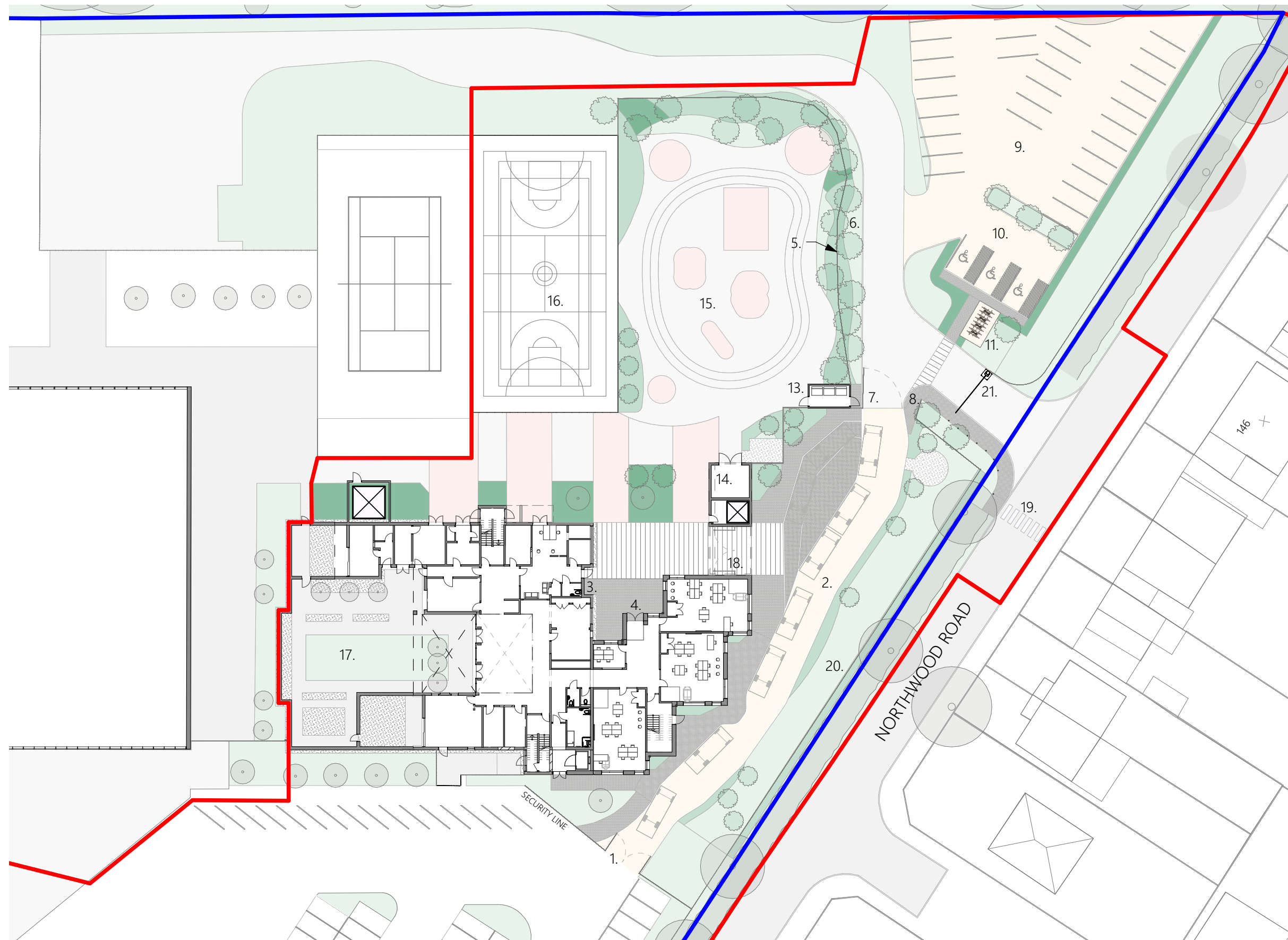


DESIGN & ACCESS STATEMENT

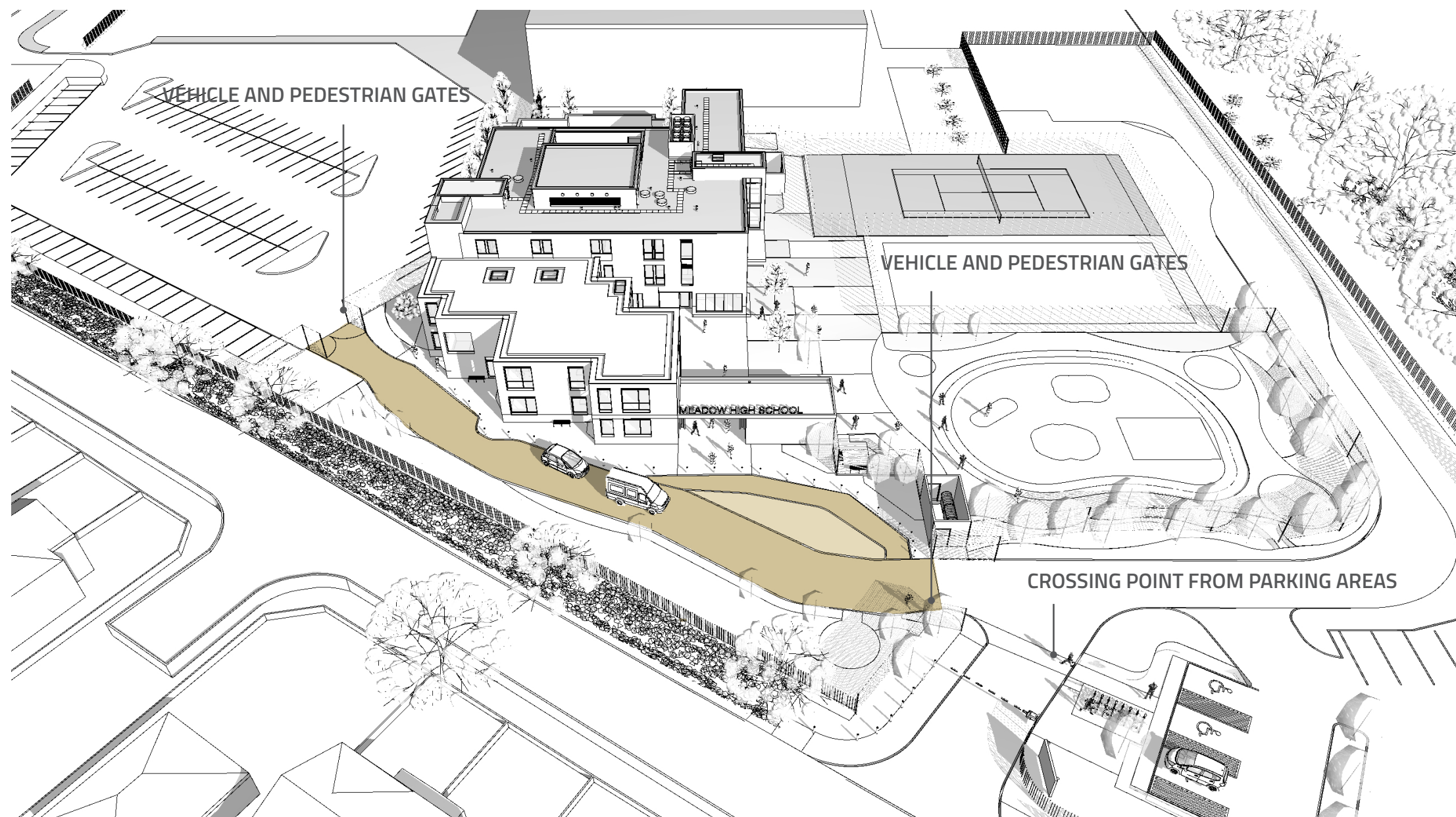
Project: MEADOW SCHOOL EXPANSION
Client: LONDON BOROUGH OF HILLINGDON
Project no: 4266
Date: MAY 2022

5.02 DESIGN PROPOSAL

PROPOSED SITE PLAN



1. - Vehicular and pedestrian security gate.
2. - Existing road to be re-positioned and resurfaced to create minibus drop-off point. Proposed road to be level with pedestrian footpath forming level play space, to be used when gates close area to vehicles. Area for vehicles to be demarcated from pedestrians with bollards.
3. - Main visitor and official entrance.
4. - Student entrance.
5. - Proposed 2m high mesh fence.
6. - Proposed planting.
7. - Large vehicular security gate.
8. - Pedestrian security gate.
9. - 24 staff carparking spaces.
10. - 3 accessible and visitor car parking spaces.
11. - 8 covered cycle parking spaces.
12. - New road access to Harefield Academy from Northwood Road.
13. - Refuse store.
14. - Outdoor play and sports store.
15. - Outdoor play area.
16. - Proposed Multi-Use Games Area.
17. - Courtyard garden.
18. - School security gate.
19. - Drop off crossing point
20. - Existing verge, improved with new planting.
21. - Vehicle barrier allowing site to be secured after hours.



AERIAL VIEW SHOWING DROP-OFF ZONE

The drop-off area will be secured with vehicle gates that are intended to be manually controlled by the school staff. These gates will be opened at the start and end of the school day to allow access for the transport service, or otherwise for emergency vehicles.

When secure, the drop-off area will become an external space to encourage scootering and running, and will be playfully marked to suggest activity as shown in the precedent image below.

Pedestrian gates will be provided for visitor access during the day. Visitors will be able to connect via video intercom with the school office and be admitted by gate release hardware.



