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[redacted]

ECOLOGICAL PROTECTION AND ENHANCEMENT PLAN

At

Land at Ford Airfield
Ford
Arundel
BN17 5QZ

NGR: SU 99164 03571

Prepared for:	Vistry Homes Ltd
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[redacted]

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1 INTRODUCTION

1.1 Author and qualifications

This report is compiled and written by Ysobella Cox BSc MBiol, Ecologist for United Environmental Services Ltd (UES).

It has been verified by Kathryn James BSc MRes MCIEEM, UES Senior Project Manager.

1.2 Proposed development

Outline planning permission was granted by Arun District Council (F/4/20/OUT) on 14th July 2023 for:

'Outline planning application (with all matters reserved except for access) for the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1 – A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing building and part removal of existing runway hardstanding. This application affects a Public Right of Way. This application is the subject of an Environmental Statement. This application may affect the setting of a Listed Building. This application falls within CIL Zone 1 – Zero Rated.'

1.3 Objectives and scope

UES was commissioned by Vistry Homes Ltd to produce an ecological protection and enhancement plan (EPEP) to discharge condition 17 of planning permission F/4/20/OUT:

'Prior to the commencement of development an Ecological Protection and Enhancement Plan shall be submitted to and approved in writing by the Local Planning Authority. The plan shall include details of:

- *Reptile and amphibian habitat management*
- *High quality green infrastructure routes across the site*
- *Wildflower meadow planting*
- *Filling of gaps in tree lines and hedgerows with appropriate nature species*
- *Wildlife ponds and / or wetland areas*
- *Bat bricks / tiles integrated into the buildings onsite facing south / south-west*
- *Inclusion of gaps at the bottom of fences to allow movement of small mammals across the site*
- *Provision of log piles and hedgehog nesting boxes*

Prior to works above slab level of any phase that includes residential dwellings, an Ecological Protection and Enhancement Plan shall be submitted to and approved in writing by the Local Planning Authority. The plan shall include details of:

- Mitigation measures to restrict human and dog access to areas of habitat suitable for Bewick's swan and the screening of movement on adjacent public footpaths with clear

timelines for each mitigation measure to be carried out. The approved plan shall be implemented in full in accordance with the agreed timings and details on a phase by phase basis as defined by the Phasing Strategy under Condition 5, where relevant.

Reason: To ensure the retention, protection and enhancement of biodiversity in accordance with Policies ENV SP1, ENV DM1 and ENV DM5 of the Arun Local Plan 2011-2031. It is considered necessary for this to be a pre-commencement condition to prevent harm to potentially vulnerable species.'

1.4 Structure of the report

This EPEP presents a scheme for protecting and enhancing the biodiversity and opportunities for wildlife onsite. It details the habitat creation and enhancement measures which will promote protected or otherwise notable species and enhance the overall biodiversity and ecology of the site.

This report should be read in conjunction with Appendices 1 and 2.

2 LANDSCAPING AND HABITAT ENHANCEMENT

An illustrative masterplan has been produced for the development site by Tor & Co in 2024, Reference Masterplan Base 180641 – TOR - A0 (see Appendix 1 – Illustrative masterplan), alongside a green infrastructure plan (see Appendix 2). Detailed landscaping proposals are provided separately as part of the EPEPs due to be produced as part of each phase, in accordance with condition 18 of F/4/20/OUT.

2.1 Parkland

Four areas of parkland will be incorporated into the proposed development: Runway Park to the southeast, Landings Green to the northeast, Arun Way to the west and Ryebank Park to the southwest.

The majority of the parkland will contain green corridors to provide a connected landscape between the parkland, hedgerows and treelines onsite. Woodland, hedgerows and treelines will be retained where possible, with native species planting to enhance and create these public open spaces. The parklands will be created to enhance biodiversity, environment and improve the ecological value of these spaces.

Landings Green will be located within the northeastern section of the proposed development site and will primarily consist of country parkland. Although the park will mainly be utilised as an area of public open space for residents and visitors from the surrounding area, the landscape design will aim to enhance biodiversity and opportunities for wildlife, through the retention of the existing woodland along the western boundary of the park and the creation of a woodland buffer, orchard, sustainable urban drainage systems (SuDS) basins, wildflower meadows, grassland and scrub planting. The creation of these habitats and species to be planted are explained in detail within the corresponding sections of this report.

