



CHAPTER 5: THE PROPOSED DEVELOPMENT AND CONSTRUCTION OVERVIEW

This page has been left blank intentionally to enable double-sided printing

5.1 Introduction

- 5.1.1 This chapter describes the key elements of the Proposed Development, including those features which may lead to significant environmental effects and includes a summary of the key construction activities and associated construction programme.

5.2 The Proposed Development

- 5.2.1 The Proposed Development was submitted for planning permission in 2018, to Fareham Borough Council (FBC) for a hybrid planning application seeking full planning permission for 58 dwellings and outline planning permission for 167 dwellings. This is detailed within the Planning Statement that was submitted in support of the 2018 planning application. During the determination period, this was amended to be an outline planning application, with all matter reserved except for access. FBC refused the planning application in September 2020 and the Applicant is now seeking to appeal this decision. This Appeal is now made in outline with all matters reserved except for access and comprises (as set out in the Planning Proof submitted in support of the Appeal):

- 225 new residential dwellings (Class C3);
- A Bird Conservation Area (BCA); and
- Public open space.

- 5.2.2 The Proposed Development land use plan is shown in **Figure 5.1**, with an indicative illustrative masterplan layout of the Proposed Development shown in **Figure 5.2**.

Basis of Assessment

- 5.2.3 The key drawing which has formed the basis of the EIA assessment are listed in **Table 5.1**.

Table 5.1: Drawing Forming the EIA Basis of Assessment

Drawing Title	Drawing Ref.	Rev.
Site Location Plan	16.140.01	C
Site Plan*	16.140.10	V
Site Areas Plan	16.140.28	N/A
Proposed Access Drawing	5611.002	D
Highway Works Plan	5611.015	C

*This plan has been prepared to illustrate the function of the land uses shown on Site Plan No. 16.140.28.