DESIGN & ACCESS STATEMENT

Project: MEADOW SCHOOL EXPANSION

Client: LONDON BOROUGH OF HILLINGDON

Project no: 4266

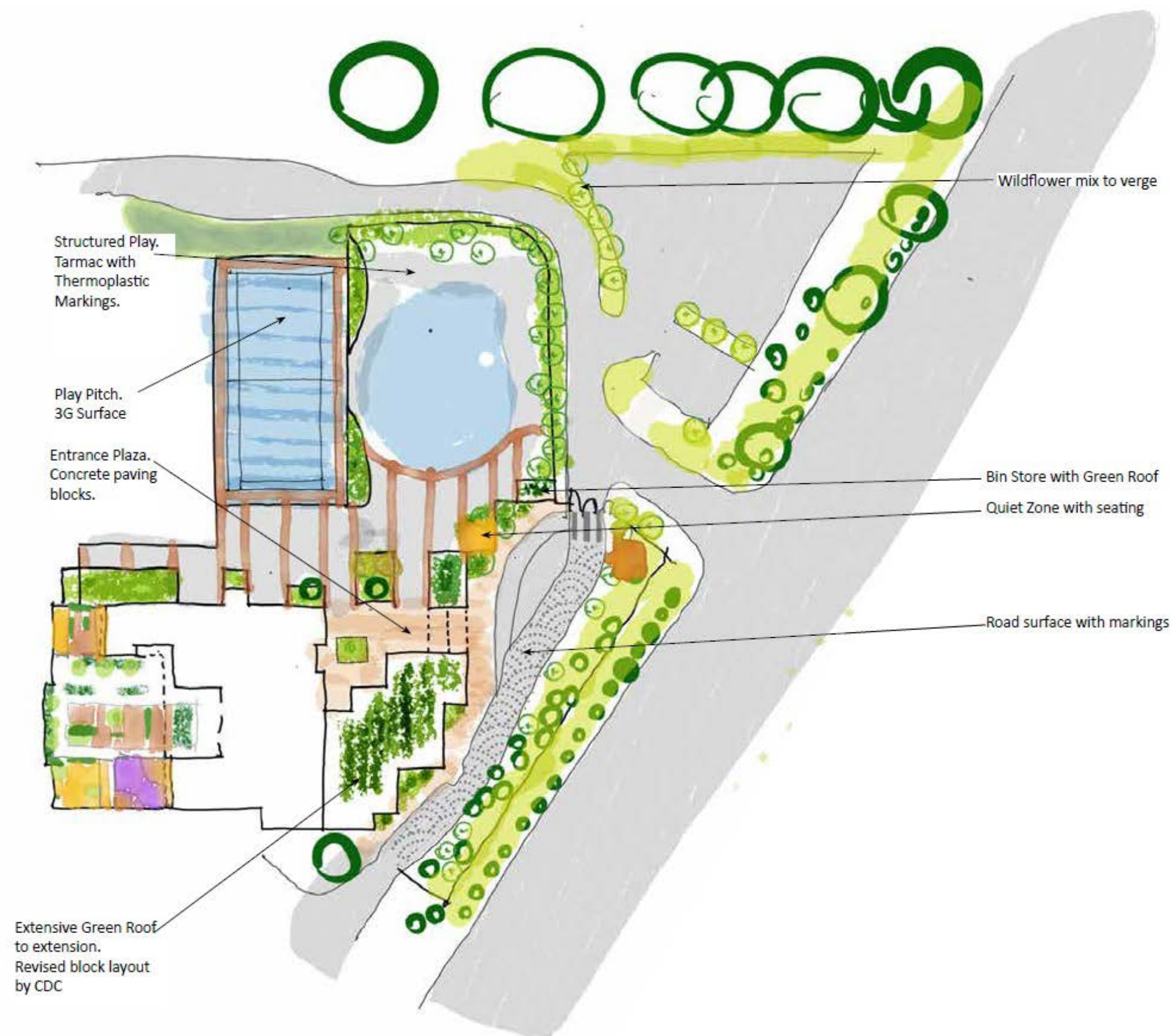
Date: MAY 2022

5.04 DESIGN PROPOSAL

ENTRANCE SPACE

The drop-off area provides a safe and attractive landscaped entrance to the school





The external landscape has been developed to support the school curriculum and provide an attractive series of spaces for the pupils.

The spaces have been differentiated with hard surfaces and with areas of soft landscape providing pockets of green space.

The walled gardens are to be broadly refurbished, but with new features introduced and an existing sunken bed raised in level for accessibility and safety.

Please refer to landscape architect HEDuk information for further details.

DESIGN & ACCESS STATEMENT

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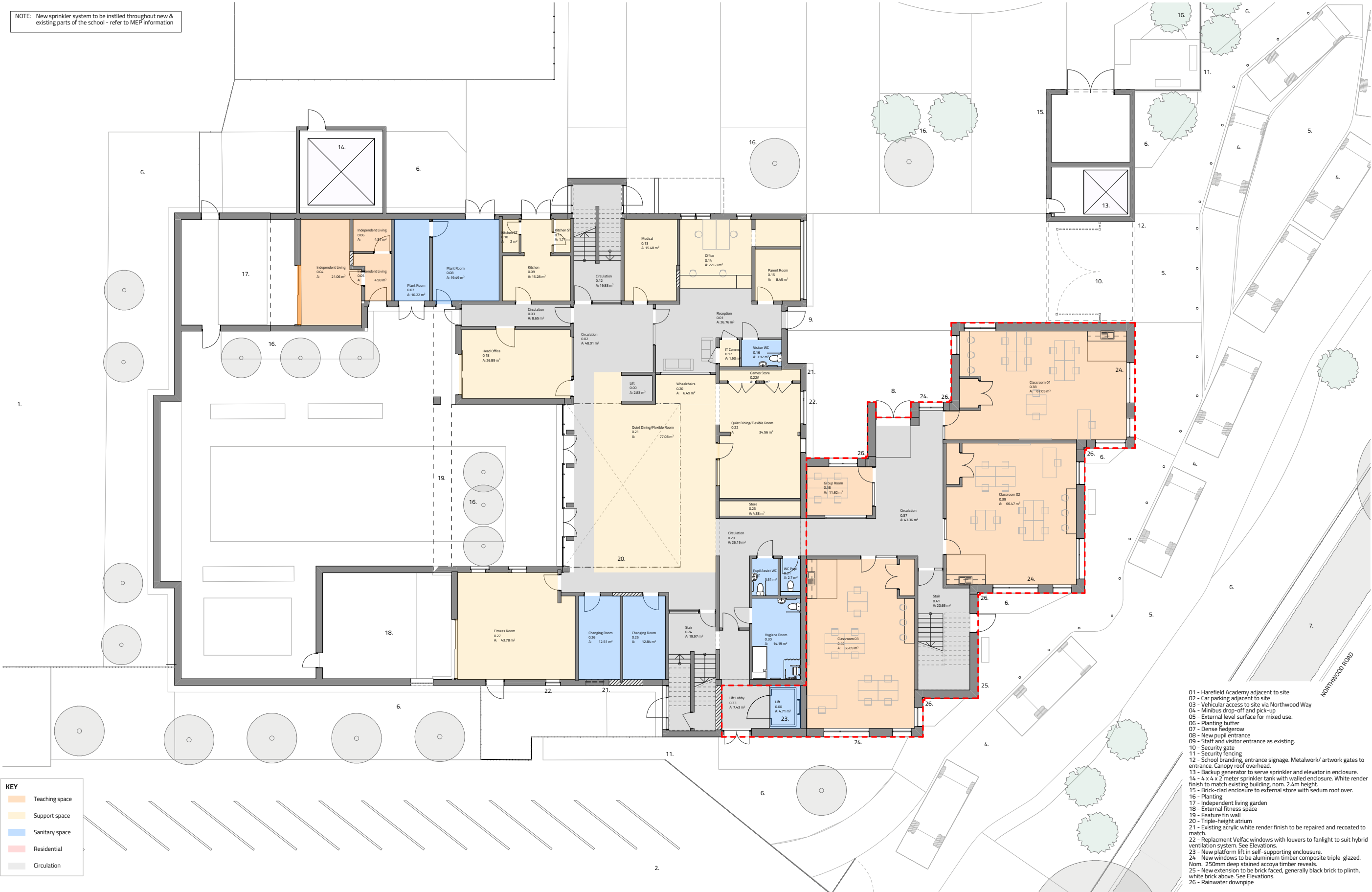
5.06 DESIGN PROPOSAL

