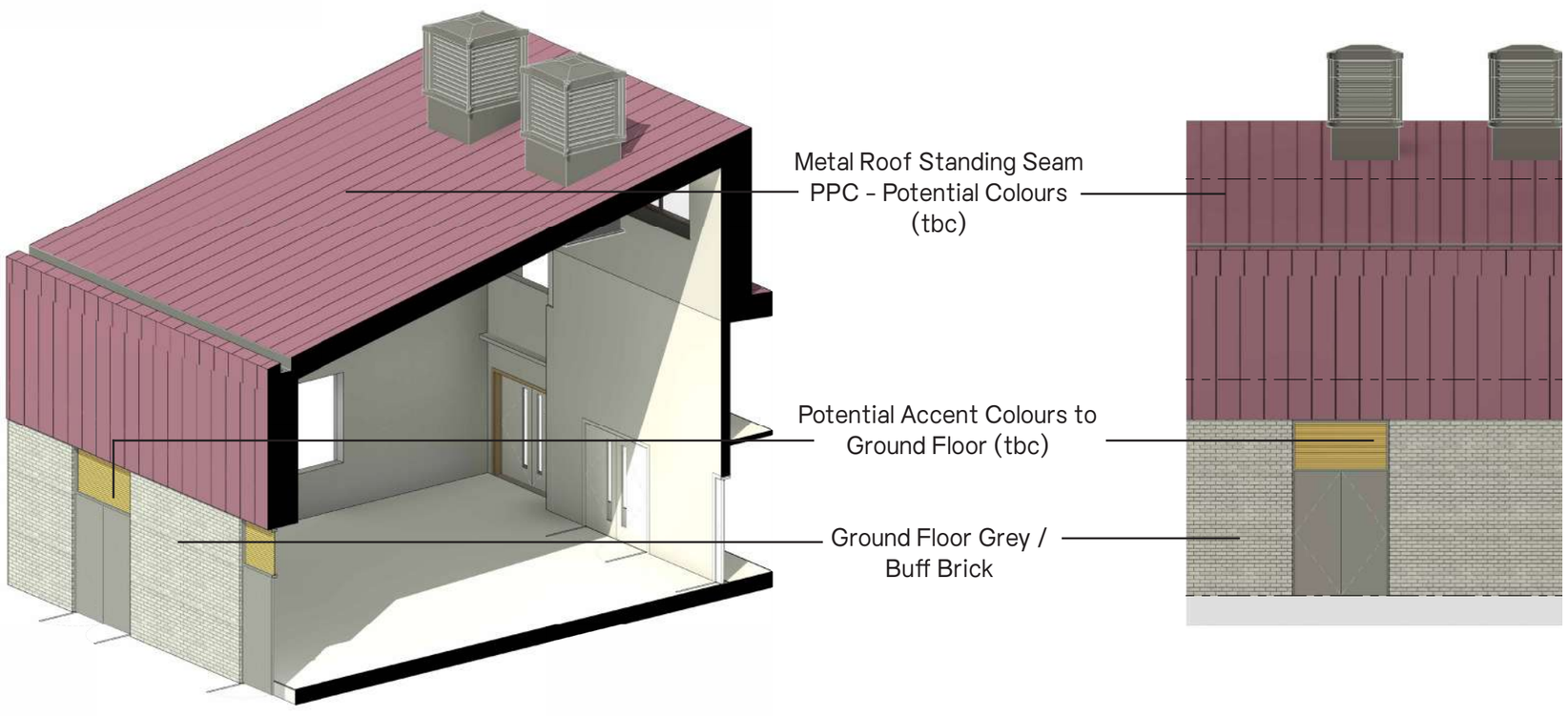
The standing seam roof and first floor facade is proposed in coloured standing seam aluminium. Final colour tone tbc.

The ground floor and gable ends to the school have been proposed in a grey / buff brick. The exact brick is yet to be selected and a final tone colour is tbc.

Generally doors, windows and louvres are to be metal. The colour to the door frames and louvres at ground floor are proposed in an accent colour - tbc. The windows to first floor level are proposed in a simple grey.

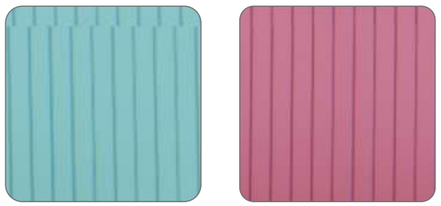
A sample board with the final selection of the above materials, will be provided at a later determined date.





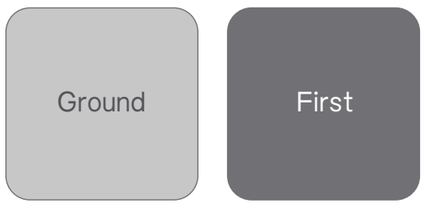
NOTE: Colours are indicative only and may change

10.3.3 Materials

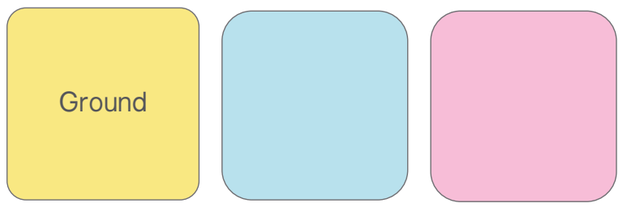


Metal Roof Standing Seam
PPC - Potential Colours
(tbc)