Figure 5.1: The Proposed Development – Site Areas Plan

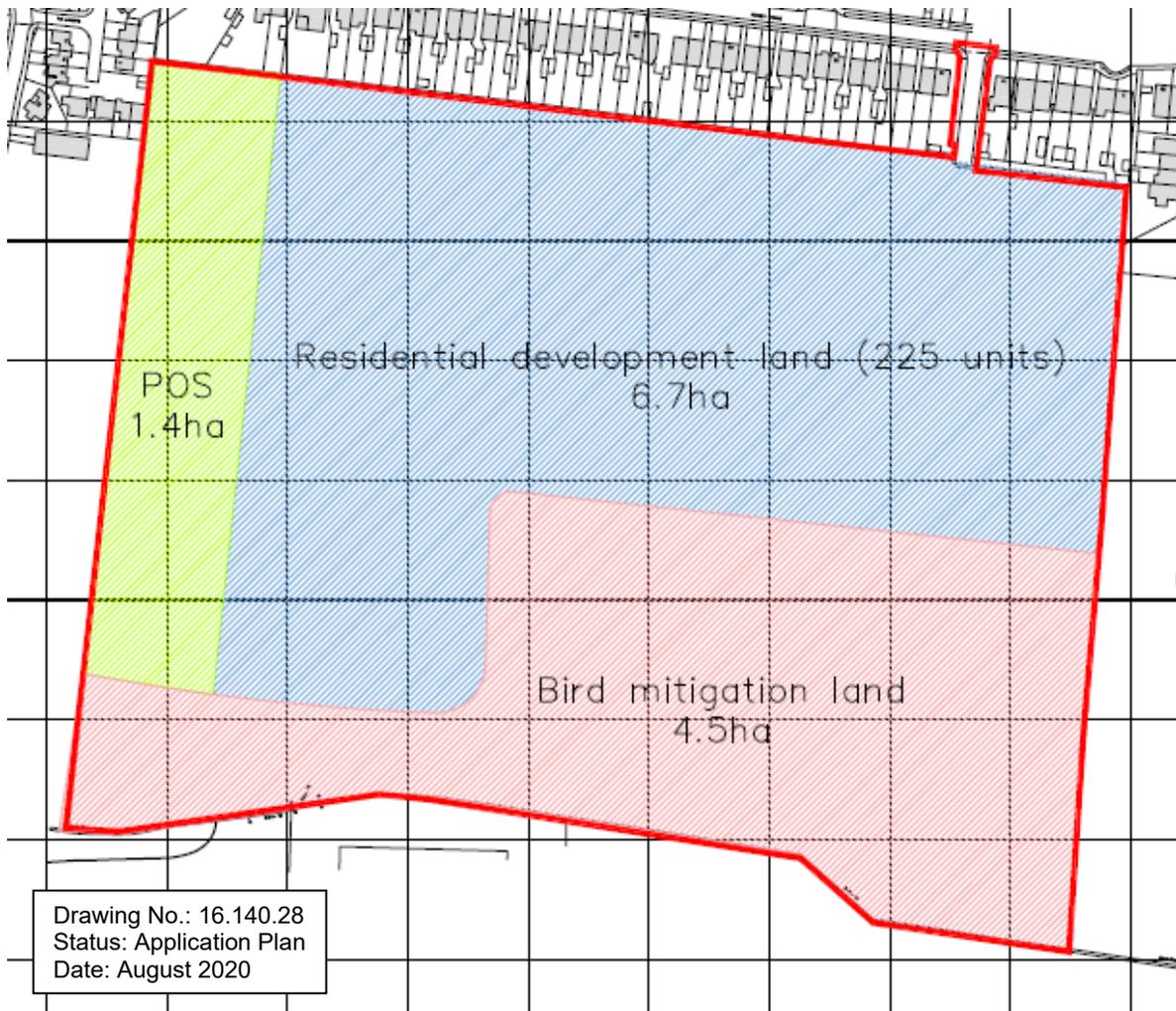


Figure 5.2: The Proposed Development – Illustrative Masterplan Layout



Proposed Development Overview

- 5.2.4 The 225 new residential dwellings will be constructed in an 'L' shape on-site, in an arrangement that provides access via Romsey Avenue, as shown in **Figure 5.1** and **Figure 5.2**.
- 5.2.5 The land for the BCA is located along the south of the Site and within the south eastern corner of the Site. Public open space, which will include play space provision, will be provided along the western edge of the Site.

Accommodation Schedule

- 5.2.6 The Proposed Development would consist of a maximum of 225 residential dwellings. No commercial land uses are considered in this Application.
- 5.2.7 **Table 5.2** below presents the illustrative residential accommodation schedule for the Proposed Development, based upon the illustrative masterplan layout shown in **Figure 5.2**.

Table 5.2: Residential Accommodation for the Proposed Development

Home size	Number of homes
1-Bed house	0
2-Bed house	78
3-Bed house	112
4-Bed house	35
Total	225

5.2.8 The Proposed Development is aiming to deliver a policy compliant overall affordable housing rate of 40% in accordance with Policy CS18: Provision of Affordable Housing¹ which states ‘on sites that can accommodate 15 or more dwellings developers will be expected to provide 40% affordable units.’ The Proposed Development is, therefore, aiming for a policy compliant approach to deliver 90 affordable dwellings.

Building Design

5.2.9 The 225 dwellings that comprise the Proposed Development include a range of dwelling types. As indicated in **Table 5.2**, these range from 2-bed houses to 4-bed houses. The houses will be detached, semi-detached or terrace houses.

5.2.10 It is expected that residential buildings will be no more than 2 storeys in height to be sympathetic to the surrounding area. It is expected that this will be secured by way of a planning condition. The total residential area of the Site is 6.7 ha, resulting in a housing density of 33.5 dwellings per hectare (dpa).

Bird Conservation Area Design

5.2.11 The land for the BCA is proposed to be located towards the south and southeast of the Site and will be 4.5 ha in size. The BCA, as shown in **Figure 5.3**, will be primarily provide:

- A protective fence to prevent people and predators such as foxes entering the conservation area. This will protect foraging geese and waders in the winter and ground nesting birds in the summer;
- A ditch line along the length of the fence on the inside of the brent geese conservation area, to provide additional habitat and further increase site security;
- The retention of a permeable boundary between the BCA and the remainder of the F21 Primary Support Area;
- A bird viewing screen in the centre of the northern boundary to encourage public engagement with the conservation area;
- Improved Grassland, with a rye grass and clover rich sward, to create a high value foraging site for brent geese;
- A scrape, to provide a freshwater source and additional foraging habitat for geese and waders;

¹ Fareham Borough Council (2011) Fareham Borough Local Plan Part 1: Core Strategy.

-
- An integrated sustainable drainage strategy (SuDS) area forming a network of waterbodies, which will provide a water resource and breeding habitat for a variety of wetland species; and
 - A sand martin and kingfisher nesting bank on the edge of one of the waterbodies.

