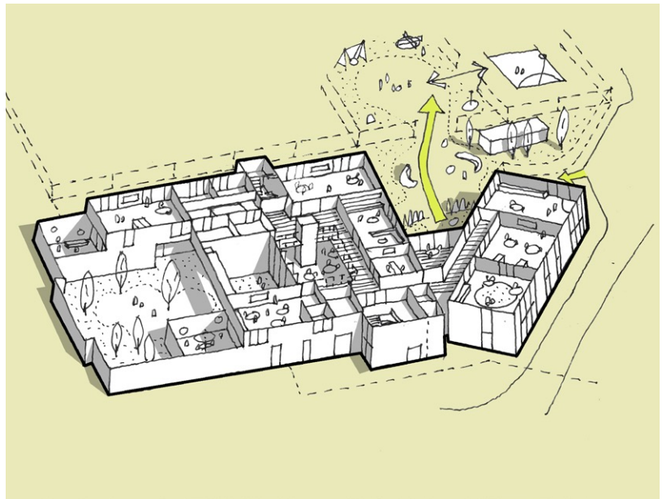
4.01 DESIGN PROCESS
OPTION APPRAISALS

EARLY MASSING STUDIES



PREFERRED CONCEPT SOLUTION

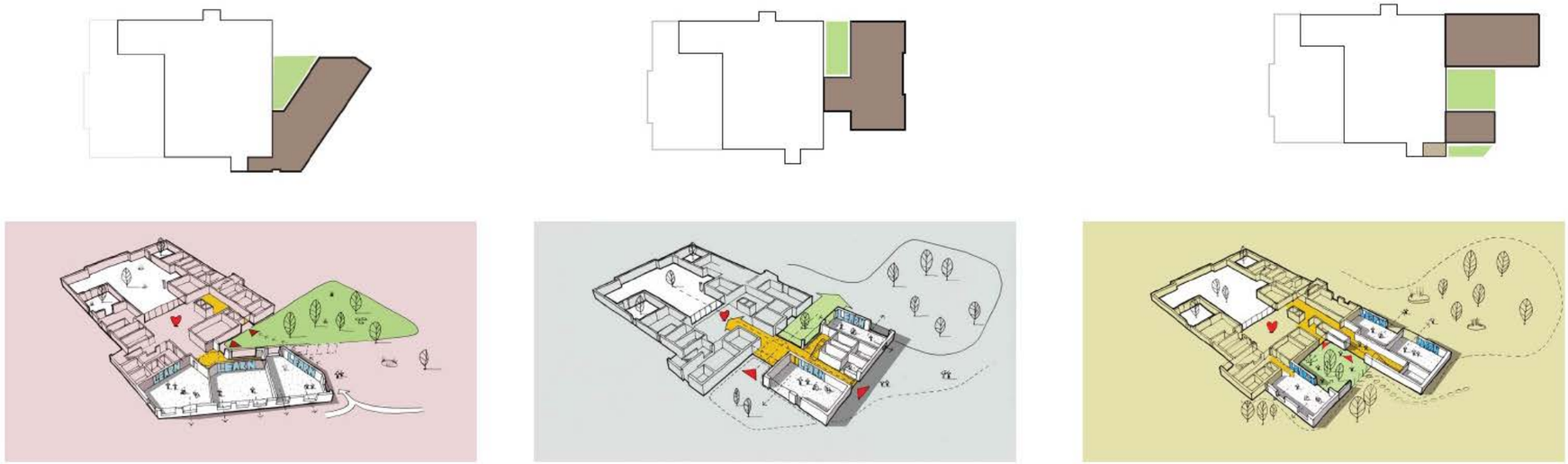
Since the instigation of the project, a number of design ideas have been explored with the school and council members to consider how the existing building and its external spaces could be repurposed to meet the educational needs and vision of Meadow High School.

Early studies included looking at the best opportunities for extending the building to provide the required level of accommodation to BB104 standards.