Ground Floor Brick
in a Grey / Buff
Colour



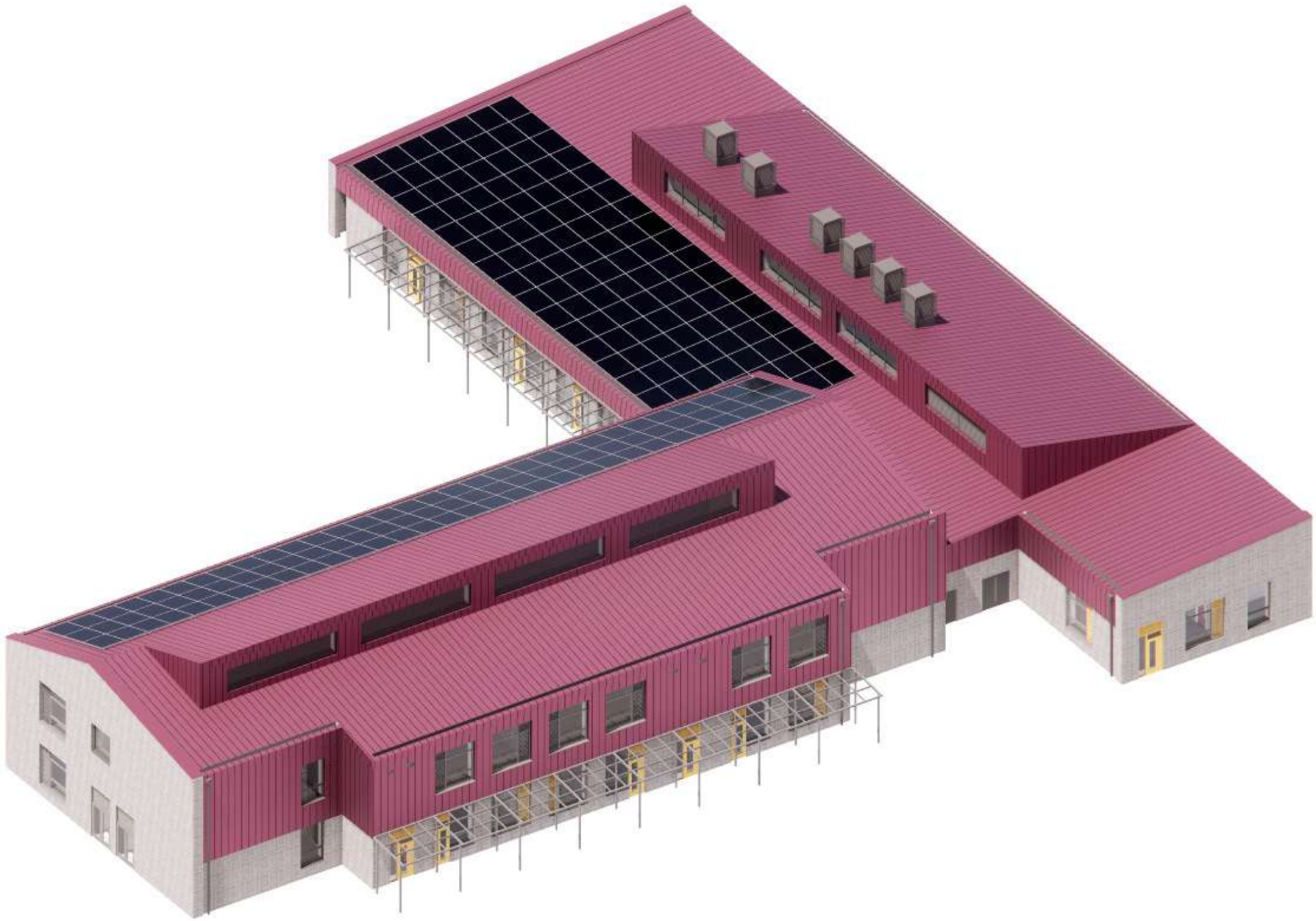
Metal Window
Frames PPC



Potential Accent Colours to
Ground Floor (tbc)