VIEW OVER EXTERNAL AREAS

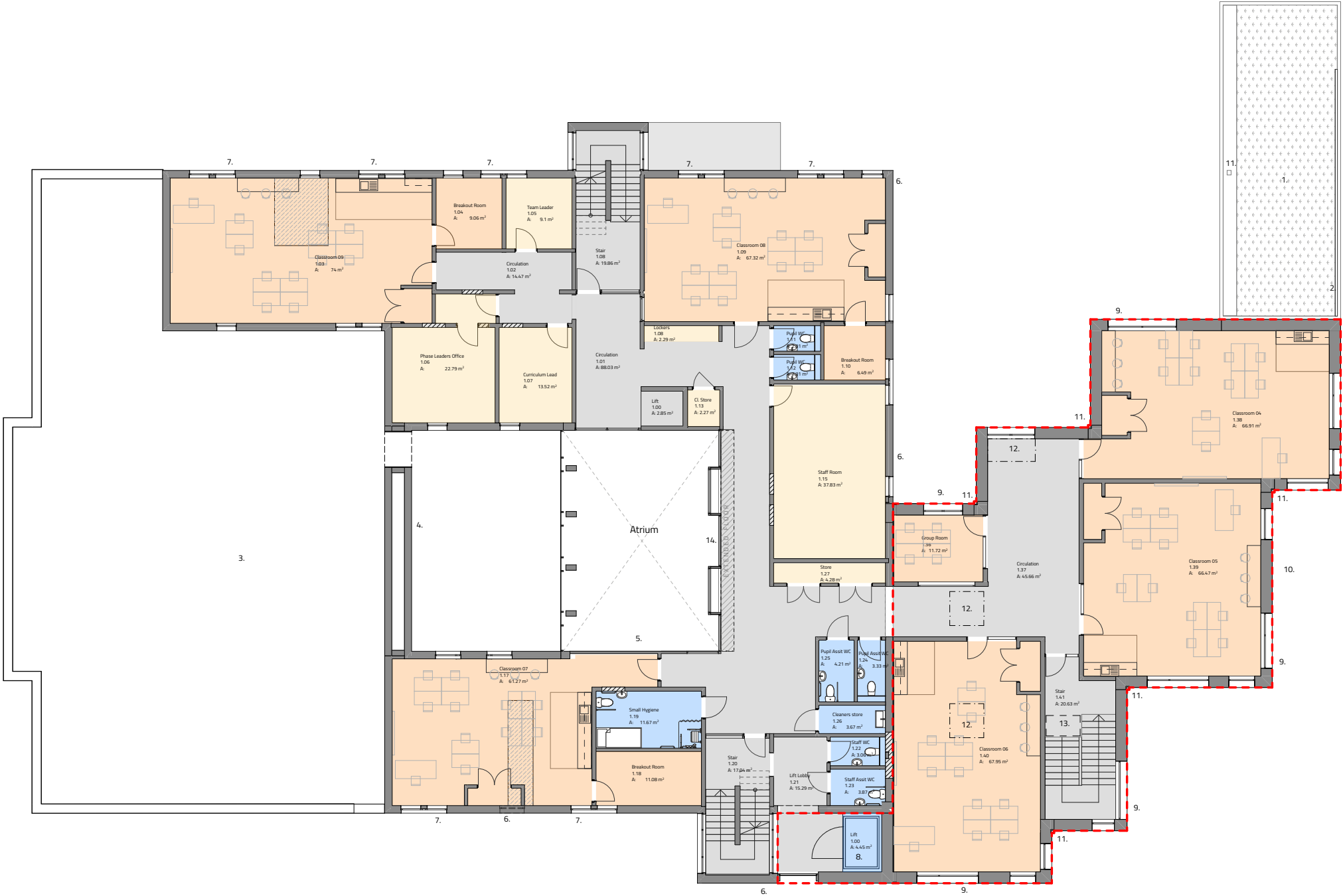
The external spaces strongly relate to the form of the new extension and encourage activity and movement



