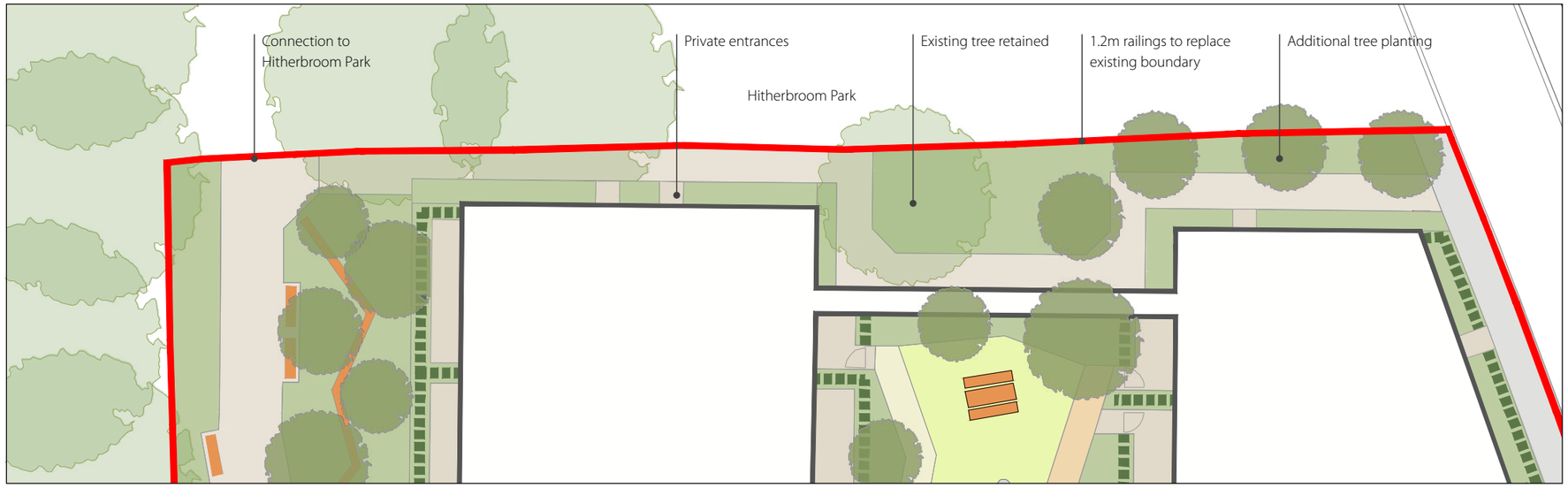
LANDSCAPE STRATEGIES

4.9.8 Hitherbroom Edge

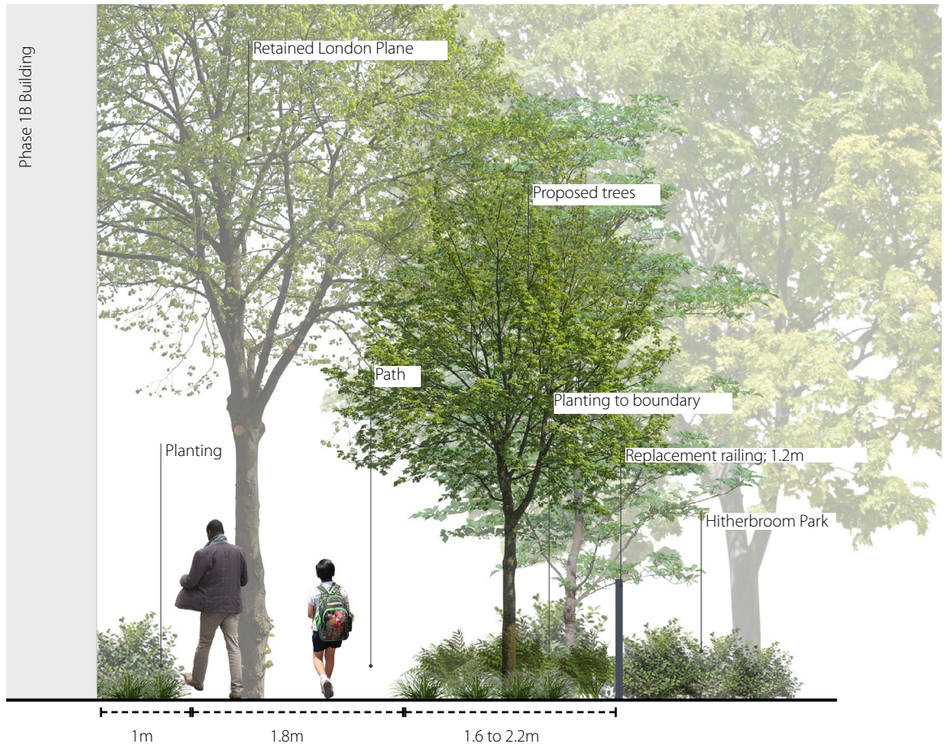
The proposals for the connection between Hitherbroom Park and Phase 1B are to the existing, damaged, boundary treatment to be removed and replaced with a 1.2m high metal railing. Where suitable this then has low level planting to soften this pedestrian area.