NOTE: Colours are indicative only and may change

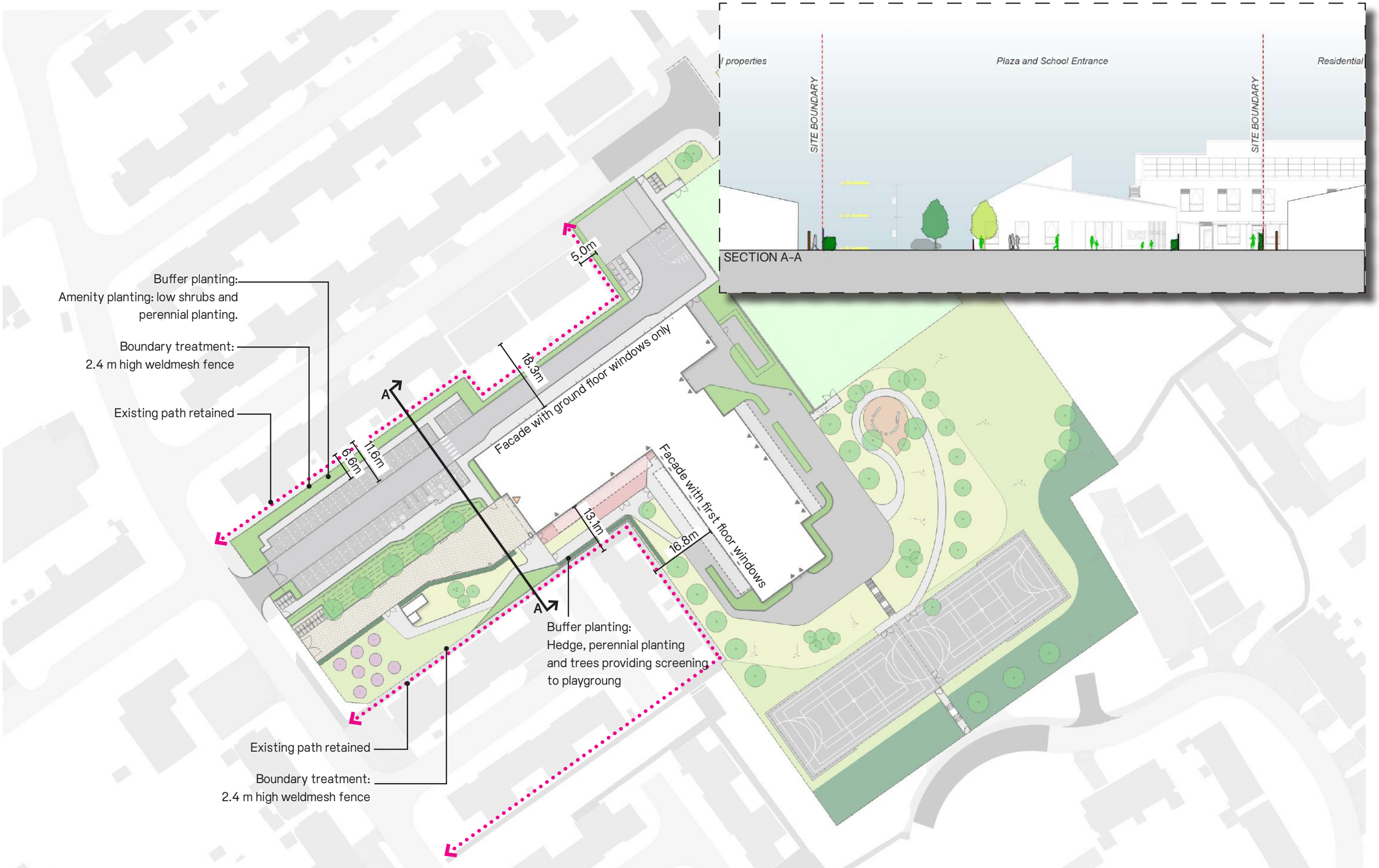
10.4 External Appearance



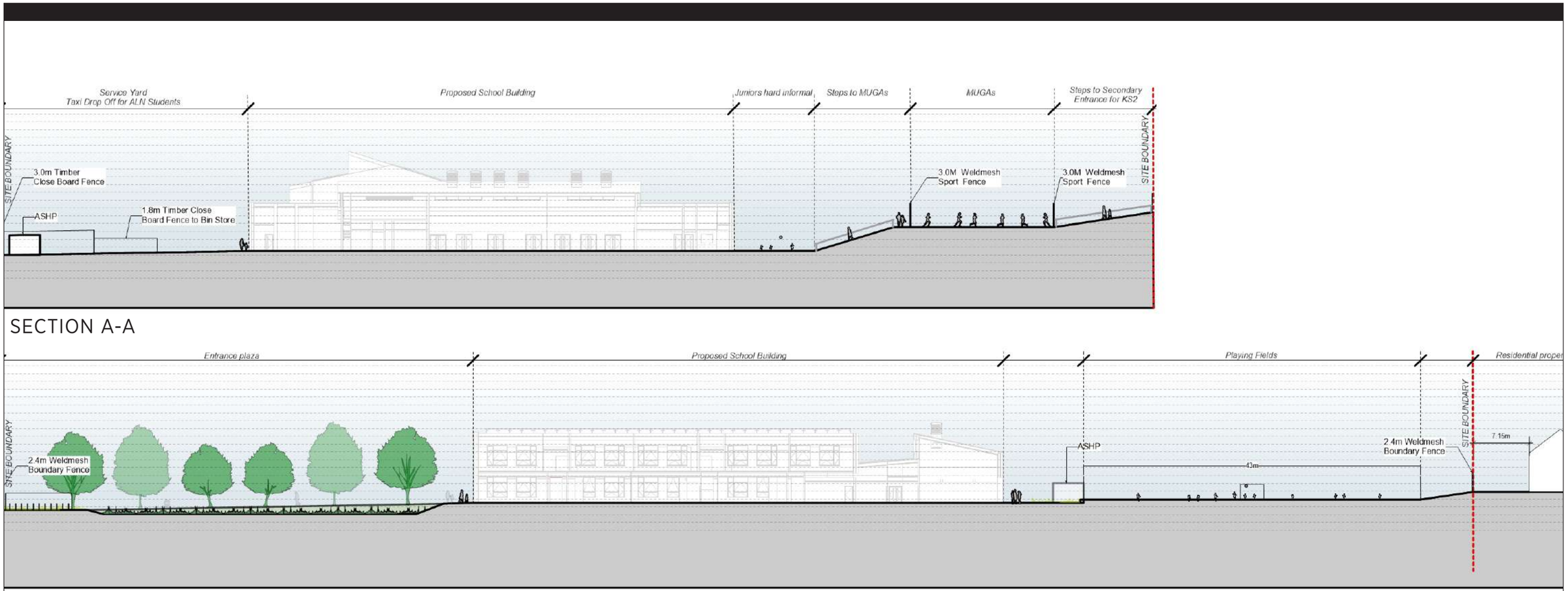
NOTE: Colours are indicative only and may change

NOTE: Colours are indicative only and may change

10.5 Marlas Proposal - Proximity to Adjacent Residences

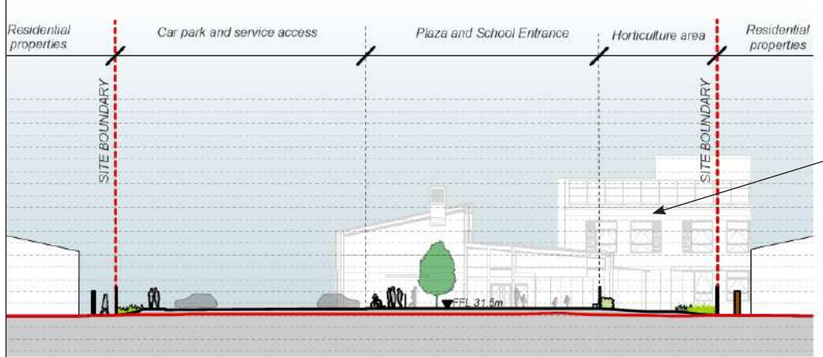


10.6 Marlas Proposal - Site Sections



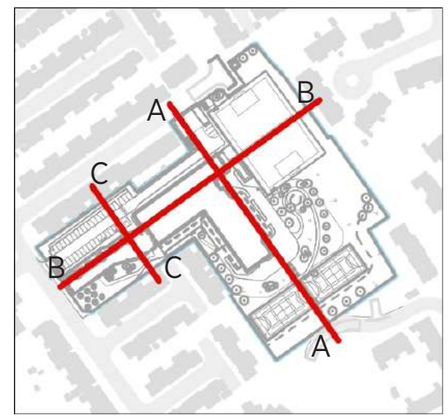
SECTION A-A

SECTION B-B



In the background

SECTION C-C



LOCATION PLAN

11.0 SUSTAINABILITY STATEMENT

11.1 Approach

This school has been designed as part of a batch of two similar schools for BCBC under the MIM WEP framework. The approach to sustainability in the design of the Bridgend West schools is largely common and the ambitions of the project are challenging across a wide range of areas.

Each building has been assessed against BREEAM criteria with the goal of achieving an Excellent rating, this in turn assists in the specification of low carbon materials and many aspects of the design.

Furthermore there is target of Net Zero Carbon (NZC) in operation, and for measured and optimised Embodied Carbon relative to a Welsh Government and framework targets. Extensive modelling and assessment has been conducted to date to assess these areas.

11.2 Specification of Materials

To align with the agreed BREEAM targets, specification of materials will consider a number of sustainability aspects, including:

- Timber – all timber and timber-based products used during construction must be legal and sustainable timber (following the UK Government's definition as outlined in the Central Point of Timber (CPET) 5th Edition of the UK Government Timber Procurement Policy (TPP))
- Volatile Organic Compounds (VOCs) – at least three out of the five product types listed in BREEAM Hea 02 shall meet the emission limits, testing requirements and any additional requirements listed in the Hea 02 criteria in order to achieve one credit for Hea 02 Emissions from Construction Products
- Responsible sourcing certifications – specifications will require that more than 20% of available BREEAM Mat 03 points will be achieved through procurement of materials from manufacturers with a BREEAM Mat 03-recognised responsible sourcing certifications for their products (e.g. BES 6001, ISO 14001 certification).

The Sustainable Procurement Plan and associated procedures will assist in driving the above and wider sustainability considerations associated with procurement of materials. The BREEAM Mat 01 Life Cycle Assessment (LCA) options appraisal and RICS-scope study will also investigate the embodied carbon impact associated with key building elements. Where possible, alternative material specifications will be modelled for materials which are found to have a substantial impact, in order to allow for the environmental impacts of different specifications to be considered in decision-making, alongside other factors.

11.3 BREEAM

The Bridgend West Primaries Batch aspire to achieve BREEAM Excellent ratings which reflect the commitment to a holistic sustainability approach for the project from inception through construction and in-use energy consumption. The buildings have been registered with the BRE and are being assessed against BREEAM 2018 UK New Construction.

The target scoring required to achieve the Excellent rating for each school was agreed at a BREEAM pre-assessment workshop, and these targets continue to be adjusted and refined in line with design development. Scoring is being tracked via a live tracker, TrackerPlus.

Target	
77.18	(TBC)
Excellent	

11.4 Environmental Engineering

In order to minimise the buildings overall energy usage and CO2 emissions a three-stage approach has been adopted to the design of the school and the associated systems. The three stages are:

1. Passive design – reduce the need for energy
2. Active Design - supply energy efficiently and recover energy wherever practical
3. Use of renewable technologies

The passive design stage is crucial in helping to achieve a low energy building as it looks to reduce the need for energy to be generated in the first instance. Following the early stages of design development, close attention was paid to co-ordinating and integrating the structure and the occupied areas to:

- Design energy efficient mechanical ventilation with supplementation of natural ventilation in summer months.
- Minimise direct solar gain to reduce unwanted overheating, but balance to maximise daylight factors in all areas.
- Maximise utilisation of plant and systems.
- Maximise control and flexibility of the installations.
- Improve the performance of the building thermal envelope (reducing fabric u-values and optimising glazing g-values).
- Reduce air permeability.