5.07 DESIGN PROPOSAL
GROUND FLOOR PLAN

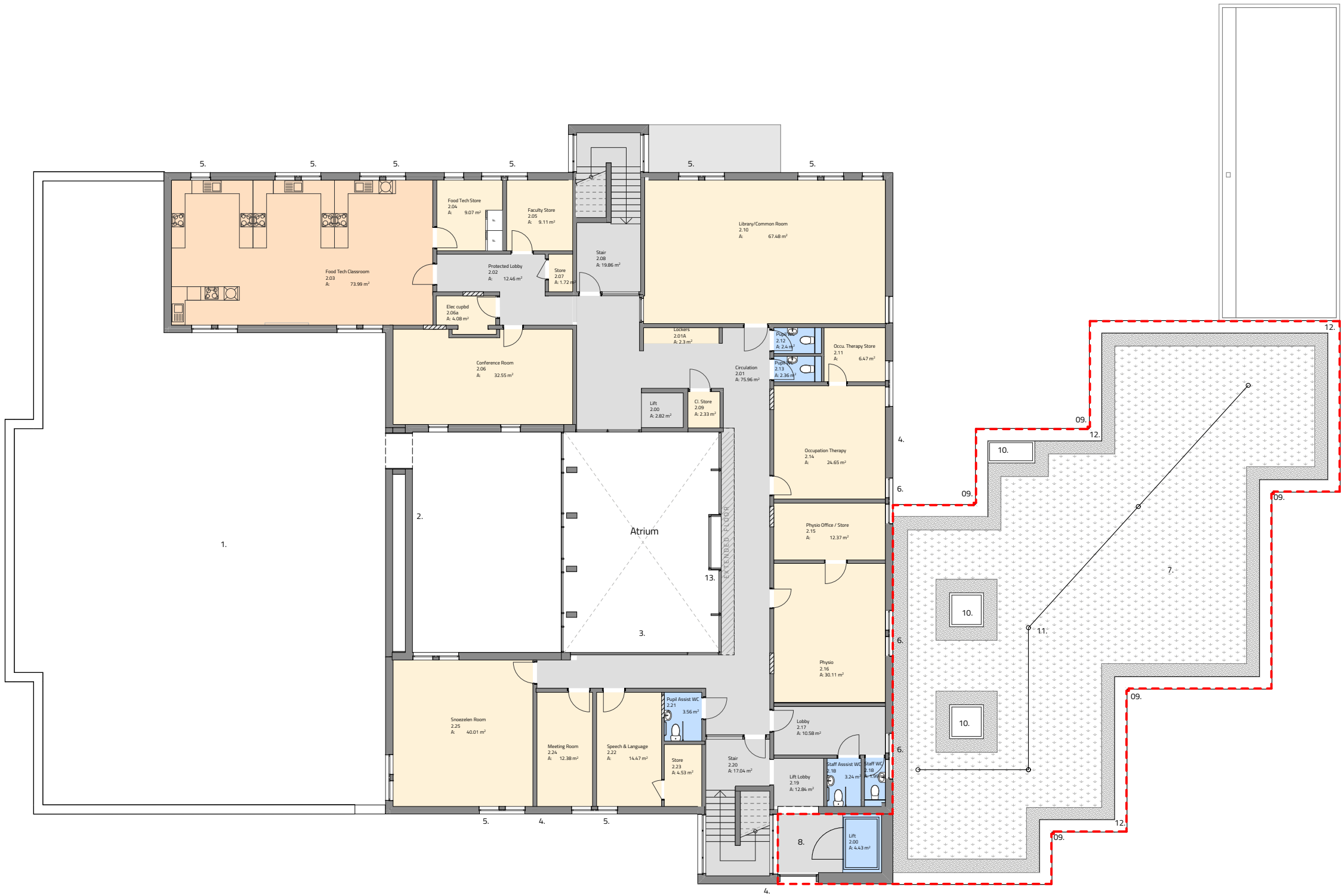


NOTE: New sprinkler system to be instilled throughout new & existing parts of the school - refer to MEP information



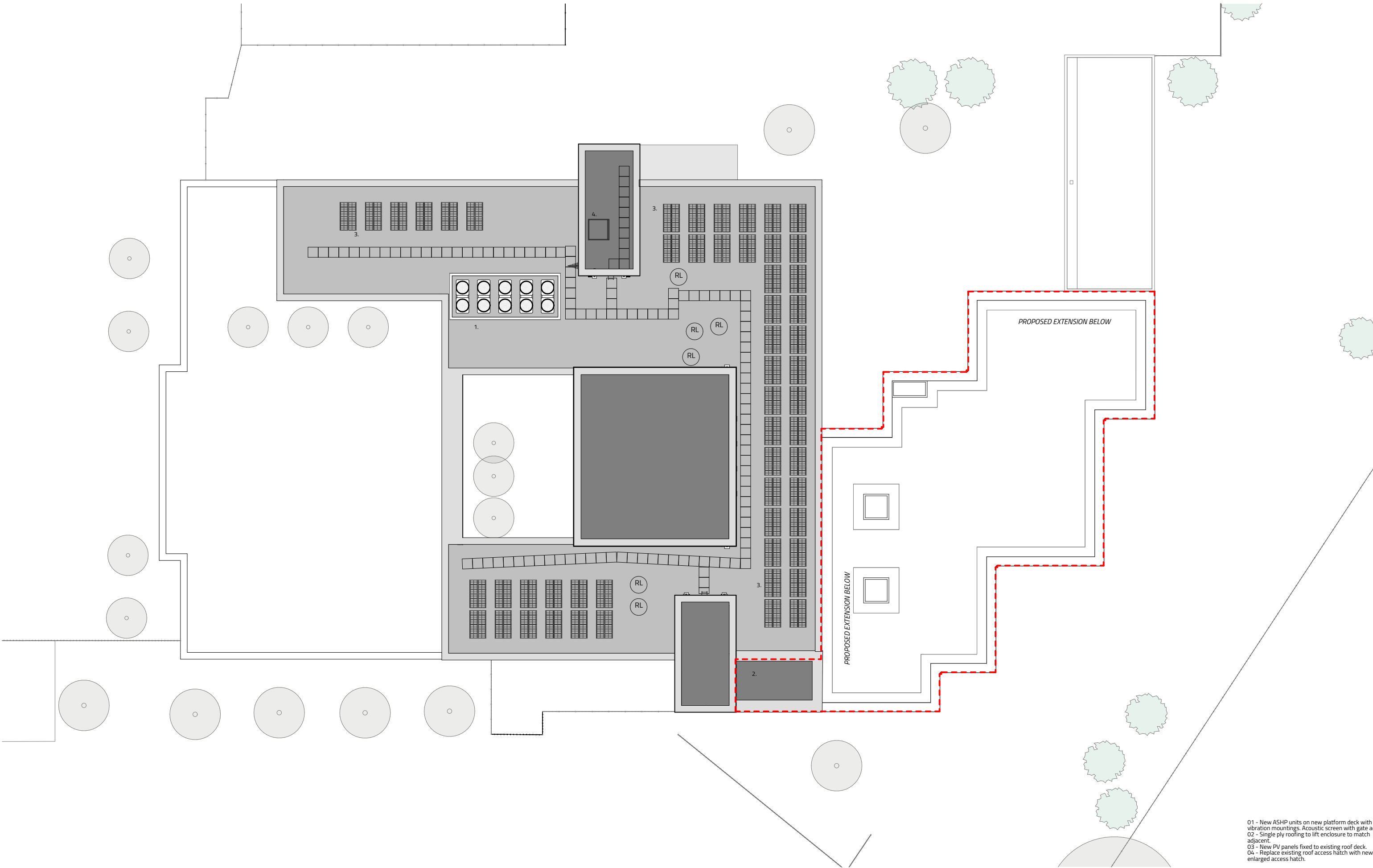
KEY	
Teaching space	Support space
Sanitary space	Residential
Circulation	