The intent for this is to provide a greater openness to this path, whilst also providing better passive surveillance onto the park itself.



HITHERBROOM EDGE PLAN

EXISTING BOUNDARY CONDITION



SECTION A

METAL RAILINGS TO PARK BOUNDARY

SHADE TOLERANT PLANTING

LANDSCAPE STRATEGIES

4.9.9 Communal Gardens

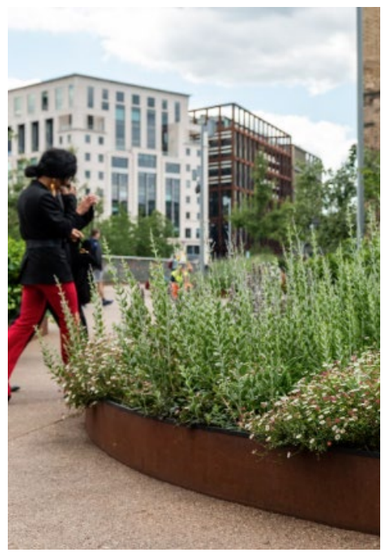
The communal gardens are all situated on the first floor of each block, with two smaller areas within Phase 2, and a larger communal space to Phase 1B.

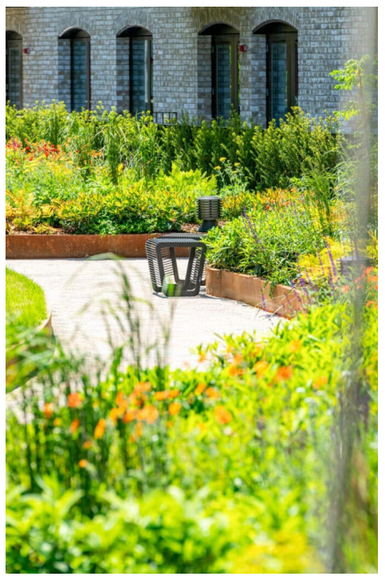
The design of these follows the objectives established in the consented scheme:

- Provide safe doorstep play for children under 5;
- consider the needs of all users;
- provide a space for residents to relax and socialise, enabling the fostering of community.

Each communal space provides areas of seating, mixed between benches, chairs and picnic benches. Doorstep play is proposed, varying between fixed equipment and natural play. Planting is provided within raised beds, with ample tree planting provided in the form of multi-stem trees.

COMMUNAL AMENITY PLAN





DESIGN INTENT

LANDSCAPE STRATEGIES

4.9.10 Planting Strategy

The planting strategy for the proposed development follows the principles set out within the consented scheme, with minor adjustments to suit the revised layout. This considers ecology, sustainability, urban greening, drought tolerance and tolerance of seasonally wet soils to rain gardens.

To the street frontages, the primary priority is to provide a buffer and defensible space between the entrances/terraces and the pavement itself. This is provide through evergreen hedging as a continuation of the strategy being implemented as part of the Phase 1A consent.

More varied planting will be provided to the other areas of public realm, this will provide native species, plants for pollinators, and seasonal interest. Evergreen shrubs will provide the backbone of the design, with flowering perennials and ornamental grasses providing colour and movement.

Within the rain gardens, suitable species will be utilised to allow for both seasonally wet soils and drought conditions. These will also provide seasonal colour with herbaceous species, creating interest to the areas of public realm and streets.

The first floor communal courtyards will be planted with species that suit raised bed conditions, with drought tolerance a key priority.

RESIDENTIAL FRONTAGE

STRUCTURE

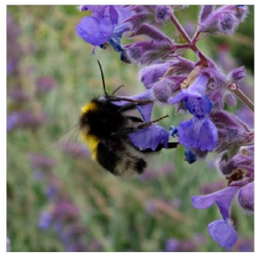
GROUNDCOVER

AVONDALE DRIVE

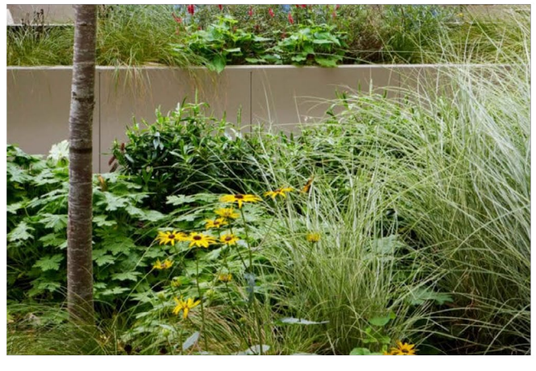
TEXTURE

SuDS

COLOUR



WILDLIFE



RESIDENTS' GARDENS

LOW MAINTENANCE

SEASONAL QUALITIES

HITHERBROOM LINK

LANDSCAPE STRATEGIES

4.9.11 Hard Landscape Strategy

The paving strategy for the site follows both the consented outline approach, as well as the Phase 1A implemented precedent. This will provide continuity throughout the wider development, and create a varied and hierarchical approach to surfacing.