In terms of active design these are systems that allow the generation and delivery of energy in an efficient way have been incorporated, including:

- High efficiency lighting systems.
- Use of LED lighting.
- Lighting controls with perimeter areas switched separately from internal areas possibly with daylight linking.

- Absence detection for lighting control rather than presence detection.
- Low velocity pipework and ductwork where possible to reduce fan and pump power consumption.
- High efficiency motors with variable speed drives.
- Specification of high-performance MEP plant.
- Local control of heating systems to prevent overheating.
- Equipment will be zoned in such a way as to allow plant to be turned off or enable out of hours setback in appropriate unoccupied spaces.
- Separate metering on power, lighting systems, ventilation systems, heating systems and domestic water systems.
- Central Building Management Control system (BMS) and Energy Management System (EMS) with monitoring of key system parameters. This allows the facilities/building managers to gain insights into the collected data as well as highlight any inefficient practices, aiding them in making better informed decisions affecting energy usage.

In terms of renewable technologies, air source heat pumps (ASHPs) and a photovoltaic (PV) array were found to be the most beneficial systems for the project and have therefore been incorporated into the design. The photovoltaic arrays required to achieve net zero carbon (NZC) are likely to be substantial in size for this project and will likely occupy a large percentage of the roof space.

There is an environmental and carbon footprint associated with potable water consumption, this is attributed to the energy and resources that are required to extract, treat, and pump this water from its source to where it is needed.

The first priority is to reduce the demand for water through the use of water economic fittings and fixtures, the second is to match demand to use. Not all uses require water to drinking standards and some demands can be met using rainwater or greywater, depending on its quality.

To meet the BREEAM requirements, the following demand management and water efficiency measures have been considered to develop a water conservation strategy that is sustainable and reduces the economic, environmental and social impacts of developing water sources and waste stream discharges:

- Match non-potable supply to non-potable demand
- Consider supply of water from local sources
- Conservation measures e.g. WCs with low water volume dual flush cisterns, low water use appliances and fittings, flow restrictors, automated supply shut-off where practical
- Management of water consumption through metering & monitoring via the BMS – such as leak identification

A hierarchical approach has been used to define the storm water drainage strategy for the proposed development's runoff in compliance with 'Statutory standards for sustainable drainage systems - designing, constructing, operating and maintaining surface water drainage systems 2018'.

One of the key aspirations to the project is to be net zero carbon in operation and in addition the team recognises the importance of embodied carbon, and thus a target of 800kgCO2/m2 has been agreed.

11.5 Heating & Cooling Strategy

The schools space heating requirements will be fulfilled by a series of air source heat pumps (ASHP's) located adjacent to the plantrooms. A thermal storage buffer vessel will be included on the primary return side to meet the minimum system water content required by the ASHP's. This water content is required to limit the on/off cycling of the units and to aid with the defrost cycles during cold weather.

The mechanical cooling within the school will be limited wherever possible. There are some areas within the building such as the IT server rooms which traditionally experience high heat gains.

Design of these systems will be explored with the intention to utilise the cloud for offsite processing, reducing the need for 'active' equipment within the school server room. With this approach the aim will be to maintain room temperatures via a extract ventilation system only, compared to a traditional refrigerant cooling system.

11.6 Energy Usage

Each of the Bridgend West schools have been designed to meet a strict operational net zero carbon target, whereby all annual operational energy consumed on site (both regulated and unregulated) shall be matched with annual generation from an extensive roof mounted solar photovoltaic (PV) array.

This array shall offset 100% of the carbon emissions annually for the energy usage of the buildings, thus being 'net zero carbon' in operation in line with the UKGBC definition. In addition, the school has been designed to minimise energy demands through extensive modelling and assessment of the building (in line with contract requirements, the BREEAM assessment and a detailed energy prediction study).

The current proposals outline generation of 100% of the annual energy consumption via roof mounted photovoltaic arrays at each of the schools. However, discussions are ongoing with the local grid operator as the electrical infrastructure at each of the school sites has limited capacity to accept surplus energy generation. Mitigation steps are being developed such as upgrading said infrastructure where possible as the preference would be on-site generation. However in the event that this is not possible as part of the construction process or in the near future, then the design will look to install appropriately sized on-site PV arrays and then offset and shortfall in carbon emissions (using a recognised local offsetting scheme) to remain true to the definition of NZC.

12.0 ACCESS STATEMENT

12.1 Access and Inclusion

The proposal has been designed to meet the requirements of current Building Regulations, The Equality Act and other relevant regulations and standards, including those accessibility standards specific to Welsh policy.

Access & inclusion have been integral to the design from inception, through to the current level of detail. Starting with the masterplan & external spaces, through to access points, circulation & internal spaces - all aspects have been monitored.

12.2 Access to Site

12.2.1 Access by Roads

The English Medium (Marlas Site) primary school site is bounded by roads. The primary road, Heol Y Parc, is a ring road which circles around the wider perimeter of the site and is its main addres. Gibbons Way sits to the north and is a residential road, whilst Plas Morlais sits to the south.

Marlas Site - Proposed Masterplan

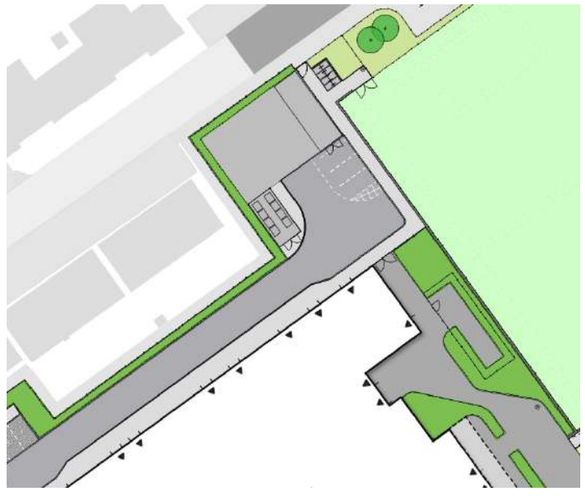
12.2.2 To the New School

The new school will not have a coach or car drop-off area. Instead, it is anticipated that the majority of pupils will walk or will be dropped off in the local area. To address conjestion being concentrated in one area, two entrances to the site have been proposed: the Main Entrance and a secondary entrance off Plas Morlais. Both entrances will be pedestrian only and will be managed by the new school.

Marlas Site - Main entrances

12.2.3 ALN Drop-Off

The ALN provision for the English Medium school, requires a taxi drop-off area. This has been provided within the vehicular zone adjacent to the ALN. It is anticipated that the taxi drop-off area will be used in the morning and at pick-up times. The entrance for the taxi's will be off Heol Y Parc, as per all other vehicles entering the site.