Arun Way will directly connect to Landings Green as a green corridor that will also benefit wildlife by providing commuting opportunities. Existing trees and woodland will be retained within both of the parks, where possible, with additional native species planting to enhance the treelines, landscape and green corridor. The green infrastructure plan indicates that the line of conifers within the western section of Arun Way will be removed in phases and replaced with native trees and hedgerow.

Runway Park will be located in the southeastern section of the site and mainly comprises country parkland with allotments along the southern edge. Native species will be planted along the edges of the parkland to provide screening from the adjacent land, and non-native species will gradually be removed and replaced to improve the habitat for local wildlife. Runway Park will be directly connected to Ryebank Park through a green corridor which will not only provide connectivity between the parks for residents and visitors, but it will also provide additional commuting and foraging opportunities for wildlife.

Ryebank Park will contain numerous SuDS basins associated with drainage. However, these additional semi-aquatic habitats will also enhance biodiversity by providing a semi-aquatic habitat for local wildlife. Additional habitats within Ryebank Park include tree planting, wildflower meadows, scrub and grassland.

2.2 Tree and hedgerow planting

To increase biodiversity on site the planting scheme includes areas of tree and hedgerow planting throughout the proposed development site to enhance biodiversity and provide connectivity. In addition, lines of trees and hedgerows which are set to be retained as part of the development will be enhanced by filling in gaps through native species planting. Native species to be planted include:

- Beech *Fagus sylvatica*
- Bird cherry *Prunus padus*
- Black poplar *Populus nigra*
- Crab apple *Malus sylvestris*
- Downy birch *Betula pubescens*
- Field maple *Acer campestre*
- Hawthorn *Crataegus monogyna*
- Hazel *Corylus avellana*
- Hornbeam *Carpinus betulus*
- Horse chestnut *Aesculus hippocastanum*
- Midland hawthorn *Crataegus laevigate*
- Pedunculate oak *Quercus robur*
- Rowan *Sorbus aucuparia*
- Scots pine *Pinus sylvestris*
- Small-leaved lime *Tilia cordata*
- Whitebeam *Sorbus aria*
- Wild cherry *Prunus avium*

Native shrub species to be planted within new hedgerows and existing hedgerows to fill in gaps, will include:

- Blackthorn *Prunus spinosa*
- Common beech
- Common dogwood *Cornus sanguinea*
- Field maple
- Guelder rose *Viburnum opulus*
- Hawthorn
- Hazel
- Wild cherry

The provision of tree and hedgerow planting will provide foraging opportunities for invertebrates including larval stages, adult herbivorous species and pollinators. Providing a range of planted species will support a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. In addition, the trees and hedgerows will provide increased nesting opportunities for birds and sheltered commuting opportunities for amphibians and mammals.

Once planted and established, the proposed trees should not require any management in the long-term, unless addressing issues with disease or damaged limbs that cause health and safety concerns. If any intensive pruning, or ongoing management, of trees and hedgerows is to be undertaken, it should be avoided during the nesting bird season (avoid during March to August inclusive), or alternatively a check for nesting birds can be undertaken immediately prior to the works.

2.3 Woodland

Areas of woodland planting have been incorporated into the landscape design strategy to enhance biodiversity by providing connectivity between different habitats onsite and through green corridors.

The new areas of woodland will be created through planting native tree and shrub species as detailed within the indicative landscaping plan, including:

- Blackthorn
- Common dogwood
- Common holly *Ilex aquifolium*
- Field maple
- Guelder rose
- Hawthorn
- Hazel
- Hornbeam
- Horse chestnut
- Small-leaved lime
- Wild cherry

The additional woodland creation will provide nesting habitat for birds, and once fully mature, the trees may develop potential roosting features for bats such as cavities and crevices. The woodland will also provide foraging opportunities for invertebrates. Providing a range of planted species will support a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds.