PAVING STRATEGY DIAGRAM

Key

- Pavement; asphalt
- Vehicle entrance; block paving
- Shared entrances & public links
- Residents pathways; resin bound aggregate
- Play surfacing
- Feature paving; setts
- Ground floor private; flag paving
- 1st floor private; flag paving

LANDSCAPE STRATEGIES

4.9.12 Furniture and Play Equipment

The furniture and play equipment across the proposals follows the strategies established within both the original outline consent and the Phase 1A implemented landscape.

Hardwood timber topped benches, chairs and picnic tables will be utilised to provide a robust and grounded furniture palette, whilst the timber provides a more inviting softness.

Play equipment will be provided to create varied experiences suitable for younger ages, with a mix of play on the way and fixed equipment being proposed. Natural play features in the form of boulders and stepping logs will also be provided.

The selection and layout of play equipment will provide a range of play experiences and support imaginative play. Accessible equipment is also to be utilised where suitable to allow all children to have access to play.

BENCHES; TIMBER TOPPED WITH BACKS & ARMRESTS

PICNIC TABLES

TIMBER CLAD INDIVIDUAL CUBE SEATS

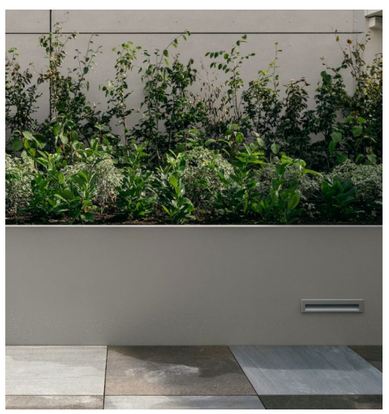
EQUIPPED PLAY

PLAY ON THE WAY

NATURAL PLAY

WILDLIFE HOTELS

STAINLESS STEEL CYCLE STANDS



PODIUM RAISED BEDS; POWDER COATED STEEL

BINS

LANDSCAPE STRATEGIES

4.9.13 Sustainable Drainage, Urban Greening & Biodiversity Strategy

SUSTAINABLE DRAINAGE

The sustainable drainage strategy for the site relies on a mix of permeable surfacing and rain gardens. Rain gardens are provided to pockets along the Avondale Drive frontage, to Abbotswood Way and within the Hitherbroom Link public realm.

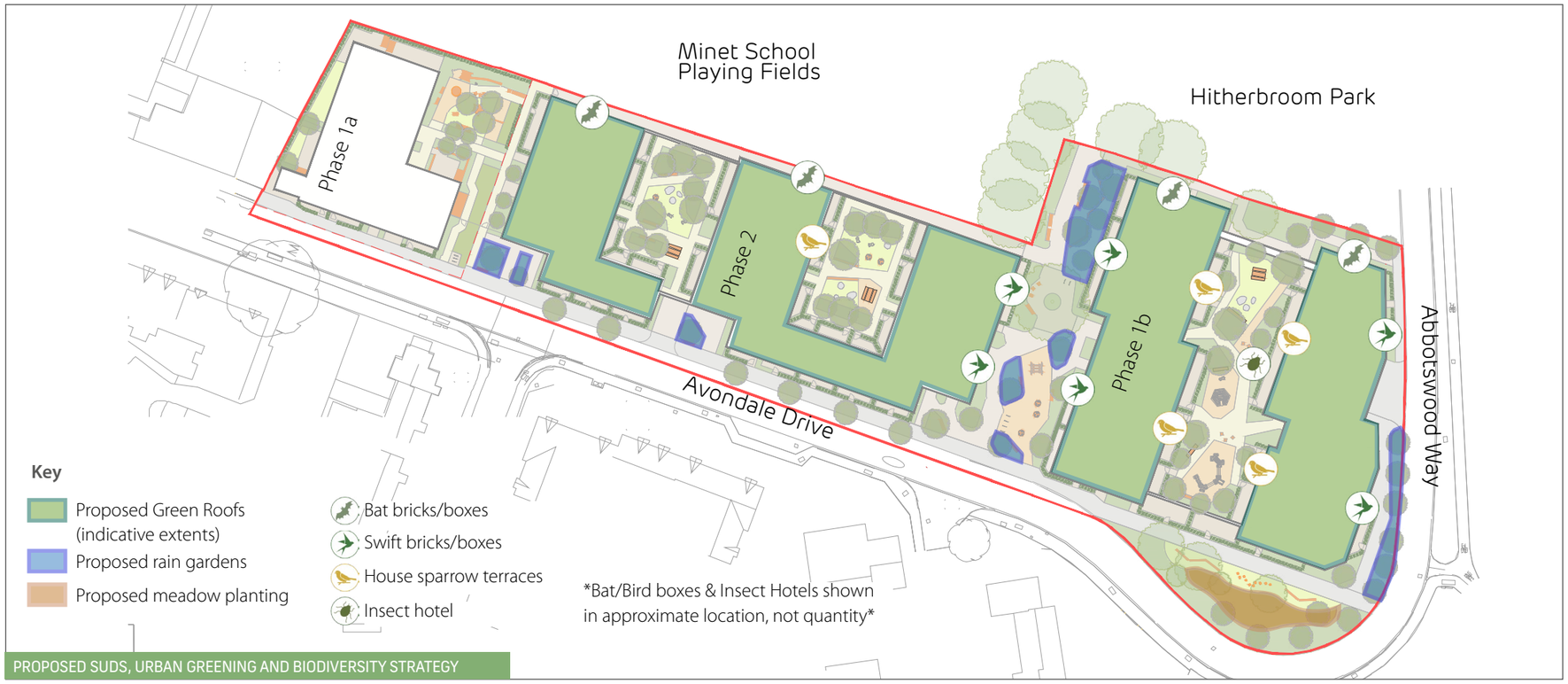
Surfacing will be a mix of permeable and impermeable surfaces. Surfacing to the podium courtyards will be permeable.