- 01 - Sedum roof to external store and entrance gateway.
- 02 - Feature PPC aluminium signage to entrance gateway
- 03 - Courtyard garden below
- 04 - Feature fin wall
- 05 - Triple-height atrium
- 06 - Existing acrylic white render finish to be repaired and recoated to match.
- 07 - Replacement Velfac windows with louvers to fanlight to suit hybrid ventilation system. See Elevations.
- 08 - New platform lift in self-supporting enclosure.
- 09 - New windows to be aluminium timber composite triple-glazed. Nom. 250mm deep stained accoya timber reveals.
- 10 - New extension to be brick faced, generally black brick to plinth, white brick above. See Elevations.
- 11 - Rainwater downpipe
- 12 - Rooflight above.
- 13 - Refuge area.
- 14 - Extended floor slab with screening.



KEY	
	Teaching space
	Support space
	Sanitary space
	Residential
	Circulation

- 01 - Courtyard garden below
- 02 - Feature fin wall
- 03 - Triple-height atrium
- 04 - Existing acrylic white render finish to be repaired and recoated to match.
- 05 - Replacement Velfac windows with louvers to fanlight suit hybrid ventilation system. See Elevations.
- 06 - Replacement Velfac windows where adjacent to new extension
- 07 - Extensive sedum roof to extension, 300mm gravel r to parapet edge and rooflights.
- 08 - New platform lift in self-supporting enclosure.
- 09 - Rainwater chute with hopper head and downpipe
- 10 - Rooflight
- 11 - Fall arrest system for safe roof maintenance access
- 12 - Flat roof parapet
- 13 - Extended floor slab with screening.



01 - New ASHP units on new platform deck with vibration mountings. Acoustic screen with gate adjacent.
02 - Single ply roofing to lift enclosure to match adjacent.
03 - New PV panels fixed to existing roof deck.
04 - Replace existing roof access hatch with new enlarged access hatch.

VIEW OF COURTYARD TO NEW EXTENSION



The material palette of the building has been selected to pick up characteristics of the existing building without using render finishes.

For fire and robustness purposes, brick is the preferred cladding material. A pale/ white brick is used for upper areas, with a dark/ black brick used in key areas and particularly at low level to suggest a solid plinth to the new extension similar to the existing building. Soldier coursing is proposed an key areas around openings and at the entrance gate.

Windows are intended to be aluminium/ timber composite to match the existing buiding, but will be triple glazed to the extension to ensure a better thermal performance. High-level louvres are integrated into the window assembly to suit the hybrid ventilation strategy.

The window reveals are intended to be picked out in a durable Accoya timber to add visual warmth and close the wall cavities.

The roof will be edged with a PPC aluminium coping.

KEY TO MATERIALS

- 1. White textured brick with white mortar
- 2. Black textured brick with black mortar
- 3. PPC Aluminium/ Timber composite window with matching louvres to ventilation behind
- 4. 30mm width Accoya timber surround to window reveals
- 5. PPC aluminium coping to sedum/ wildflower flat roof behind

DESIGN & ACCESS STATEMENT

Project: MEADOW SCHOOL EXPANSION
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5.12 DESIGN PROPOSAL