Any tree felling or arboricultural works that are required will only be undertaken outside of the breeding bird season and these works will be avoided between March and August inclusive. If this isn't possible and works need to take place during this period, a nesting bird check will be undertaken immediately prior to the works by a suitability qualified ecologist and an ecological clerk of works will be appointed to oversee the works if considered necessary. If any specialist works are required, then an arboriculturalist should be appointed.

2.4 Wildflower grassland

The green infrastructure plan indicates that areas of wildflower meadow will be incorporated into the landscaping design, including within the parkland areas and within the SuDS basins. The green infrastructure plan indicates that the margins of the wildflower meadows will be mown to provide a minimum 1m buffer to footpaths, roads and infrastructure. The wildflower grasslands will be created by sowing the Emorsgate EM3 special general purpose meadow mixture. The composition of the Emorsgate EM3 mixture is detailed below:

<u>Wildflowers</u>

- Agrimony *Agrimonia eupatoria*
- Black medick *Medicago lupulina*
- Bladder campion *Silene vulgaris*
- Bulbous buttercup *Ranunculus bulbosus*
- Common knapweed *Centaurea nigra*
- Common vetch *Vicia sativa ssp. Segetalis*
- Cowslip *Primula veris*
- Crosswort *Cruciata laevipes*
- Field scabious *Knautia arvensis*
- Great burnet *Sanguisorba officinalis*
- Greater knapweed *Centaurea scabiosa*
- Meadow cranesbill *Geranium pratense*
- Meadow vetchling *Lathyrus pratensis*
- Musk mallow *Malva moschata*
- Oxeye daisy *Leucanthemum vulgare*
- Red campion *Silene dioica*
- Ribwort plantain *Plantago lanceolata*
- Rough chervil *Chaerophyllum temulum*
- Sainfoin *Onobrychis viciifolia*
- Salad burnet *Poterium sanguisorba ssp sanguisorba*
- Selfheal *Prunella vulgaris*
- Tufted vetch *Vicia cracca*

- Hedge bedstraw *Galium album*
- Hoary plantain *Plantago media*
- Kidney vetch *Anthyllis vulneraria*
- Lady's bedstraw *Galium verum*
- Viper's-bugloss *Echium vulgare*
- Wild carrot *Daucus carota*
- Wild marjoram *Origanum vulgare*

Grasses

- Common bent - *Agrostis capillaris*
- Crested dog's-tail - *Cynosurus cristatus*
- Red fescue - *Festuca rubra*
- Smaller cat's-tail - *Phleum bertolonii*
- Smooth-stalked meadow-grass - *Poa pratensis*

Alternative wildflower grassland mixtures could be used; however, these will be agreed with the project ecologist to ensure they contain similar and appropriate native species.

The provision of wildflower grassland will provide immediate benefits for wildlife in the form of foraging, breeding and sheltering opportunities. In the longer term, the grassland will also be colonised naturally by additional native plant species.

2.5 Scrub planting

The green infrastructure plan and indicative landscaping plans indicate that there will be areas of native scrub planting throughout the proposed development site to form boundaries around areas of public open space and to provide screening. Native scrub species will be incorporated into the landscape design including:

- Blackthorn
- Common dogwood
- Hawthorn
- Hazel
- Holly

The areas of shrub planting will also be sown with Emorsgate EG1 general purpose meadow grass mixture to create the ground flora of the shrub habitat.

The provision of shrub planting will ensure that foraging opportunities (for both larval stages and adult pollinators) are available for a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. In addition, the shrubs will provide increased nesting opportunities for birds and sheltered commuting opportunities for amphibians and mammals.

2.6 Orchard

The proposed orchard in Landings Green will contain fruit bearing species of local provenance including:

- Apple 'Coronation' *Malus domestica 'Coronation'*
- Apple 'Saltcote Pippin' *Malus domestica 'Saltcote Pippin'*
- Apple 'Ergemont Russet' *Malus domestica 'Ergemont Russet'*

- Plum 'Victoria' *Prunus domestica 'Victoria'*
- Pear 'Conference' *Pyrus communis 'Conference'*
- Pear 'Concorde' *Pyrus communis 'Concorde'*

The orchard will provide foraging opportunities for a great diversity of invertebrate species which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. The provision of fruit bearing species will also provide direct foraging opportunities for birds, whilst trees within the orchard will provide increased nesting opportunities for birds.