URBAN GREENING & BIODIVERSITY

The development of the scheme has been guided throughout by the requirements of Biodiversity Net Gain (BNG) and Urban Greening Factor (UGF) assessments. Measures to support delivery of urban greening and ecological enhancement will include the following as per the original consent:

- a comprehensive tree planting scheme using a mix of native and non-native species;
- use of plant palettes and mixes that have a high proportion of species of known wildlife value, including 'Plants for Pollinators';
- biodiverse extensive green roofs;
- habitat features including bird and bat boxes, and insect hotels.

The Urban Greening Factor calculation has been undertaken at an outline level without the full specification of tree and general planting. The outline score is 0.52, an increase on the consented proposals. This is largely due to an increase in tree planting and the retention of two additional trees.



PROPOSED SUDS, URBAN GREENING AND BIODIVERSITY STRATEGY

CONSENTED SUDS, URBAN GREENING AND BIODIVERSITY STRATEGY

Surface Cover Type	Factor	Area	Contri-bution	Notes
Semi-natural vegetation	1	649	649	Existing trees + proposed meadow
Intensive green roof, min substrate depth 150mm	0.8	807	646	Phases 1B & 2 podium gardens
Standard trees (soil volume min. 2/3 of canopy area)	0.8	1805	1444	Estimated 5m canopies, 19m2 per tree
Extensive green roof	0.7	2744	1921	
Flower-rich perennial planting	0.7	507	355	Estimate 50% of planting
Rain gardens	0.7	292	204	
Groundcover planting	0.5	507	253	Estimate 50% of planting
Amenity grassland	0.4	189	76	Existing to SE
Total Contribution			5547.8	
Urban Greening Factor				0.52

5. PHASE 1A DETAILED DESIGN

5.1 SUMMARY

NOTE: ALL IMAGES ON THIS PAGE ARE EXTRACTS FROM THE CONSENTED DESIGN AND ACCESS STATEMENT FOR THE AVONDALE DRIVE ESTATE HYBRID PLANNING APPLICATION

No changes to the phase 1A detailed application are proposed under this Section 73 application.

For details please refer to Chapter 5 of the Design and Access Statement prepared by Pollard Thomas Edwards (PTE) Architects on behalf of the London Borough of Hillingdon for the redevelopment of Avondale Drive Estate UB3 3NR submitted as part of the consented Hybrid Planning Permission (reference 76551/APP/2021/4502).

PHASE 1A TECHNICAL REVIEW - LESSONS LEARNED

Phase 1A Height Review

PRP worked with Higgins on the Phase 1A technical design, coordinating the scheme with Structural design, Mechanical & Electrical design and Fire engineers recommendation. Following coordination, the following changes were proposed and captured in the now as-built design:

- Increased ground to first floor heights to allow sufficient depth for build-up of the podium and to provide enough headroom below.
- Increased roof build-up from underside of structure to external finish to accommodate required depth of structure and falls for rainwater collection.

Outline Height Review

The above lessons learned from the phase 1A technical design have been integrated into the proposed outline design alongside an additional 1000mm to allow for future flexibility and construction tolerance. The parameter plans specify the height at the top of parapet for each zone as well as a maximum overall height inclusive of this tolerance. There is then an additional height allowance for roof plant and lift overruns, matching the approach taken by the consented scheme.

Construction tolerance

The proposed parameter plans now allow for a +250mm deviation of the building outline to allow for construction tolerance.

VIEW OF PHASE 1A, PTE

6. TECHNICAL DESIGN

6.1 TECHNICAL SUMMARIES

6.1.1 TVIA

Avondale Drive TVIA Summary

The Townscape Visual Impact Assessment (TVIA) Addendum prepared by Savills Heritage and Townscape assesses the visual and townscape effects of the Amended Scheme for the redevelopment of Avondale Drive Estate. The assessment follows the methodology established in the 2021 TVIA. The visual impact assessment was conducted through six representative townscape views, agreed upon with LB Hillingdon, using Accurate Visual Representations (AVRs) produced by Hayes Davidson illustrating the maximum parameters and illustrative masterplan prepared by PRP Architects. The report provides an overview of relevant policy and guidance updates related to townscape and heritage and discusses any changes to the baseline condition of the site and its surroundings, including the heritage baseline.