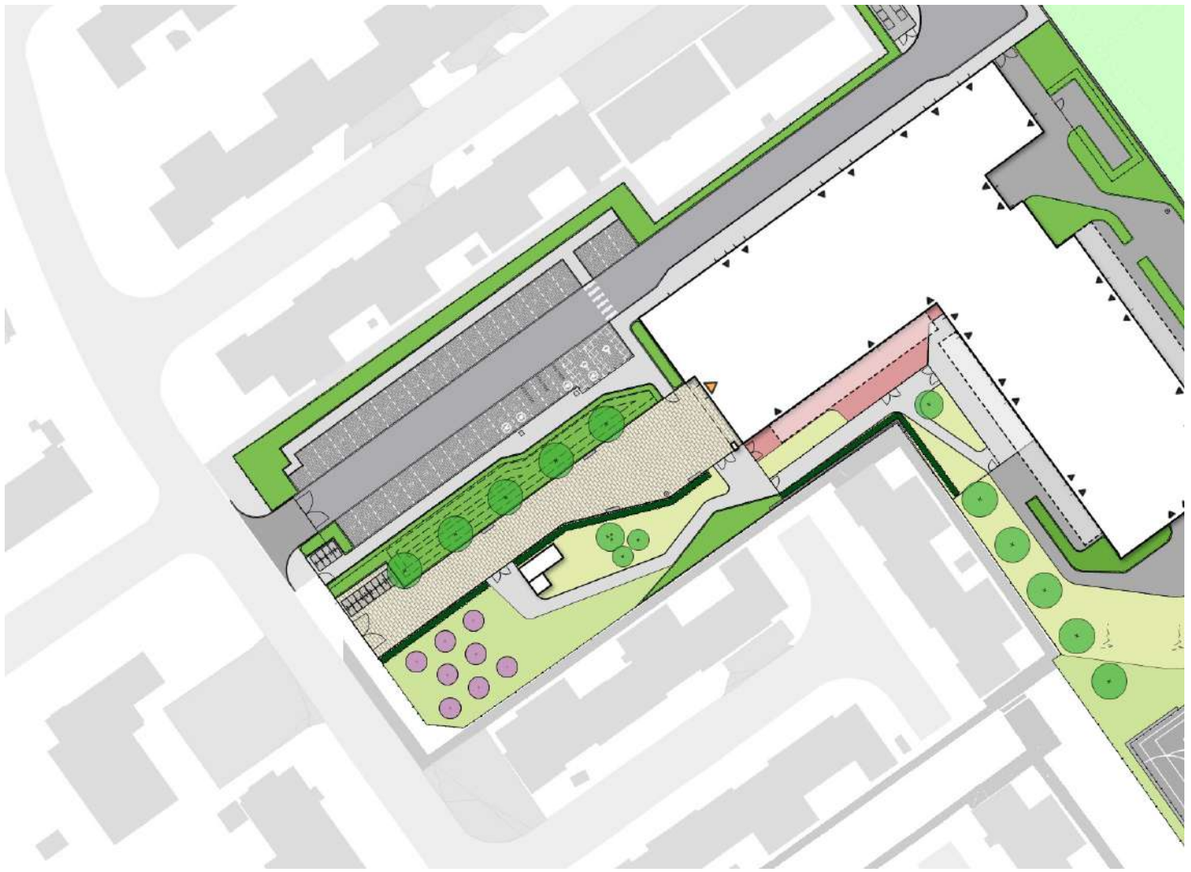
Marlas Site - ALN drop-off zone

12.4 Parking & Cycle Provision

As part of the new proposals, parking provision has been located to the west of the Marlas site, off Heol Y Parc. The vehicular and pedestrian routes off the main approach, have been segregated by a soft buffer of vegetation. The car parking area provides spaces for staff, visitors and disabled bays. These are close to the Main Entrance to the new school.

The vehicular route to the north would only be accessed by taxi's (for the ALN pupils) and service vehicles. A soft landscaped buffer has also been provided for behind this route.

Covered cycle provision has been allocated within the main entrance plaza, towards the road. These have been sensitively located within the landscape.



Marlas Site - Car parking and cycle provision

12.3 Access Points in to the New School

The Main Entrance and Reception are directly off the plaza to the front of the school. A gentle slope will navigate the differences in ground levels externally, to provide a level threshold. Once within the building, there will be no level change.

Other than the main entrance, the new English Medium primary school will have a number of other entrances in to classrooms for the lower years. These will be primarily in to classrooms for drop-off and pick-up times. Secondary access doors in to the building will be used by Junior year pupils and are close to stair cores for access to the first floor classrooms.

Around the perimeter of the new building where there are entrances or access routes - all access points will have a level threshold. Entrances in to the building are shown below.

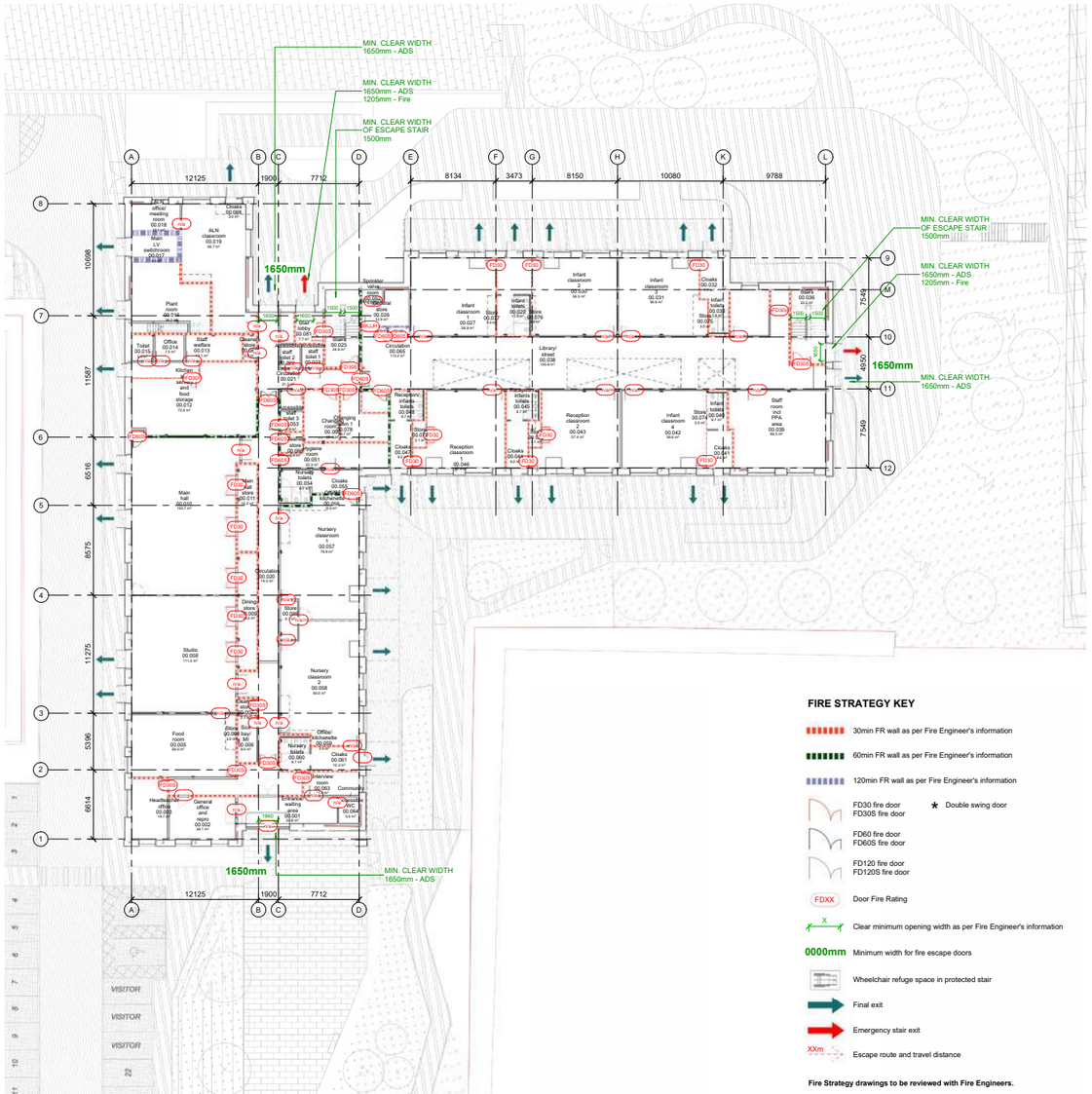
Marlas Site - Ground Floor showing access points