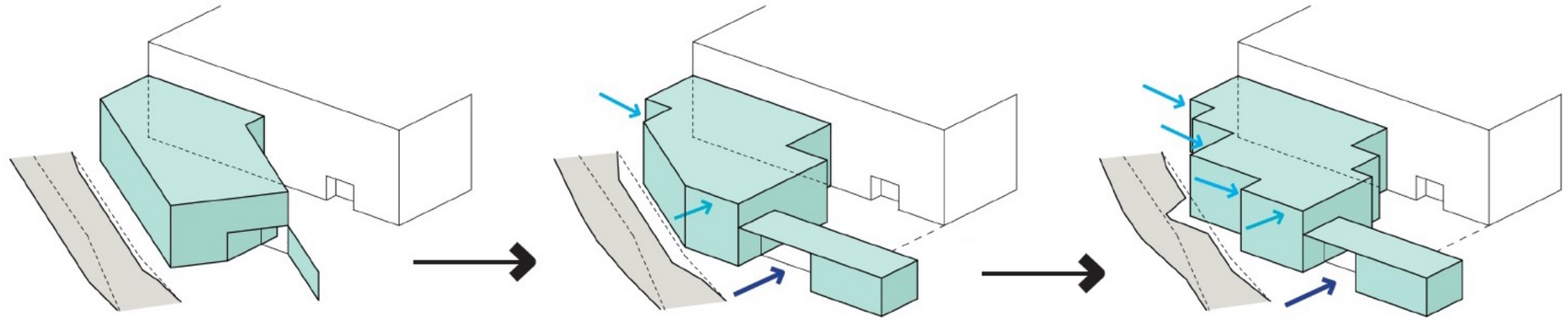
It was agreed that extending the building towards the south of the existing building proved the most beneficial by increasing the connectivity of pupils to the external areas, but also allowing a cluster classrooms that efficiently concentrated circulation. Additionally, this allowed the classrooms to be retained at ground and first floor levels, minimising vertical travel for pupils who may have physical disabilities.

Preliminary massing studies/ ideas have been shared with the planning team and members of DfE at the instigation of RIBA Stage 2 for review and input.