2.7 Sustainable drainage system

Sustainable drainage system basins will be created as part of the proposed development and landscape design, a number of which have been designed to have permanent standing water within them. Although the primary function of SuDS is drainage, they also provide the opportunity to enhance biodiversity onsite by providing ecologically valuable features for local wildlife including birds, amphibians, small mammals and invertebrates.

Aquatic and marginal plants will naturally colonise the basins, but in order to prevent dominance by competitive grasses and undesirable ruderal species, the features will be sown with seed mixtures that contain a combination of native grasses and forb species suitable for damp soils, such as the Emorsgate EM8 meadow mixture for wetlands along the banks of the basin, and Emorsgate EP1 pond edge mixture for the base. Additional marginal planting will include:

- Brooklime *Veronica beccabunga*
- Common fleabane *Pulicaria dysenterica*
- Flowering rush *Butomus umbellatus*
- Great willowherb *Epilobium hirsutum*
- Greater pond sedge *Carex riparia*
- Greater spearwort *Ranunculus lingua*
- Hemp agrimony *Eupatorium cannabinum*
- Meadowsweet *Filipendula ulmaria*
- Purple loosestrife *Lythrum salicaria*
- Ragged robin *Lynchnis flos-cuculi*
- Reed sweet-grass *Glyceria maxima*
- Slender-tufted sedge *Carex acuta*
- Water forget-me-not *Myosotis scorpioides*
- Water mint *Mentha aqautica*
- Water plantain *Alisma plantago-aquatica*
- Water speedwell *Veronica anagallis-aquatica*
- Yellow iris *Iris pseudacorus*

The SuDS feature will increase botanical and invertebrate diversity by providing a marshy and semi-aquatic habitat, which will in turn benefit other faunal species such as bats, birds, reptiles and amphibians.

2.8 Amenity gardens and ornamental planting

As the proposed development is a housing scheme, numerous areas of amenity garden will be created onsite most of which will be associated with the residential properties and access roads. In addition, there will be areas of ornamental planting throughout the proposed development site. Ornamental structural and accent planting will occur around the plots and mainly comprise either evergreen or flowering species.

2.9 Removal of invasive species

Three individual stands of Japanese knotweed *Fallopia japonica* were identified during an ecological walkover conducted by UES in 2023 (see report reference UES04099/01). No other invasive species have been identified on site, and these three stands will not be impacted by this phase of the development, although they are situated approximately 80m from the phase boundary at their closest point. The three stands are located on the edge of an area of grassland / scrub at SU 99580 03417, SU 99595 03315, and SU 99637 03228. These areas will not be impacted by the current phase of the application, although the relatively close proximity of the stands increases the risk of disturbance and dispersal. As such, it is recommended that these three stands are treated during the commencement IRM phase (expected to occur between January 2025 and January 2027 inclusive).

Japanese knotweed, is listed under Schedule 9 of the Wildlife and Countryside Act 1981. As such, it is an offence to plant or otherwise cause this species to grow in the wild. Without mitigation, site clearance and setting out could result in the disturbance and dispersal of Japanese knotweed on and off site. This could result in a breach of legislation. Japanese knotweed is also highly invasive and can result in damage to foundations, structures and roads.

Preventing spread

1. In order to avoid contamination around the site, all site operatives with the potential to work within the vicinity of the invasive species should receive training in Japanese knotweed identification and best practice procedures for avoidance of spreading any species throughout the site.

2. Good site hygiene should be maintained:

    - All stands of the invasive species should be recorded, isolated and left undisturbed until the completion of treatment and eradication works.

    - Stockpiles of contaminated soil and vegetative material should be clearly marked and isolated.

    - Avoid the used of vehicles within the contaminated areas where possible, if not, vehicles should be washed at a designated area to remove any plant fragments and soil, taking care that contaminated wastewater does not spread off site.