12.5 Emergency Escape

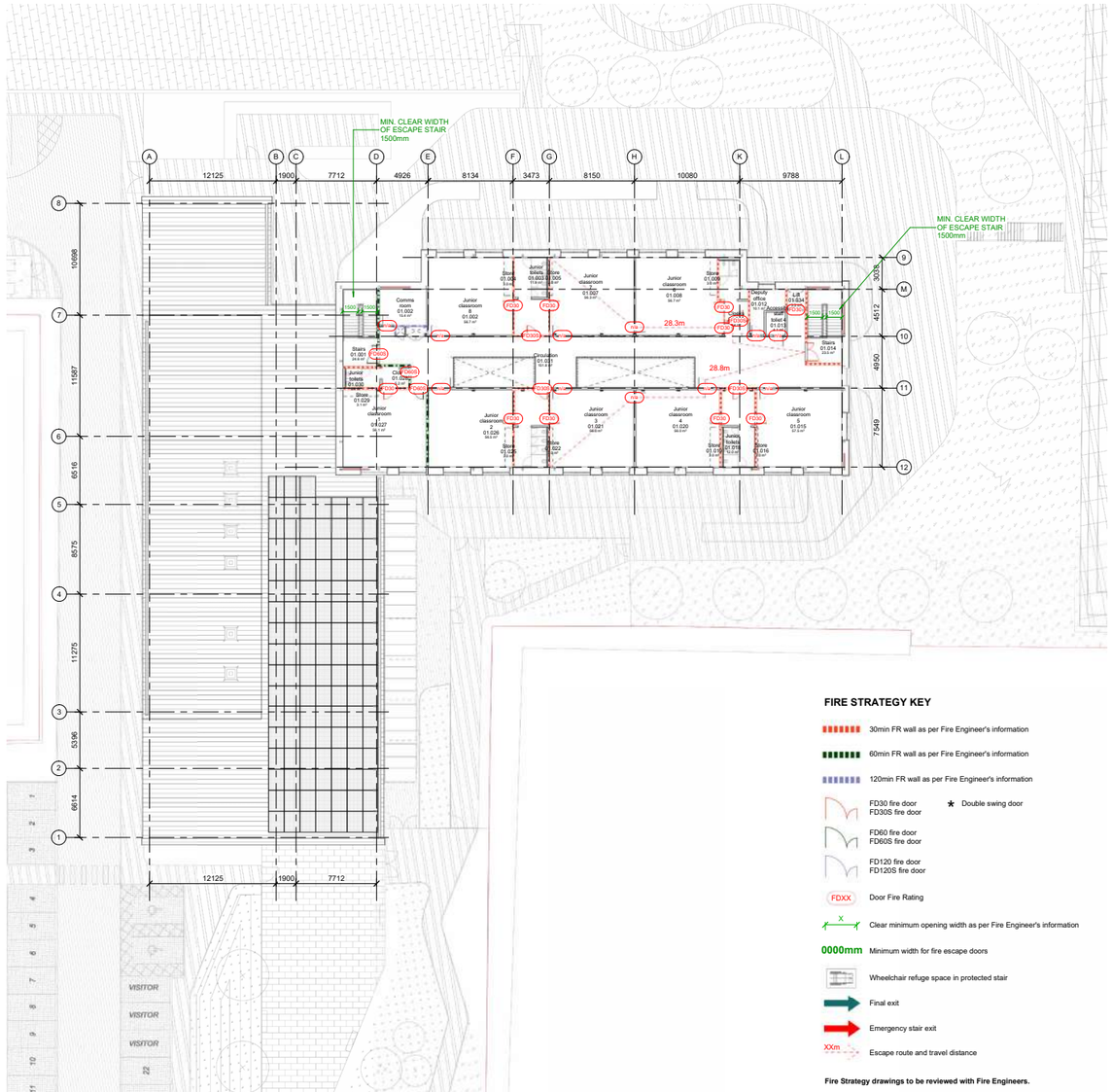
It is anticipated that emergency escape at ground floor level, will be predominantly via classroom doors, although the vast majority of other spaces also have an external door. There will be an access door to the ends of circulation routes at ground and final exits to cores.

On the first floor, there will be classrooms which require escape via an adjacent classroom, to pass the voids along the corridor. Once in the corridor, there are 2 escape cores at each end of the building.

The Fire Strategy Report will be submitted by the Fire Consultant as part of the Building Regulations application.



Marlas Site - Ground floor Fire Strategy



Marlas Site - First floor Fire Strategy

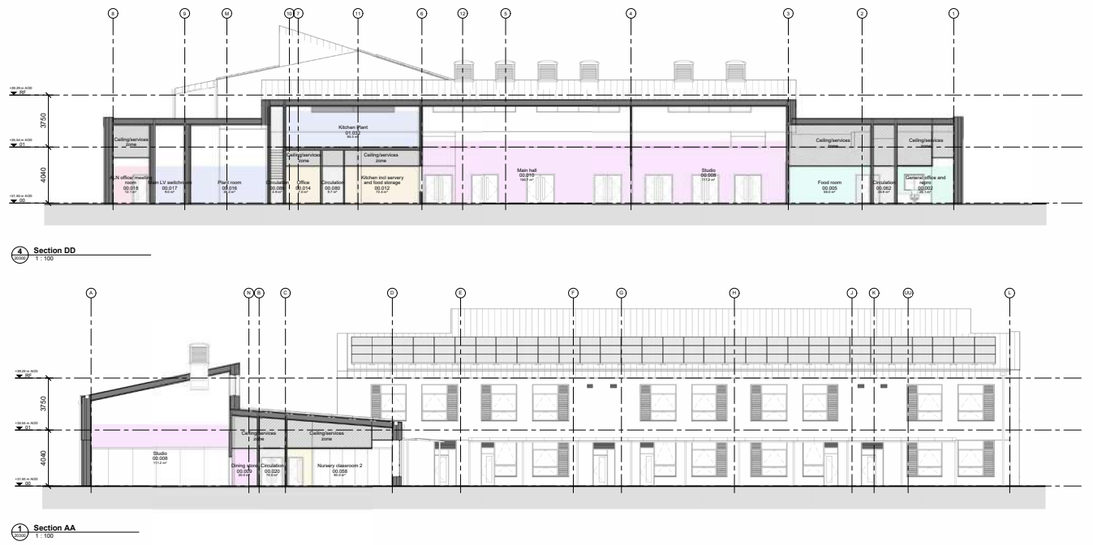
12.6 Internal Accessibility

The building layout and finishes will be designed to be fully usable by occupants with a range of accessibility needs. The buildings elements and components will be designed to be the appropriate dimensions, heights, weights and to be suitable for a primary school. These will include:

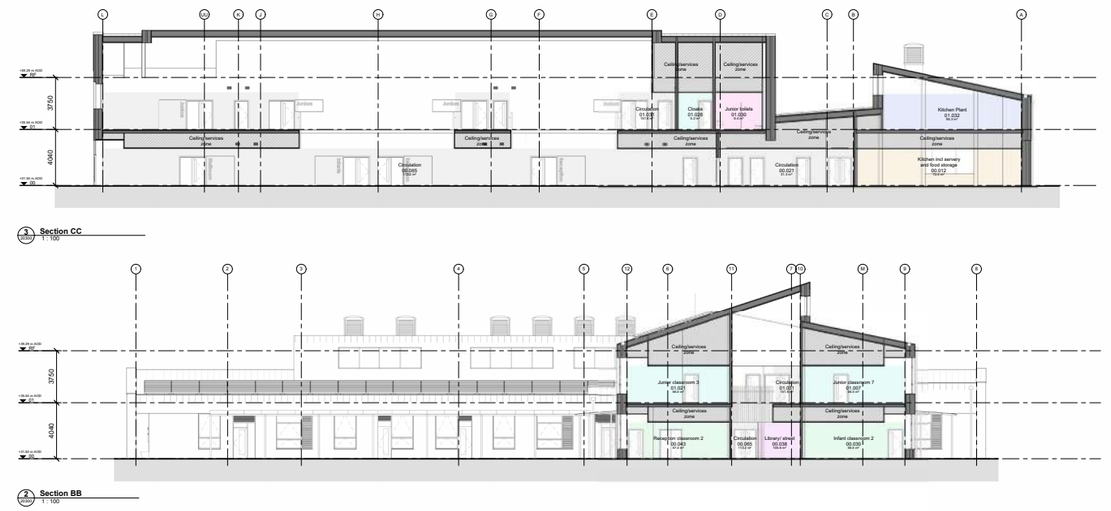
- Windows will be at the correct heights to offer views out for small children.
- The weight of doorsets will be suitable for primary school occupants.
- Doors will be detailed without creating finger traps etc.
- In addition to specifying finishes which are of a suitable robustness for a school, the Design Team will also specify to the correct level of slip resistance for floors.
- Teaching spaces will have desks suitable for wheelchair users and teaching rooms will have space for wheelchairs to turn.
- The Reception desk will have a dropped height section for wheelchair users.
- Hearing loops are currently under duscussion. If required, this information will be identified on the services engineers information.
- Included are: a lift, Accessible toilets & Hygiene Room.

Main thoroughfare corridor widths have been stipulated by the brief to be a minimum of 1900mm and are generous to allow for peak flow at busy times of the day. Corridors will, as a minimum, meet the widths required in Approved Doc. Part M.

Marlas Site - Circulation sketch



Marlas Site - Sections



Marlas Site - Sections

12.7 Horizontal Circulation

The new English Medium schools footprint, occupies a substantial portion of the site. At ground floor level, key access points have been strategically located for staff / parents / visitors, as well as for direct access in to classrooms for pupils. All access points will be detailed to provide level access from the adjacent ground.

In summary, these are as follows:

- Main Entrance in to the school is via the external ‘Plaza’.
- Secondary entrances in to the school, predominantly for the Juniors, from the external play areas in to the ‘Street’ space.
- Direct access in to the classrooms from the adjacent external play spaces.
- Access at the ends of the circulation routes.
- Additional access points in to the Main Hall and Studio.
- Access doors leading out from stair cores.

The Main Entrance in to the school is at the gable end of one of the wings and will be accessed via the adjacent hard landscaped ‘Plaza’. An entrance portal will be provided above, to protect against weather.

Upon entry, the lobby is located adjacent to the administration suite of spaces. It is anticipated that the Main Entrance will be predominantly used by staff, parents and visitors during the day.

The secondary entrances in to the school, are via the external play areas in to the ‘Street’. As the Junior classrooms are located on the first floor, these secondary entrances will be used by the older (Key Stage 2) pupils upon arrival, during the day for access to the play spaces and at the end of the day.

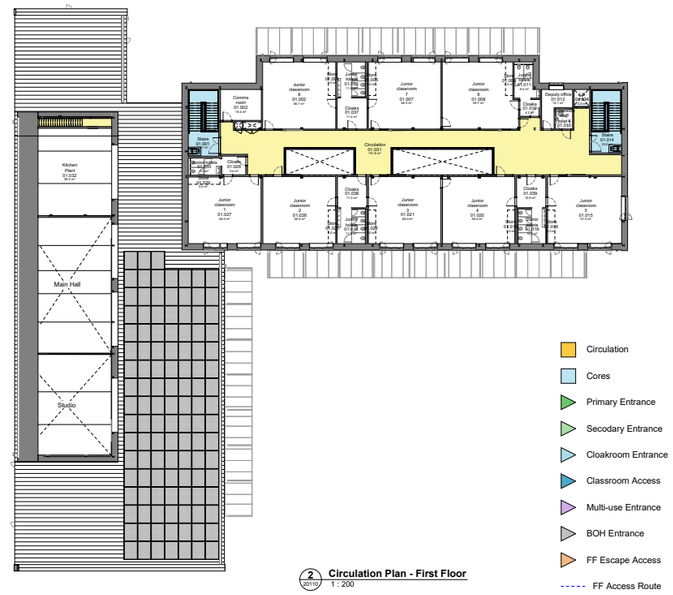
Entrances in to classrooms, will also be accessed via the external landscape. A canopy will be provided above entry points to protect against weather. These will be predominantly used by pupils during the day for direct access to their play space. The entrances in to the Nursery classrooms will have good sight lines & visability from the Main Entrance for security & passive supervision.

Escape doors leading out from the stair cores at ground floor level have been provided at both ends of the teaching wing.

For additional access, the Main Hall and Studio have a set of double doors leading to the external. These provide potential out-of-hours and community use.

The circulation has been kept as simple, direct and efficient as possible to provide clear views & passive supervision.