4.02 DESIGN PROCESS
EXTENSION DEVELOPMENT



EXTENSION OPTION APPRAISAL



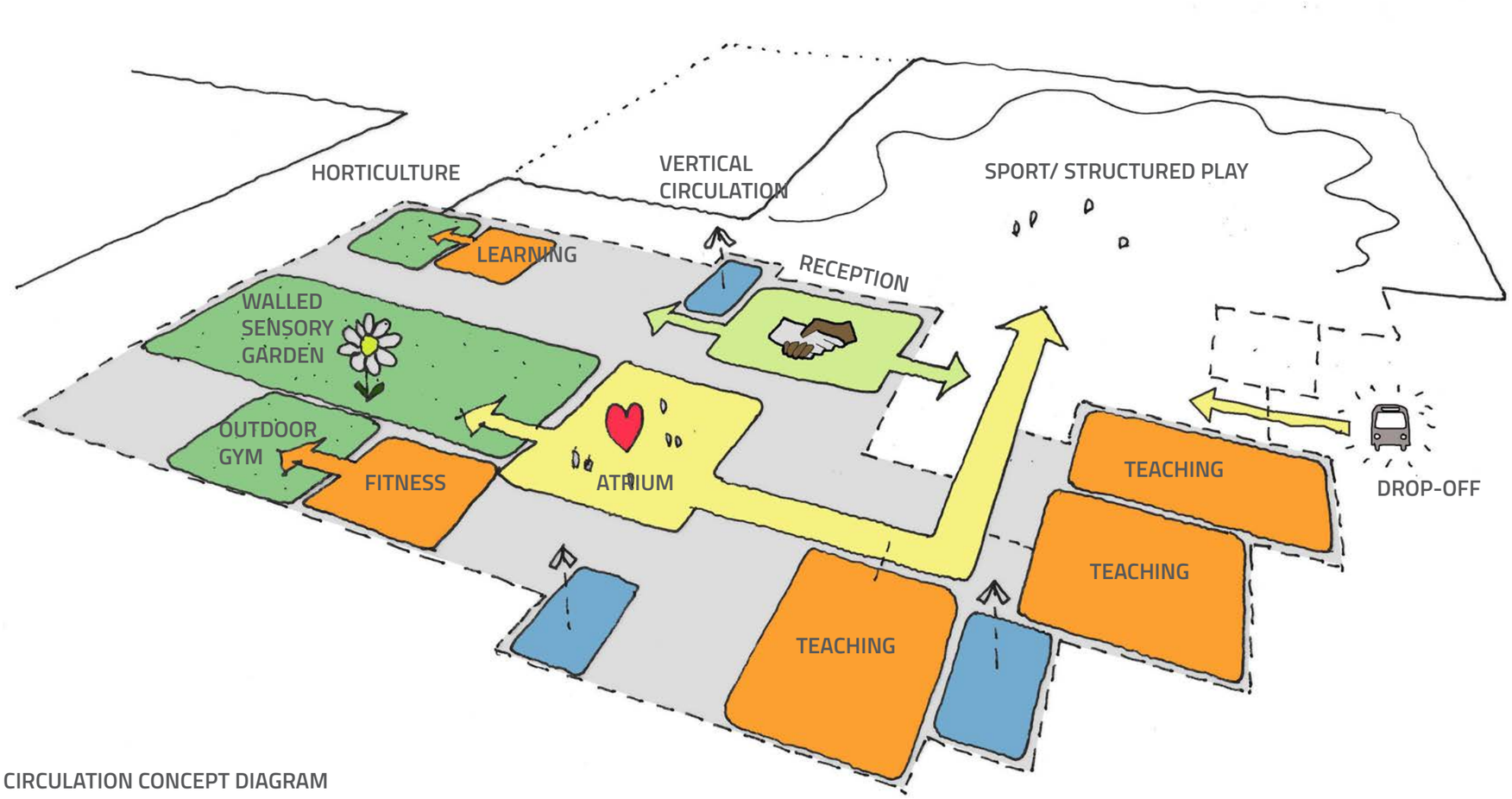
MASSING DEVELOPMENT SKETCHES

The extension design has also been developed in close consultation with the school team. The arrangement of learning spaces and how the extension connects to the refurbishment of the existing building has been a key consideration, and several ideas have been explored.

The extension has been designed to read - both in terms of its massing and materials - to feel related to the existing building.

As the existing entrance to the school is set back well within the site, the extension forms a new clear entrance for the school, controlling security lines whilst providing a welcoming front for the new school.