In conclusion, the findings of the visual impact assessment indicate that the Amended Scheme is likely to enhance the townscape. This is attributed to the considered placement and articulation of massing, improved permeability, and the proposed architectural approach, which will be further detailed as part of a later reserved matters submission. The visual impact of the Amended Scheme is assessed as positive across all six representative views and aligns with the London Plan Policy D9 and policy DHMB10 of the Hillingdon Local Plan that emphasise high-quality design for tall buildings demonstrated through the proposed site layout, form, and massing.

6.1.2 Daylight / Sunlight

Daylight / Sunlight Summary

The updated daylight and sunlight analysis assesses the revised Avondale Drive Estate proposals against the 2021 hybrid consent, considering both the outline maximum parameters and the illustrative scheme. The assessment reviews impacts on surrounding properties, internal daylight within the proposed buildings, sunlight availability to new amenity spaces, and overshadowing to Hitherbroom Park, in accordance with the 2022 BRE guidance.

When compared with the consented scheme, variations in Vertical Sky Component (VSC), No-Sky Line (NSL), and Annual Probable Sunlight Hours (APSH) are limited, with most windows and rooms showing negligible or improved performance. Any localised reductions remain modest and within the range expected for a dense urban site.

The façade-based VSC study indicates that good daylight potential is maintained across the development, with the majority of façades achieving values in line with or better than the 2021 consent. Internal daylight levels remain consistent with policy expectations for residential quality.

The overshadowing analysis confirms that Hitherbroom Park continues to meet the BRE target for at least two hours of sunlight on 21 March, with no significant loss of sunlight compared to the consented position. Overall, the revised massing delivers an appropriate daylight and sunlight environment that aligns with planning and design standards.

TECHNICAL SUMMARIES

6.1.3 Fire

Outline Fire Strategy

This addendum updates the original fire strategy to follow the new BS 9991:2024 guidance. It applies to the redesigned layouts for Cores B, C and D in Phase 2 and Cores E and F in Phase 1B. The main change is the introduction of two stair cores in the taller buildings to improve evacuation.

Blocks B, C and D, which are between 11 and 18 metres tall, will keep single stair cores with smoke control, protected lobbies and dry risers within the stairs. Blocks E and F, which are between 18 and 30 metres tall, will now have two stairs with protected routes and dedicated firefighting and evacuation facilities. Each stair core will include an evacuation lift designed to EN 81-72 standards, and the lift lobbies will have smoke control to protect occupants with mobility needs.

The design also introduces clearer wayfinding and travel distances that will be designed in accordance with BS 9991:2024. Ancillary areas such as plant rooms, cycle stores and refuse areas will meet the updated travel distance limits in BS 9991.

6.1.4 Sustainability and Energy

Sustainability and Energy Strategy Summary

The Energy and Sustainability Statement has been created to confirm the development's energy strategy and the resulting carbon emission reduction associated with the implementation of high performance building fabric, high efficiency mechanical and electrical building services. Photovoltaic solar panels are also proposed to generate renewable electricity on site.

The Energy and Sustainability Statement to be submitted with the RMAs will demonstrate regulated carbon emission savings that firstly incorporate the passive and low energy design measures viable for the development over the baseline requirement. This forms part of the 'Be Lean' assessment. Secondly, a feasibility study will be carried out to determine if the development is in close proximity to any existing or proposed District Energy Networks, forming part of the 'Be Clean' assessment. The final study will be in line with 'Be Green' criterion which will include all feasible on-site renewable technologies.

The aspiration is for all buildings to be achieve net zero carbon but as a minimum 80% reduction has been targeted.

TECHNICAL SUMMARIES

6.1.5 Drainage Strategy

Drainage Strategy

The proposed drainage strategy for the Avondale Drive development follows the same design principles established in the previously approved drainage strategy prepared by Whitby Wood in 2021.

Surface Water Drainage:

Surface water will be managed via a gravity drainage system incorporating shallow attenuation tanks located beneath the proposed car park and landscaped areas. These tanks will regulate the flow of runoff before discharging at two points: one connection to the Phase 1 drainage system, limited to a discharge rate of 1.0 l/s, and a second connection to the public Thames Water surface water sewer within Avondale Drive, limited to 2.3 l/s. This dual discharge strategy ensures controlled runoff volumes in line with sustainable drainage requirements.

Foul Water Drainage:

Foul drainage will also be conveyed via a gravity system, with two proposed connections to the existing public Thames Water foul sewer located in Avondale Drive. An existing foul sewer adjacent to the south-east corner of the building footprint will require local diversion to accommodate the new development layout. This diversion will be subject to a build over agreement and diversion agreement with Thames Water.

All new on-site drainage infrastructure will remain private and be managed and maintained by the development's management company. The diverted section of foul sewer will be adopted and maintained by Thames Water, subject to agreement. All proposed connection points and discharge rates will be confirmed and agreed with Thames Water as part of the application process.