INTERIORS



VIEWS OF CENTRAL HEART SPACE



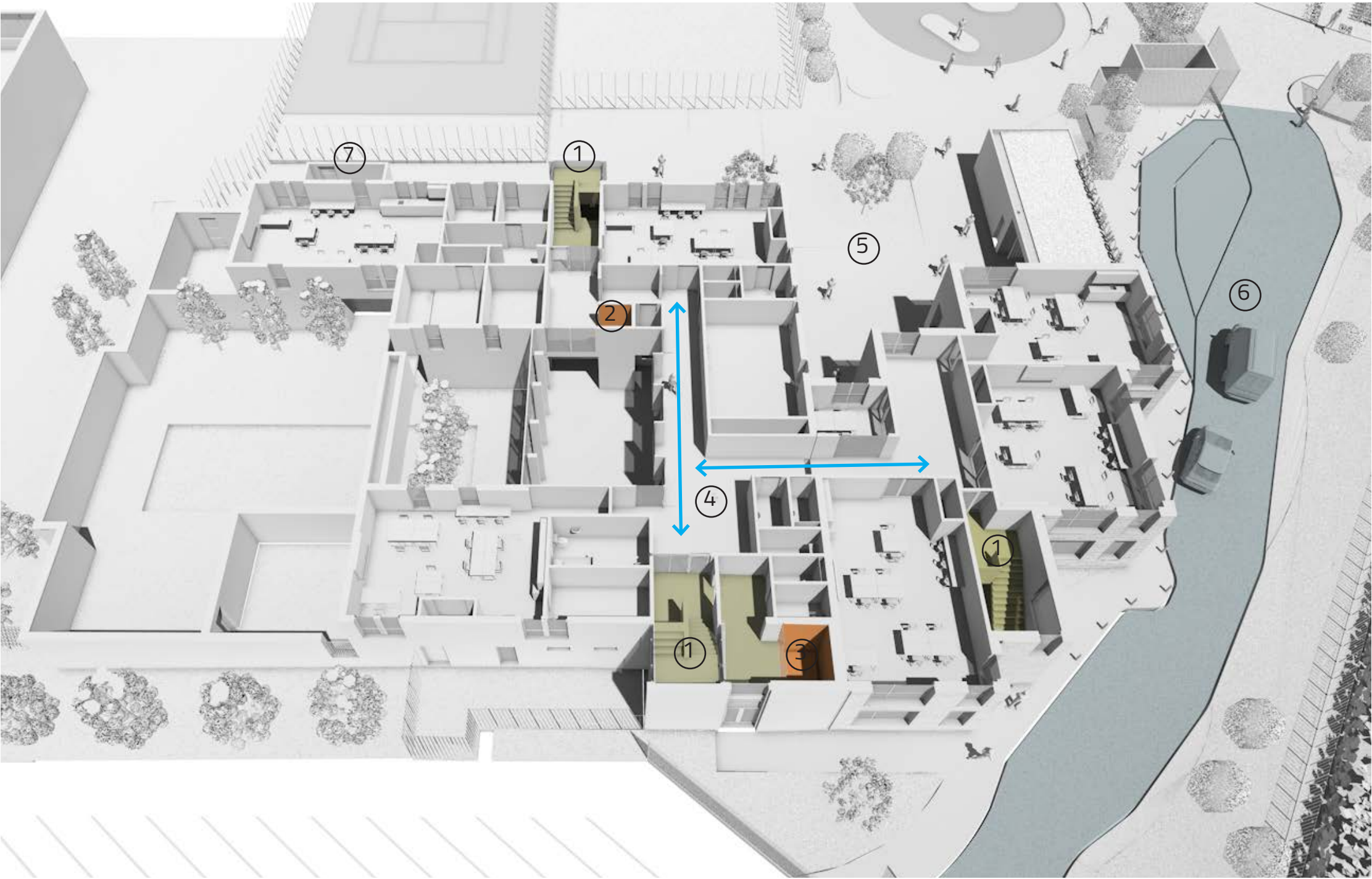
The atrium provides an attractive 'heart space' for the school, that will open out into the sensory garden and support diverse uses such as assembly, indoor PE and dining. A number of stores and rooms around the perimeter of the atrium support this multi-functional use.

Walkways around the atrium will be widened to allow the passing of wheelchairs, and additionally the atrium will be screened to prevent objects being thrown from upper floors. The intention is to express these as projecting seating areas to promote socialising in the upper circulation areas.

Spaces through the building generally will maximise daylight through existing windows, and within the new extension daylight levels will work towards CIBSE daylight factor guidance. Internal electric lighting will be modulated to adjust for daylight levels adjacent to windows.

Many pupils at the school are sensitive to noise levels, and therefore the acoustic performance of the school will need to be greatly enhanced to meet the recommendations of BB93. Sharps Redmore acoustic consultants have produced a noise report making recommendations for plant noise and the ventilation strategy of the building to ensure internal noise levels are adequate.

Hearing loops will be integrated to the requirements of the school.



CUT-AWAY VIEW AT FIRST FLOOR

As a school for children with special educational needs and disabilities, accessibility and fire safety have been paramount in the design development.

Hoare Lea consultant fire engineers have inputted into the design proposals, which has resulted in the proposal of a fire evacuation lift discreetly knitted into an existing stair core to fit with the architecture of the existing building. This will assist the evacuation of pupils on upper floors in the event of an emergency.

The new extension is intended to match floor levels to ensure a seamless transition between new and old. Likewise, door thresholds at ground floor level will provide level access for wheelchair users.

Walkways around the atrium will be widened to allow the passing of wheelchairs, and additionally the atrium will be screened to prevent objects being thrown from upper floors.

Existing doorways will need to be widened to meet the provisions of Part M of the building regulations, and otherwise the internal design of the building will be governed by Part M, BS 8300 and BB104.

KEY

- 1. Escape staircase with refuge point
- 2. Existing platform lift
- 3. New larger 1000kg platform lift to assist pupils with motorised/ larger wheelchairs. Also fire evacuation lift.
- 4. Existing walkways widened to provide circulation to allow passing wheelchairs
- 5. Level threshold into external areas for wheelchair users from pupil entrance
- 6. Level threshold from drop-off zone
- 7. Sprinkler tank location (if required)



AERIAL VIEW

Re-purposing the redundant residential building towards a new active community use is a highly sustainable approach by the school. The existing building is only 11 years old and as such has reasonably good levels of thermal performance and energy use.

Although the building currently runs on gas, the proposals indicate replacing this energy source with Air Source Heat Pumps, to be mounted in a dedicated acoustically-attenuated enclosure on the roof. This will greatly reduce the carbon use of the building, including the new extension.