Figure 5.3 Bird Conservation Area Proposals



Access and Parking

- 5.2.12 Access to the Site will be via Romsey Avenue.
- 5.2.13 The Proposed Development will provide car and cycle parking in line with FBC's Local Development Plan Residential Car and Cycle Parking Standards Supplementary Planning Document (2009).
- 5.2.14 Specific details regarding the quantum of car and cycle parking will be set out at the Reserved Matters Stage.

Open Space

- 5.2.15 Public open space, including the provision of play space, will be located along the western edge of the Site and will be 1.4 ha in size.
- A formal open space area;
 - A children's play area;
 - A landscape buffer;
 - A native hedge to provide natural physical separation between the proposed residential dwellings and the Bird Conservation Area; and
 - Native tree and shrub planting to provide visual and ecological mitigation.

Biodiversity Net Gain

- 5.2.16 A Biodiversity Net Gain Assessment has been produced (presented in **ES Volume 4, Appendix F**), which has identified the following net gain on-Site:
- +5.95% in habitats; and
 - +132.56% in hedgerows.
- 5.2.17 Whilst the gain for habitats is below the best practice level of 10%, the Proposed Development will provide a greater gain to the overall ecology and biodiversity of the Site.

Energy Statement

- 5.2.18 An Energy Statement for the Proposed Development has been produced and is being submitted separately to this ES.
- 5.2.19 Energy targets will be met via a mixture of passive energy measures, energy efficient fixed services and Low or Zero Carbon (LZC) Technologies.
- 5.2.20 Emission reductions will be targeted through the implementation of the following:
- Enhanced Building Fabric - Low U value construction materials, low target air permeability & enhanced thermal bridging details;
 - Energy Efficient Systems - Including high efficiency mechanical ventilation with heat recovery (MVHR) systems and LED lighting externally and internally; and

- LZC Technologies - Air Source Heat Pumps (ASHPs) and roof mounted solar photovoltaic panels are proposed.

5.2.21 The Proposed Development will incorporate water efficiency measures including water efficient fittings in accordance with current and emerging Building Regulations and consideration to utilising rainwater harvesting at detailed design stage. Information on recycling and composting facilities will be provided to new residents.

5.2.22 Preliminary Standard Assessment Procedure (SAP) calculations have been undertaken for a representative sample of dwellings. These energy performance calculations have demonstrated that the proposed energy efficiency strategy would meet and exceed the requirements of Part L of the Building Regulations, in line with the sustainable design aspirations of Fareham Borough Council.

5.2.23 Detailed calculations regarding energy demand and carbon dioxide emissions will be undertaken at the detailed design stage, alongside opportunities to reduce the resource intensity and maximise the end of life potential of the architectural proposals.

Drainage Strategy

5.2.24 The Proposed Development will use permeable driveways and shallow soakaway systems to increase infiltration rates and reduce run-off. Vegetated verges will increase interception' further measures to increase interception such as bio-retention strips, rain gardens, tree pits and/or shallow vegetated swales will be incorporated wherever practicable during the detailed design stages to reduce surface water runoff from the estate roads.

5.2.25 A network of dry swales along the northern and western perimeters of the bird mitigation reserve will collect surface water from residential roads in the eastern and central portions of the site. A permanently wet pond provided as part of the ecological mitigation within the bird mitigation reserve will provide emergency storage for extreme weather events.

5.2.26 There is sufficient storage volume within the proposed strategic SuDS scheme to attenuate surface water runoff to allow infiltration into the ground.

Waste

5.2.27 An operational waste management strategy which provides details on operational waste generated by the Proposed Development and how that will be managed will be developed at the Reserved Matters stage should the Proposed Development achieve approval.

5.3 Construction Overview

5.3.1 The Proposed Development is being applied for in outline with all matters reserved other than access, though for the purposes of the EIA an indicative construction overview has been prepared so as to understand the likely effects associated with construction.

5.3.2 The information presented in this section is for assessment purposes, is indicative and subject to change once the relevant contractor has been appointed. However, this information has been collated from significant experience of developing schemes of this type and scale, and a conservative approach has been taken.

Indicative Construction Programme

- 5.3.3 Based on the project team’s expertise and experience on similar projects, it is anticipated that the construction of the Proposed Development will take approximately four years and eight months to complete, with an estimated start date in January 2023. On this basis the Proposed Development is expected to be completed in August 2027.
- 5.3.4 The construction of the Proposed Development is not anticipated to be undertaken in distinct phases. It is assumed that one development phase working progressively from the western boundary of the Site, working eastwards over the proposed four years and eight months construction programme, as indicated in **Figure 5.4**.