6.1.6 Air Quality Strategy

Air Quality Assessment Addendum Summary

An updated Air Quality Assessment has been prepared to support the Section 73 application for the regeneration of the Avondale Drive Estate in Hayes.

The Air Quality Assessment considered construction-phase impacts, including potential dust and particulate matter emissions from demolition, earthworks and trackout. With standard best-practice mitigation in place, effects are expected to be controlled to 'not significant' levels.

For the operational phase, detailed dispersion modelling was undertaken using updated traffic data reflecting the proposed development. Predicted concentrations of nitrogen dioxide (NO_2), PM_{10} and PM2.5 at both existing and proposed sensitive receptors remain below the relevant Air Quality Assessment Levels. No significant changes in pollutant concentrations or new exceedances are anticipated.

The development's design further reduces potential emissions, supporting compliance with relevant air quality policy, including the London Plan's air quality neutral requirement. Overall, the scheme remains compliant with national and local air quality policy, achieves air quality neutrality, and does not alter the original conclusions that impacts will be negligible and not significant.

TECHNICAL SUMMARIES

6.1.7 Financial Viability Assessment

Financial Viability Assessment

A Financial Viability Assessment ("FVA") in support of the application has been prepared by Savills. The FVA presents a robust analysis of the level of planning contributions (including affordable housing and other Section 106 and Community Infrastructure Levy financial contributions) the project can justifiably provide. Savills' analysis has considered the total income realisable from the project, alongside the costs to bring the Estate forward. Their analysis concludes that the quantum of reprovision and additional affordable housing proposed within the application exceeds that which may otherwise be justified on viability grounds. The driver behind this approach has been to ensure a full reprovision of Rented housing for existing residents on the Estate.

6.1.8 Noise Impact Assessment

Noise Impact Assessment

The noise impact assessment for Phases 1B and 2, carried out to accompany the S73 application, indicates that acceptable noise levels can be achieved at the site both internally and in external amenity spaces.

7. APPENDIX

7.1 APPENDIX 1 - INDICATIVE SCHEDULE OF AREAS

The schedule of areas for Phase 1A below reflects the as-built design. The proposed schedule of areas for Phase 1B and Phase 2 are an estimate only, based on the indicative masterplan design.

The areas category 'Residential' includes all back-of-house and ancillary areas including: bins, bikes, plant.

Note: The figures in the below table are indicative and based on the illustrative masterplan. The final floorspace, unit and tenure mix will be confirmed through the submission and approval of reserved matters applications in compliance with the controls defined in relevant planning conditions and s106 obligations.

Phase	Tenure	Residential		Car Park	Total GIA	Total NIA
		GIA	NIA	GIA		
1A	Social Rent	2,906	2,226	0	2,906	2,226

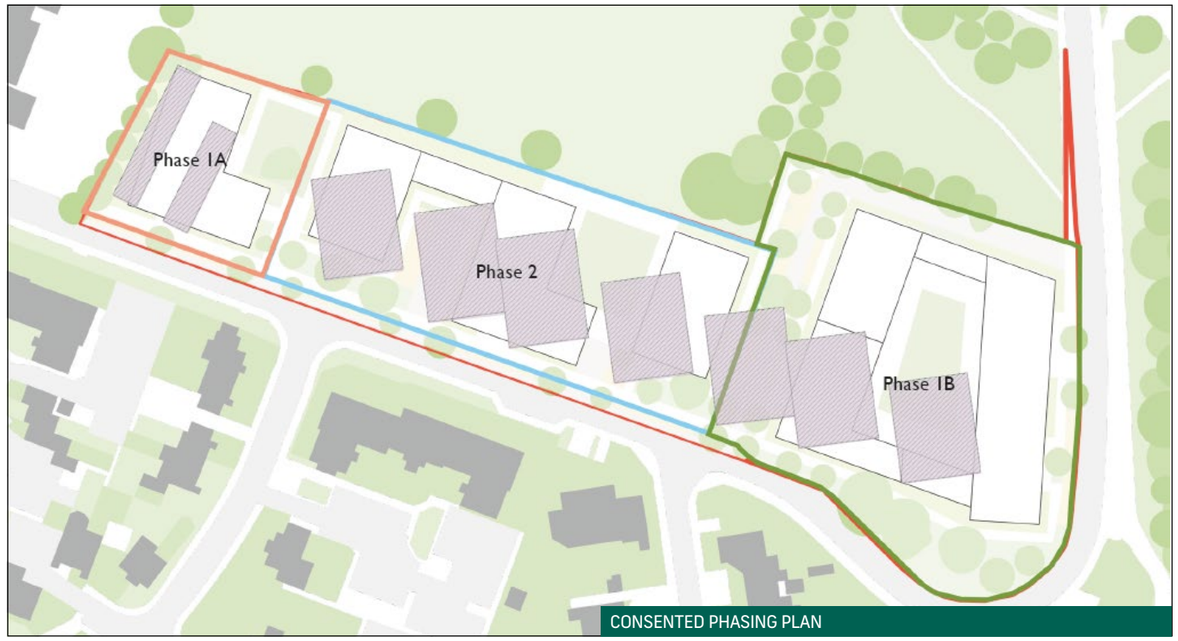
As-built

Phase	Tenure	Residential		Car Park	Total GIA	Total NIA
		GIA	NIA	GIA		
1B	Private	12,983	9,736	778	13,761	9,736
	Social Rent	3,187	2,334	186	3,373	2,334
2	Social Rent	8,927	6,399	1,295	10,222	6,399
Total		25,097	18,469	2,259	27,356	18,469