4.03 DESIGN PROCESS
CONNECTIONS TO OUTSIDE



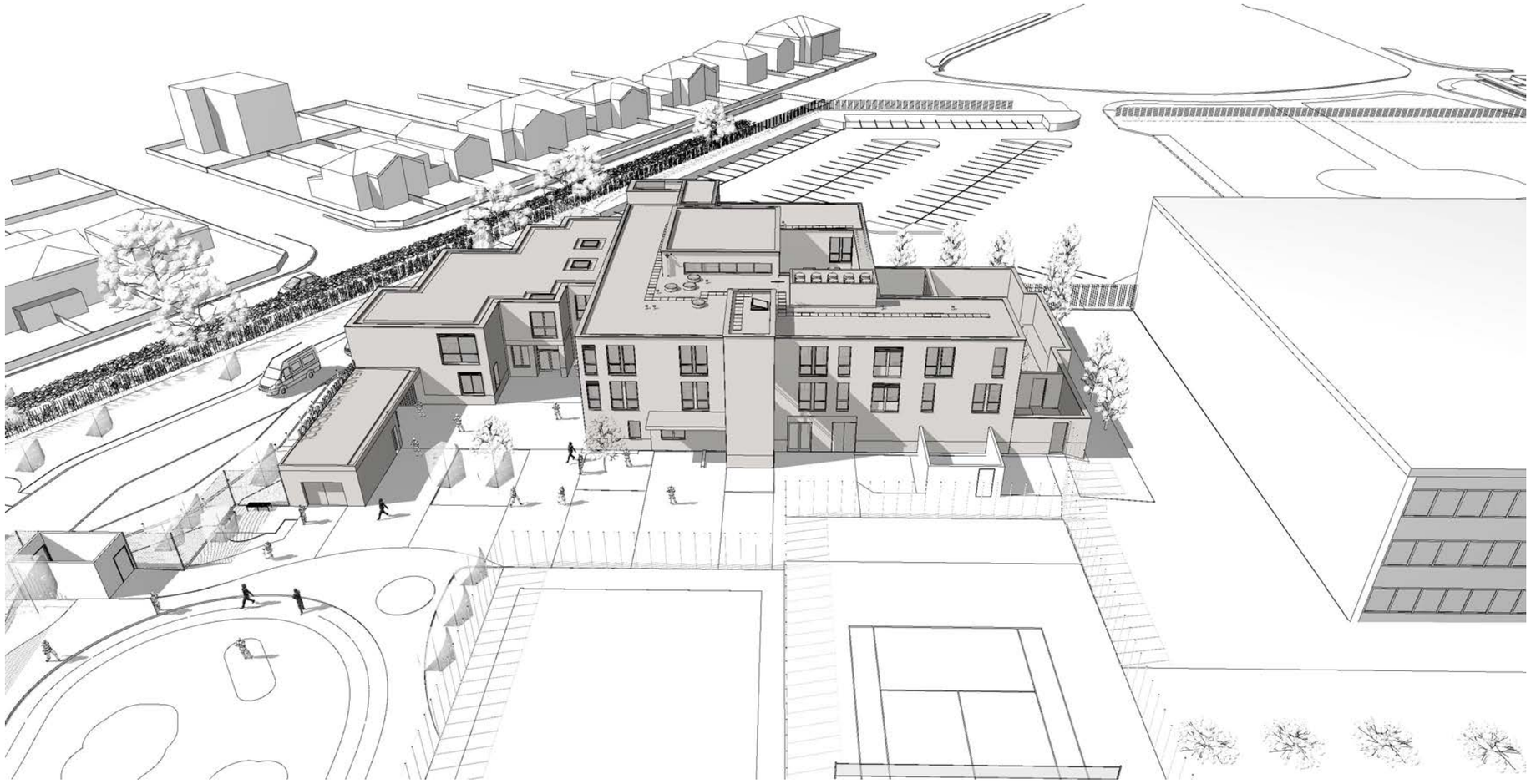
CIRCULATION CONCEPT DIAGRAM

This diagram demonstrates how the new extension works with the atrium 'heart' of the existing building to provide a legible circulation route to the building.

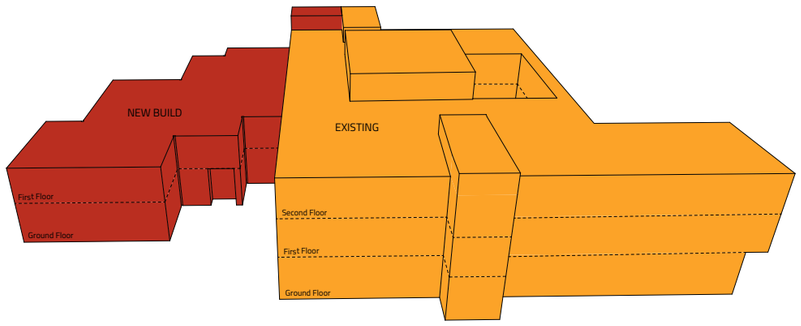
The new extension allows the differentiation of a pupil entrance from the main reception and visitor entrance, easing movements at the start and end of the day when staff are busy accompanying pupils to their transport.

Additionally, the new extension 'opens up' to the adjacent structured play areas, forming a simple direct connection for pupils at break and lunch times.

4.04 DESIGN PROCESS
SCALE AND MASSING



MASSING IMAGE (SEEN FROM NORTH)



VOLUME STUDY

The new extension has been designed to minimise its height and footprint relative to the existing building whilst providing the key aspects of the brief.

Storey heights are maintained to approximate the existing residential storey heights of the existing building.

The extension forms an etrance courtyard with the new building, clearly defining the new pupile entrance and the visitor entrance.