Figure 5.4: Indicative Construction Programme

Component	Programme 6-Monthly Breakdown (January 2023 to December 2027)									
	Jan-June 2023	July-Dec 2023	Jan-June 2024	July-Dec 2024	Jan-June 2025	July-Dec 2025	Jan-June 2026	July-Dec 2026	Jan-June 2027	July-Dec 2027
Site Preparation and Enabling Works	█	█								
Main works		█	█	█	█	█	█	█	█	
Fit-Out and External Works								█	█	█

- 5.3.5 It is assumed that the Site will be constructed from west to east, the construction compound will initially be located in the western corner of the Site. This will move to the eastern corner of the Site as works progress and the infrastructure is completed.

Description of Works

- 5.3.6 Investigations and surveys will be undertaken in line with regulatory requirements before any construction takes place.
- 5.3.7 The proposed construction of the building works will be divided into the following stages:
- Site preparation and enabling works;
 - Main works (including infrastructure works); and
 - Fit out and external works.

Site Preparation and Enabling Works

- 5.3.8 The set-up on the Site is anticipated to start (subject to relevant approvals) in January 2023.
- 5.3.9 The Site works will start with an enabling works phase which will commence with establishing safe access to the Site from Romsey Avenue.
- 5.3.10 The following main activities will occur during the Site preparation and enabling works:
- initial Site set-up;

- Site clearance;
- topsoil stripped and land re-profiled; and
- Site will be secured using perimeter fencing, with access/egress procedures put in place.

Main Works

- 5.3.11 The main works (infrastructure, substructure and superstructure) will involve the excavation for the buildings' foundations. The superstructure works will involve the construction of the buildings' frames and envelopes, including the upper floor and roof.
- 5.3.12 The following activities are likely to occur during the main works:
- any required survey works;
 - construction of the necessary utilities and infrastructure on-Site;
 - construction of the Proposed Development, including connection to mains electricity, water and gas;
 - groundworks and earthmoving – all material will be re-used on-Site where possible, or otherwise transported off-Site where re-use is not possible; and
 - erection of frame, roofing, external envelope finishes including brickwork; cladding and windows.

Fit-Out and External Works

- 5.3.13 Once the external cladding and façades have progressed sufficient for weatherproofing, the fit-out will commence. Fitting out works generally comprise mechanical, electrical, and plumbing systems.
- 5.3.14 The following works are likely to occur during fit-out:
- fix of mechanical and electrical installation;
 - internal fit-out of new buildings;
 - completion of car-parking facilities;
 - hard / soft landscaping; and
 - site compound reduced and removed once works are complete.

Site Working Hours

- 5.3.15 Site working hours are expected to be between 08:00 and 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays. Restricted operations are proposed to continue outside of these hours in line with the appropriate approvals.

Plant and Equipment

- 5.3.16 During the Site preparation, enabling works and the construction of the Proposed Development, a range of plant and equipment will be utilised. Piling works are not

anticipated due to the scale of the Proposed Dwellings and the identified geology. **Table 5.6** outlines plant and equipment to be used during the construction phase.

Table 5.6: Construction Plant and Equipment used during the Construction Phase

Plant and Equipment	Stage of Works				
	Enabling and Site Preparation	Construction	Services Installation	Fit-out	Landscaping
Excavator	✓	✓			
Cranes	✓				
Floodlights	✓	✓	✓		✓
Articulated Dump Truck		✓			
Drills / Cutters		✓	✓		
Concrete generation			✓		
Generators	✓	✓	✓	✓	✓
Scaffolding		✓	✓	✓	✓
Asphalt Plant				✓	✓
Forklift Truck			✓	✓	✓

Construction Traffic

- 5.3.17 It is anticipated that construction traffic will travel down the A27 (Portchester Avenue) from each direction (east and west), to access the Site via Beaulieu Avenue and then Romsey Avenue.
- 5.3.18 **Table 5.7** provides estimates average daily construction traffic movements. The Construction Environmental Management Plan (CEMP) will consider opportunities to reduce the number of construction staff vehicles, as such the number in **Table 5.7** represents a worst-case scenario.