PV panels are proposed to be mounted in unshaded south-facing positions on the roof also, helping to run the ASHP and providing further carbon savings.

The extension is proposed to be roofed in a sedum/ wildflower extensive roof to increase the site's urban greening factor and encourage invertebrates and wider biodiversity.

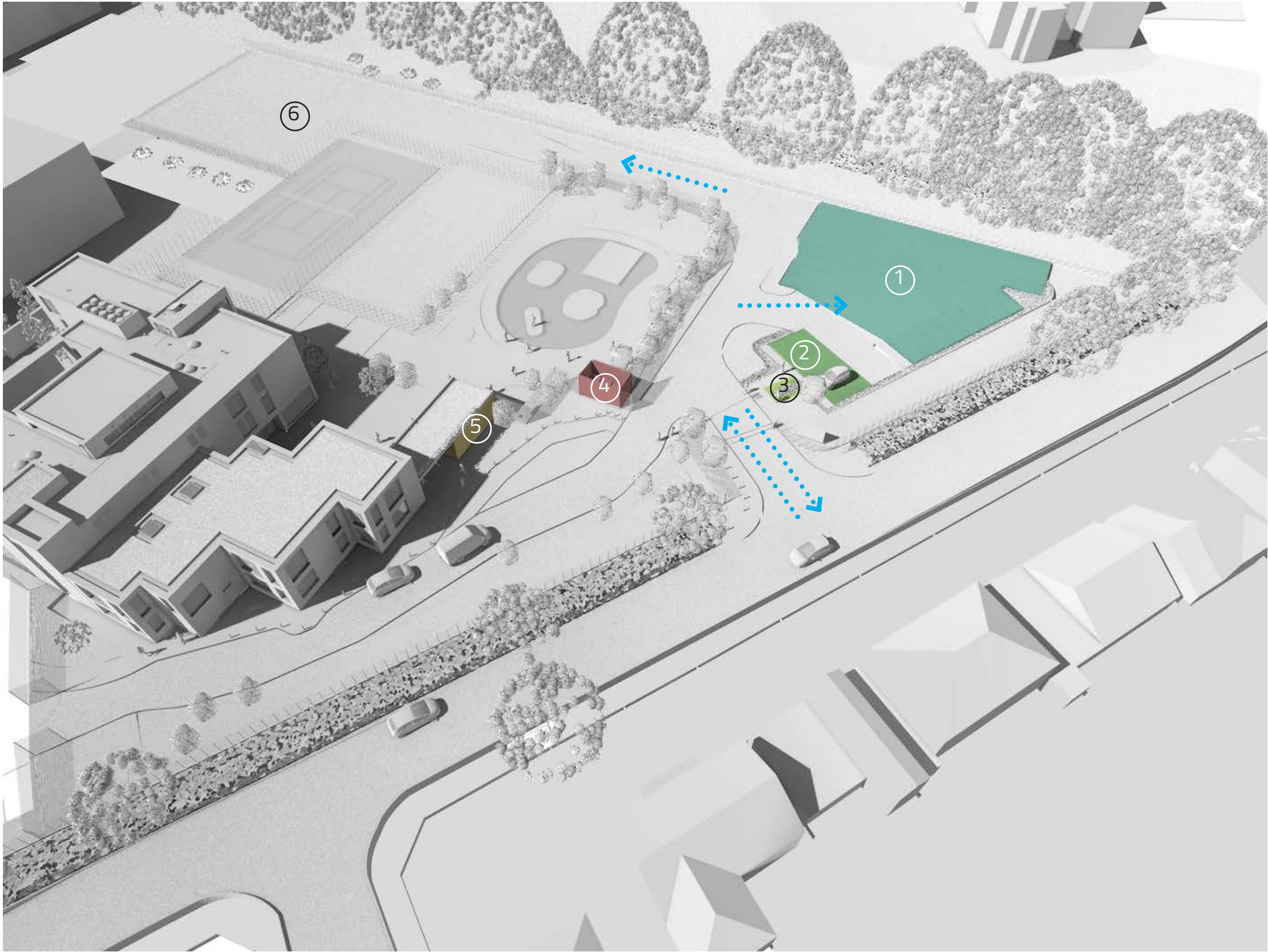
Due to noise impacts, it is expected that the new extension and some classrooms in the existing building require louvres to hybrid ventilation units behind. These will ensure good levels of fresh ventilation to these rooms whilst helping to mitigate overheating.

The extension is expected to be framed using Cross Laminated Timber (similar to the existing building), which is a low-embodied carbon solution.

KEY

- 1. Sedum/ wildflower extensive roof to extension
- 2. Roof-fixed PV panels
- 3. ASHP units in acoustic enclosure and on anti-vibration mountings
- 4. Louvres to Hybrid ventilation units

An ecologist has undertaken a preliminary assessment of the site and the findings will be developed at future design stages.



SITE SERVICING

The proposed new vehicular access from Northwood Road allows a direct path for refuse vehicles etc to access the Academy’s service yard without passing the new school. The access has been sized to suit the vehicles that would be expected for both the academy and Meadow High School.

The new shool will have a bin enclosure sited adjacent to the new access for ease of collection, currently expected to be by Hillingdon Council services.

Visitor and cycle parking are located close to the access point for ease of access and due to the proximity to the new school entrance.

Please refer to Robert West transport assessment for details of parking and servicing.

KEY

- 1. Staff Parking
- 2. Visitor/ Disabled Parking
- 3. Cycle Parking
- 4. Bin Store (3 x 1100l Eurobin Capacity)
- 5. External PE store (built under canopy)
- 6. Harefield Academy Service Yard



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