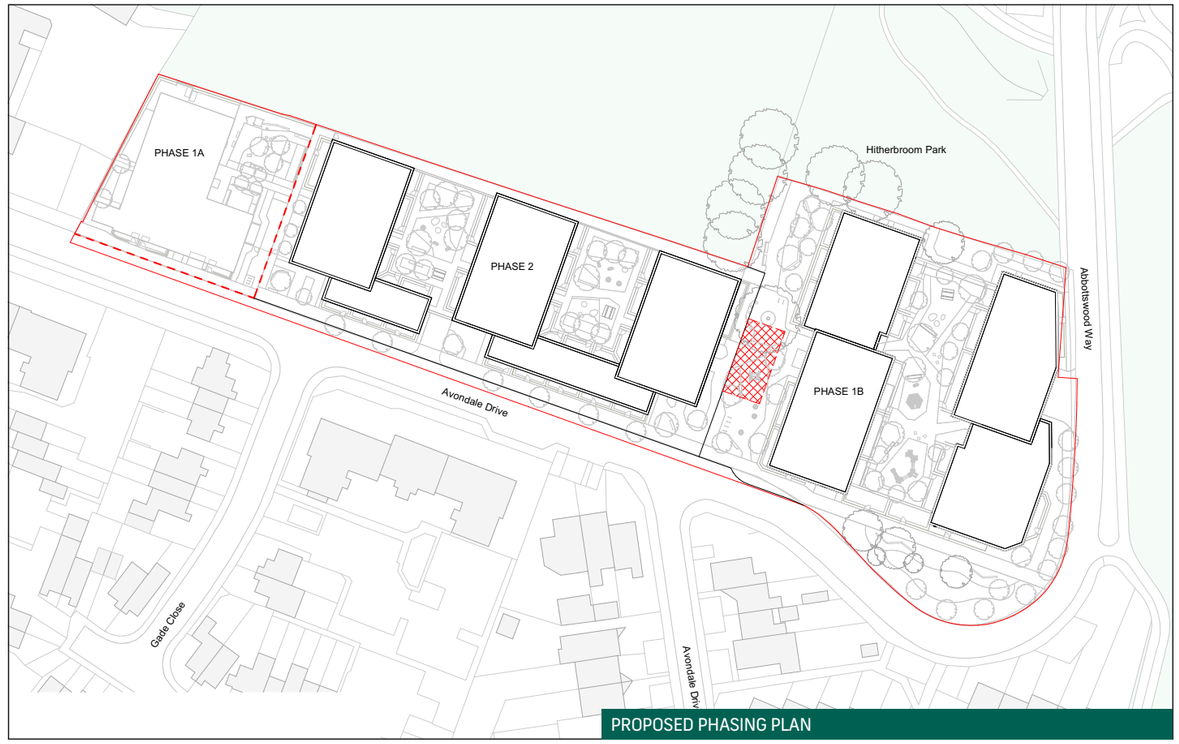
Proposed, based on the indicative masterplan design