Table 5.7: Estimated Daily Peak Movements of Construction Traffic Flows (Two-Way Movements)

Construction Vehicle Type	Total Two-Way Daily Peak Movements
HGV Construction Vehicles	48
Workforce cars / vans	160
Total	208

- 5.3.19 Further information on construction related traffic impacts and mitigation can be found in **Volume 2, Chapter 6: Transport and Access.**

Construction Traffic – Access and Management

- 5.3.20 All entrances to Site will be managed by trained traffic marshals to segregate and organise all vehicle movements on and off the Site. This will involve the segregation of pedestrians using physical barriers to ensure vehicle movements are separated from members of the public. Full details of construction vehicle access to the Site will be confirmed within a Construction Logistics Plan, which will be the subject of a Planning Condition as part of any planning approval.

- 5.3.21 Further information on construction related traffic impacts and mitigation can be found in **Volume 2, Chapter 6: Transport and Access.**

Construction Workers

- 5.3.22 Construction of the Proposed Development is estimated to generate between 40 and 60 Full Time Equivalent (FTE) jobs over the 4 years and 8 months construction period.

Materials and Resource Use

Construction

- 5.3.23 An estimation of the main bulk materials and their approximate volume to be used during construction of the Proposed Development has been provided in **Table 5.8.**

Table 5.8: Approximate Quantum of Construction Materials used for the Proposed Development

Construction Materials	Volume	Units
Foundation Concrete	8,654	M ³
Bricks	27,283	M ²
Concrete Blocks	34,104	M ²
Roof Tiles	17,677	M ²

Construction Waste

- 5.3.24 It is anticipated that a certain amount of waste will be generated from the construction stage of the Proposed Development. Typically, construction waste accounts of 10-20% of total building materials used overall with lower amounts of wastage associated with glazing and pipework. Due to the outline nature of the Proposed Development, it is not possible to accurately quantify the total amounts of waste during construction at this stage. However, **Table 5.9** provides an estimate of the volume of waste materials that will be generated during construction of the Proposed Development.

Table 5.9: Approximate Quantum of Construction Waste Materials generated by the Proposed Development

Construction Materials	Volume	Units
Foundation Concrete	1,298	M ³
Bricks	4,092	M ²
Concrete Blocks	5,115	M ²
Roof Tiles	2,652	M ²

- 5.3.25 It is anticipated that all excavated material on-Site will be reused within the Site landscaping, which will be finalised at reserved matters stage.

Construction Environmental Management Plan

- 5.3.26 An outline CEMP will be provided at the detailed design stage and will include:
- access and parking arrangements;



- policies for storage of oils and fuels, and plant use maintenance;
- arrangements and location for wheel washing, and some dust control measures;
- measures for the protection of the natural environment to include watercourse, tree and hedge protection; and
- hours of work.

Waste Strategy

5.3.27 A Site Waste Management Plan will be developed, maintained and regularly monitored. Wherever possible, the arisings will be dealt with in a manner that reduces their environmental impact and minimises potential re-use of materials. All relevant contractors will be required to investigate opportunities to:

- eliminate waste at the source;
- reduce waste;
- maximise re-use of packaging; and
- recycle where unable to eliminate, reduce or reuse, particularly demolition and construction materials.

5.3.28 Waste will only be deposited at authorised waste recycling, treatment, and disposal sites.

5.3.29 Key considerations within the waste strategy include: Refuse and recycling; segregation; monitoring of waste production; storage and housekeeping and design considerations.

Public Relations

Local Residents and Businesses

5.3.30 The Appellant will aim to establish contact with the various local landowners, residents and businesses. This will be done through periodic newsletters detailing project progress, specific works that may be relevant and contact details for the Site. It is proposed to hold periodic meetings to explain anticipated works for the forthcoming quarter and how these will impact upon Site neighbours.

5.3.31 The Site will be screened by 2.4 m high hoarding (higher in certain circumstances for marketing and security reasons) around the external boundary. The hoarding will be maintained to a high standard throughout the construction of the Proposed Development. As works progress above the hoarding, measures will be introduced to control work at heights by task specific method statements and collective proprietary barriers to protect adjacent properties from the risks of falling materials.

5.3.32 The Appellant will liaise extensively with nearby residents to ensure any concerns are understood and mitigated. Communication will be through newsletters and local project information boards situated on hoardings with contact information for raising comments or complaints. If required or requested regular meetings will be held with local residents and businesses to discuss concerns.