1 (2019) Circulation Plan - Ground Floor
1 : 200



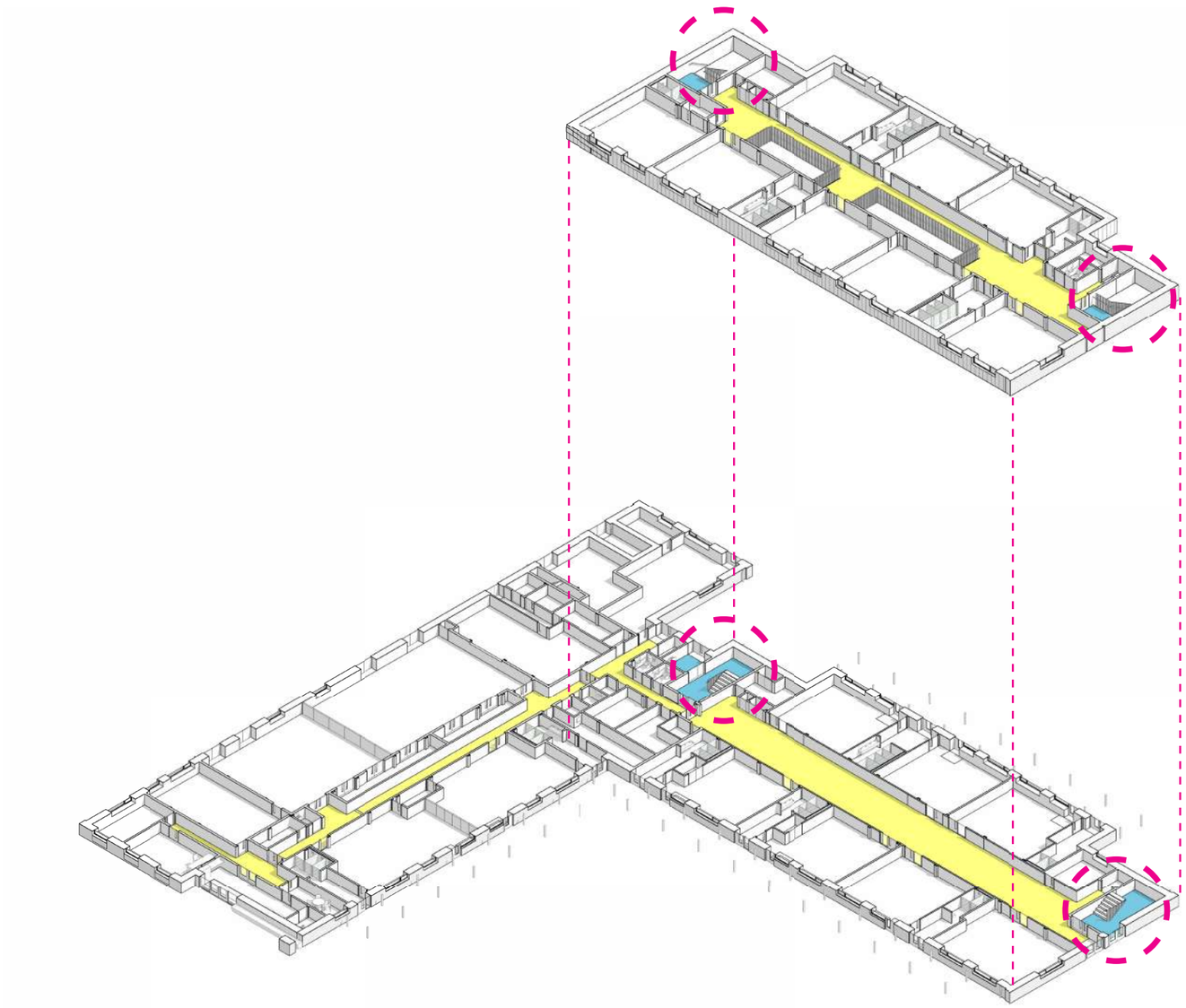
2 (2019) Circulation Plan - First Floor
1 : 200

12.8 Vertical Circulation

The school design has incorporated stair cores at the ends of the classroom wing. The stair cores connect the ground to the first floor primarily for Junior & staff access. The cores will also be used as escape routes, in the case of an emergency. Both cores have refuge areas and a door at ground floor level, directly leading to the external.

A lift has been located adjacent to the stair core with a clear lobby provided in addition to the circulation route.

Corridors will have a minimum width of 1900mm along the two circulation spines. Secondary corridors off the main spine, have been minimised wherever possible.



Marlas Site - Vertical circulation sketch - ground floor

Marlas Site - Vertical circulation sketch - first floor

12.9 WC Accommodation

The WC layouts have been designed in line with the Local Authorities standard arrangement for the WC and cloak rooms areas. They have been arranged to form a suite of spaces which are clustered and located in between classrooms. The briefed ACR, SSB & Schedule of Accommodation noted the areas (sqm) to be provided for the pupil WC's, per age group. The following is the provision shown at RIBA Stage 3.

Compliance with: BS6465-1 / SPR 1999 / BB99.

Accessible toilets/ Hygiene facilities: Accessible toilets and a Hygiene facility have been provided. The Accessible WC's are on both levels of the school.

Staff toilets: Staff WC's are via the Accessible toilet provision provided on both levels.

Visitors / community toilet: There will be an Accessible toilet suite within the Main Entrance secure line – available for visitors and located adjacent to the Main Reception.

Pupil Toilets -

Nursery, Reception and Infants: Non-gendered toilets with half height cubicle partition system, as appropriate. Toilets and cloaks are arranged in a central blocks between classrooms.

Juniors: Non-gendered toilets with 1900mm high cubicle partition system for privacy. Toilets and cloaks are arranged in a central block, accessed from the corridor & classroom, allowing for:

- Good proximity from the classroom / teacher,
- Good passive supervision from the Cloak room areas,
- Openness & working towards anti-bullying spaces.

Marlas Site - WC provision - ground floor

Sanitary Key

WC Type 1 - Nursery - 3 WCs

See BR0301-SRA-XX-00-DR-A-74201

WC Type 2 - Reception - 3 WCs

See BR0301-SRA-XX-00-DR-A-74202

WC Type 3 - Infants - 3 WCs

See BR0301-SRA-XX-00-DR-A-74203

WC Type 4 - Infants - 2 WCs

N/A

WC Type 5 - Juniors - 3 WCs

See BR0101-SRA-XX-01-DR-A-74204

WC Type 6 - Juniors - 2 WCs

N/A

Staff

N/A

Accessible

N/A

Hygiene Room

See BR0101-SRA-XX-00-DR-A-74205

Marlas Site - WC provision - first floor

13.0 SUMMARY

This Design and Access Statement sets out the background to the proposed development of a English Medium primary school on the Marlas Site; describing the site and its character and also the extent of the development proposed. The DAS should be read alongside the planning statement prepared for the proposed development, which demonstrates how the development, and its design, meets the relevant planning policy and design guidance. On this basis it is considered that the Statement meets the legislative requirements of a Design and Access Statement.

The proposed development marks a significant investment into local education provision and would future proof the delivery of education in the local area for current and future generations. In light of the considered design approach that is respectful to the site and local area, and the significant benefits that would be delivered from the development, it is considered that the proposed development is suitable on design and policy grounds and suitable to be granted planning permission.

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