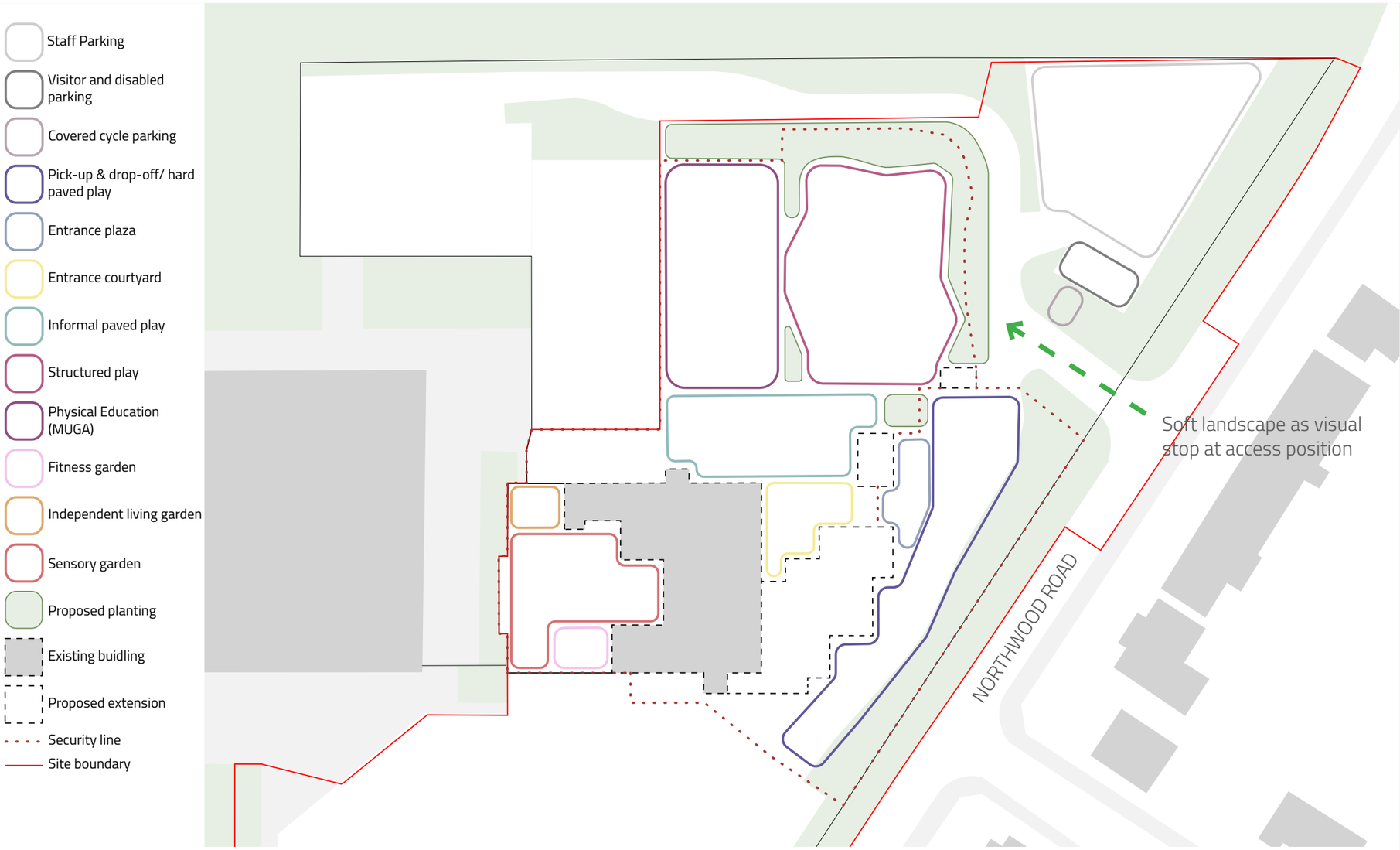
the form of the building is stepped to acknowledge the angle of Northwood Road adjacent, but the primary mass of the extension is at the junction with Ash Grove, between dwellings.

GIA FLOOR AREA OF EXISTING BUILDING = 1613M2 APPROX
GIA FLOOR AREA OF NEW EXTENSION = 622M2 APPROX

VOLUME OF EXISTING BUILDING = 6430M3 APPROX
VOLUME OF NEW EXTENSION = 2185M2 APPROX

EXTENSION APPROX 34% VOLUMETRICALLY OF EXISTING BUILDING

4.05 DESIGN PROCESS
SITE ZONING



EXTERNAL AREA ZONING DIAGRAM

The external areas of the site have been efficiently planned to provide play and PE areas towards BB104 standards, but also to provide vehicle drop-off, parking and servicing.