7.2 APPENDIX 2 - CONSENTED DRAWING COMPARISON

7.2.1 Indicative phasing plan



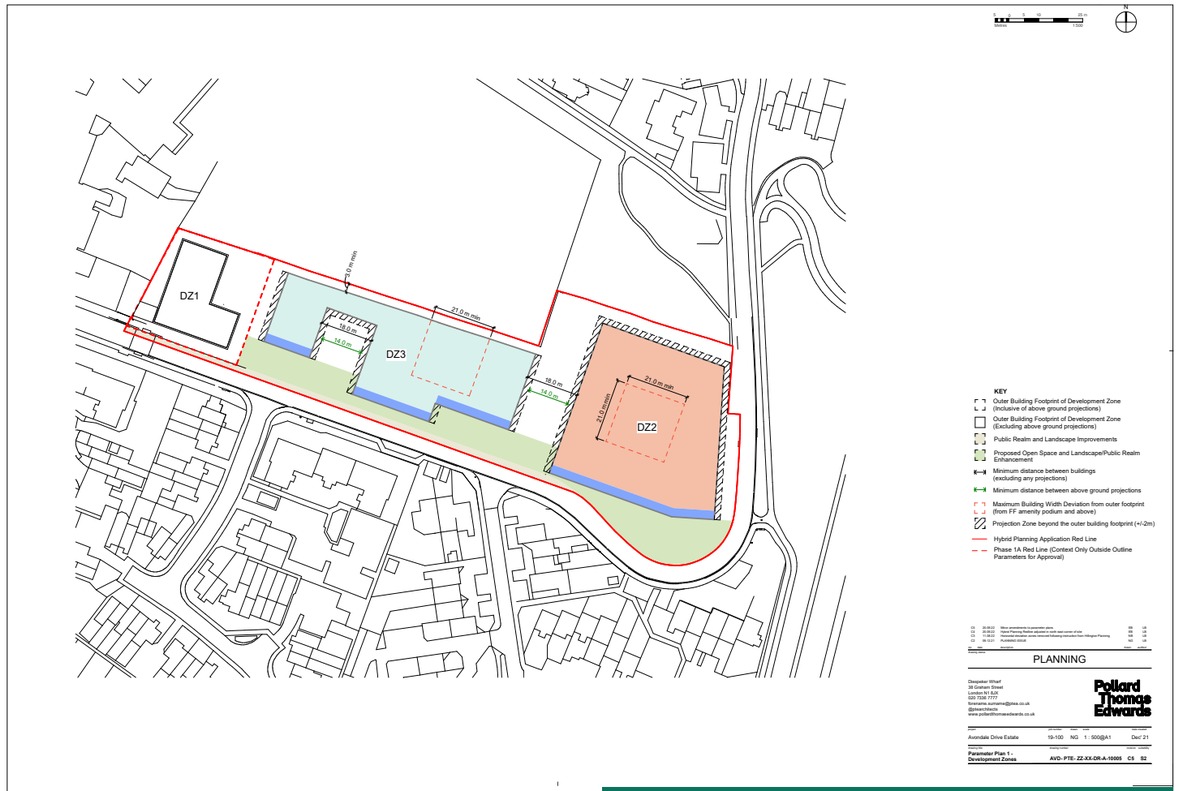
CONSENTED PHASING PLAN



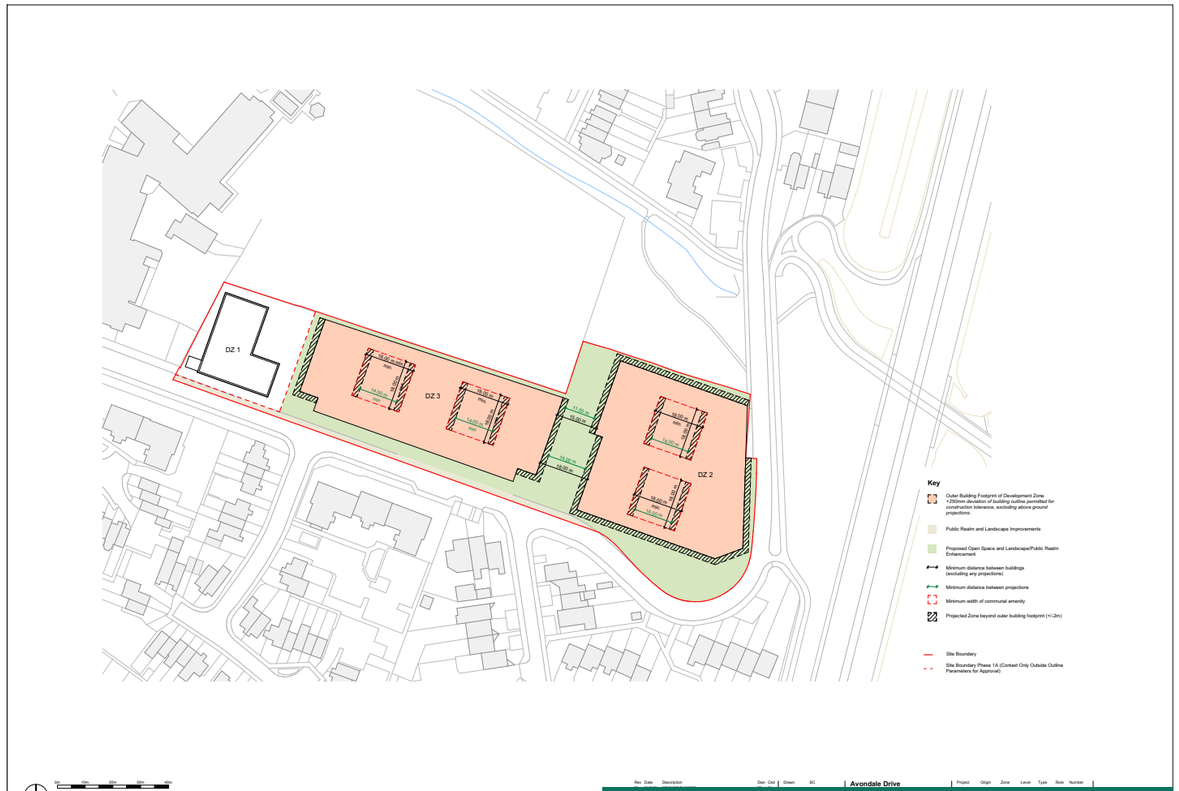
PROPOSED PHASING PLAN

APPENDIX 2 - CONSENTED DRAWING COMPARISON

7.2.2 Parameter Plans - Development Zones



CONSENTED PARAMETER PLAN



PROPOSED PARAMETER PLAN