At the new access point, new soft landscape has been introduced within the site to maintain the 'green' aspect along Northwood Road.

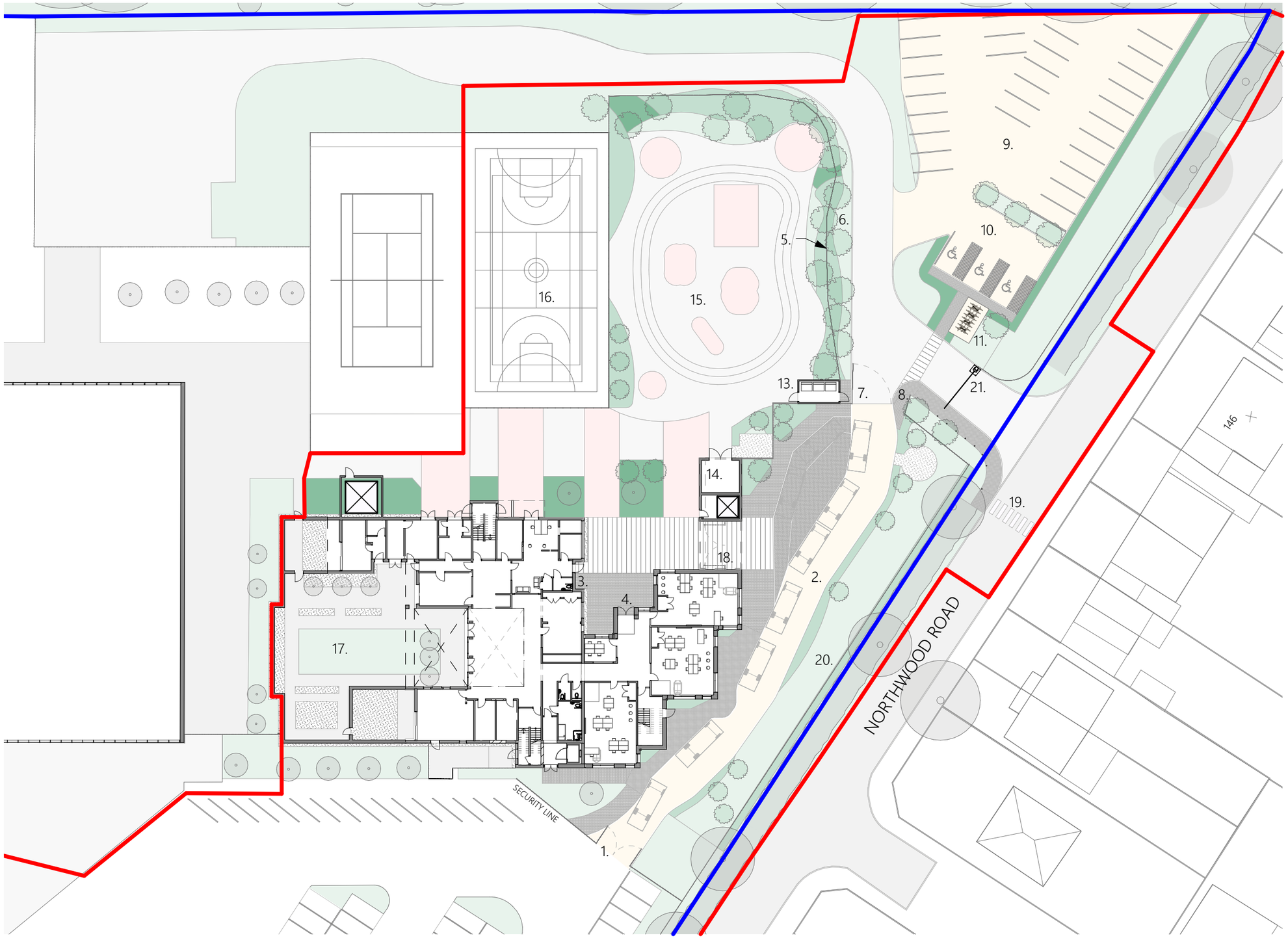
The new structured play area is bordered with new soft landscape to encourage habitat areas for pupil exploration.

The rear walled gardens are given their own landscape characters to relate to the internal functions of the adjoining spaces.

5.01 DESIGN PROPOSAL
SITE INTENT

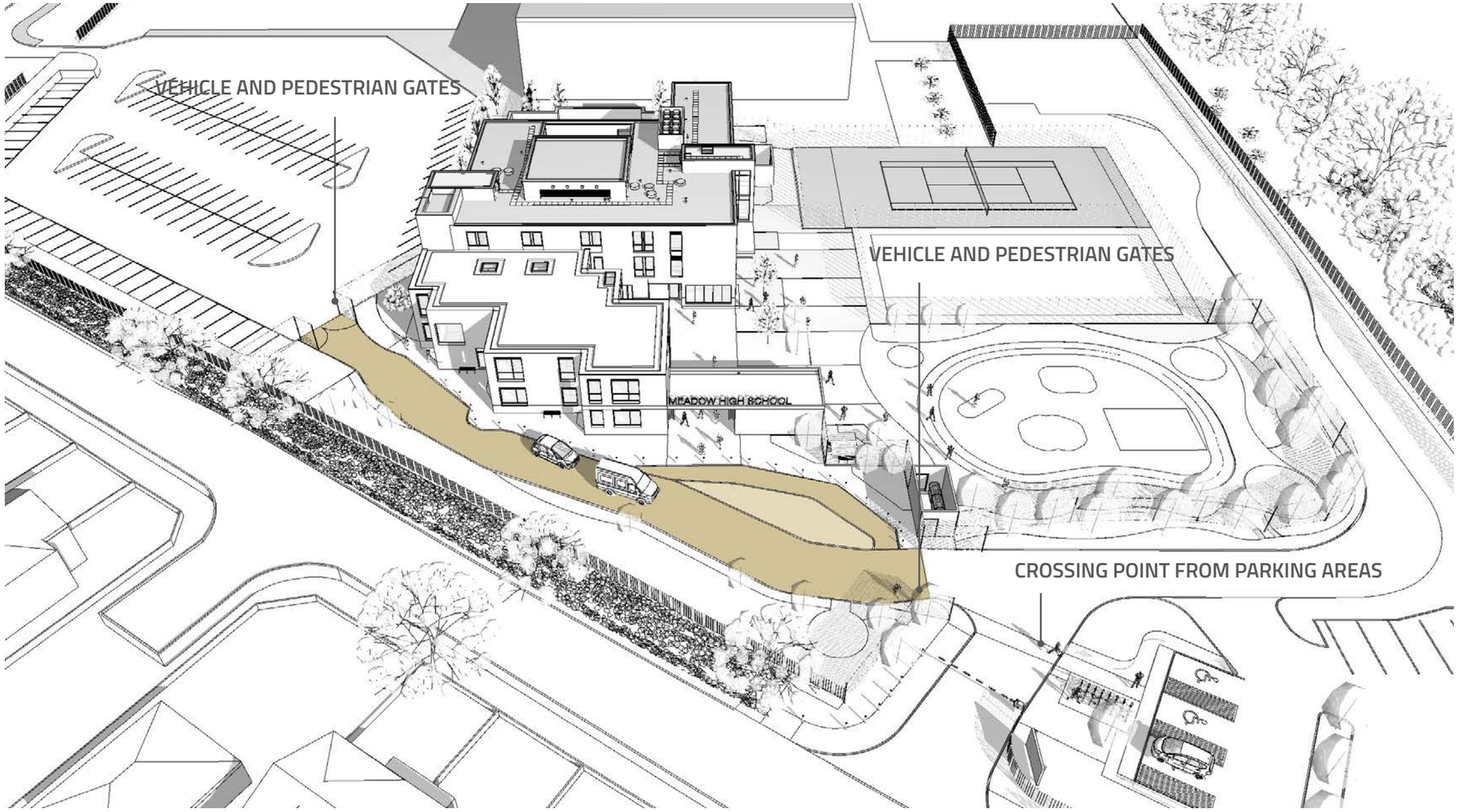
AERIAL VIEW OF PROPOSED DEVELOPMENT FROM THE WEST

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 offical 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.

5.03 DESIGN PROPOSAL
ENTRANCE/ DROP-OFF



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.

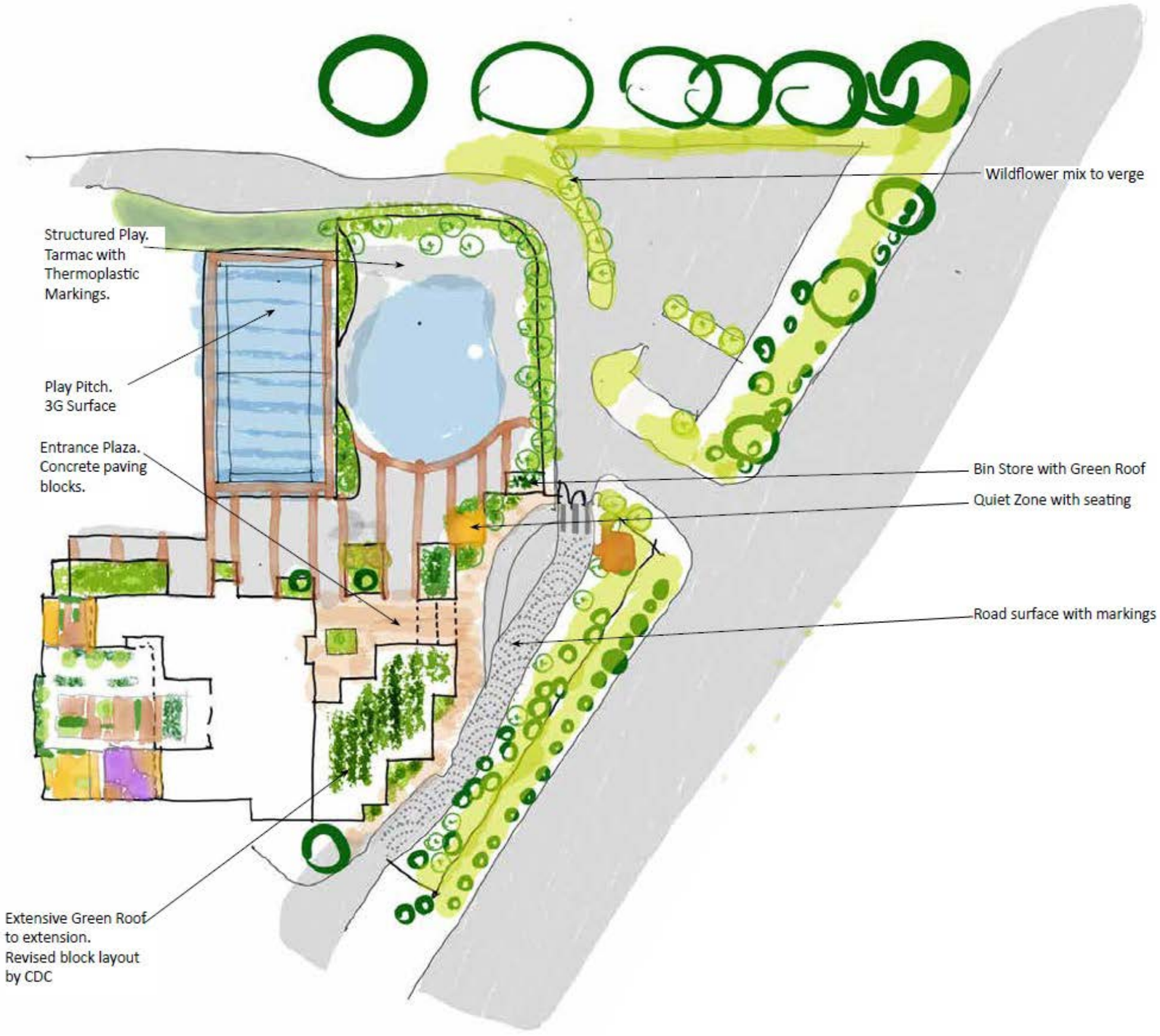
When secure, the dropp-area will become an external space to encourage scootering and running, and will be playfully marked to suggest activity as shown in the precedent image below.

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.

5.04 DESIGN PROPOSAL
ENTRANCE SPACE

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

5.05 DESIGN PROPOSAL
EXTERNAL AREAS



LANDSCAPE CONCEPTS

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.

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