3. Avoid any new contamination to the site by minimising the risk of fly-tipping waste onto the development, not importing infested topsoil for use on site, and inspecting new vehicles entering the site, particularly any caterpillar tracks.

4. Reusing treated soils onsite is possible without the need for a waste management licence. However, to minimise the potential problems there could be if the soil was not treated adequately, you should only use soil again where there is little risk of spreading such as away from watercourses, amenity lawns and gardens, away from boundaries with other properties and in an area, what is not disturbed heavily by people or livestock.

Treatment

Works to control invasive species should be undertaken by suitably trained and qualified operatives holding the appropriate certification and licences where applicable. Herbicide application works must be undertaken by an operative certified to use and apply herbicides (i.e. NPTC PA1 and PA6).

As there is the possibility that these species could be disturbed by contractors throughout the construction period, any invasive species should be removed prior to works within the affected areas on site. The following procedures should be followed regardless of the chosen method of treatment:

1. Identify all existing and emerging stands within the site area and mark all clumps with a single stake (for small clumps), 2 or 3 stakes (for bigger clumps). Each stake shall be driven until firm by hand. All stakes shall be 75mm diameter x 2.5m long peeled, tanalised softwood with the top painted for ease of identification. Stake on the edge of all identified clumps. Mark all areas on a site plan and take a photographic record.

2. A 7m exclusion zone around each clump will be marked out on site.

3. This process should occur immediately prior to the treatment methods implemented and should involve a site walkover survey by an appropriately trained operative able to identify the invasive species on site.

4. Access to all infected areas shall be on foot at all times. No plant or vehicles shall pass within 7m of the identified stands or staked areas.

5. No excavation or tipping of any material shall be allowed within 10m of any identified stands or staked areas.

6. All site staff shall be briefed upon the identification of invasive species and the need to avoid contact or cross contamination within the site, including points 2, 3 and 4 above. The following steps then need to be followed according to each invasive species.

Whilst chemical treatment of Japanese knotweed is a viable treatment option, it is recommended that in this case the stands of knotweed are excavated and buried, or removed from site as contaminated waste. If burying the Japanese knotweed is the chosen method of treatment, the Environment Agency are required to be notified at least one month before treatment. This method involves excavating the Japanese knotweed zone to a depth of at least 5 metres if not using a geotextile membrane, or 2m if using a geotextile membrane. Any geotextile membrane that is utilised for burying Japanese knotweed must be undamaged, UV resistant, will remain intact for 50 years, and sealed securely. The exact depth of excavation and geotextile membrane will be confirmed by the chosen competent contractor. If excavation and removal is the chosen method of treatment, then the excavated material must be treated as controlled waste and disposed of accordingly via a licenced handler or at a licensed facility.

Future contamination, monitoring, and responsibility

Japanese knotweed can redevelop on site after treatment through subsequent growth of dormant seeds, stolons and rhizomes or through future contamination of the site. If all plants are controlled prior disturbance of these areas, then contamination within the site will be prevented. Disposal of all plant material and associated soil via an appropriately licensed waste handler and / or waste facility will ensure that contamination off-site is prevented.

It is important that regular monitoring be undertaken to assess any regrowth and prevent the spread of any invasive species. This should occur annually for at least two consecutive years following treatment.

The responsibility of the initial treatment and future monitoring rests solely with the development company and any appointed contractors. If the site is sold, or if a management company is used following the development of the site, then the responsibility for future monitoring and treatment of invasive species will also be passed on to the new site owners or the management company appointed to maintain the site. The effectiveness of monitoring will be increased through onsite training given to the site operatives. Any regrowth will be further assessed, and an appropriate method of treatment carried out.

3 PROTECTED SPECIES

3.1 Bats

The habitats onsite mainly provide good quality habitat for bats. The hedgerows, treelines, woodland, grassland and dense scrub habitats will provide commuting and foraging opportunities for bats, whilst the buildings and trees onsite may provide roosting opportunities. In addition, the connectivity between the different habitats onsite through hedgerows and treelines further improves the quality for bats.

A suite of bat surveys has been undertaken onsite by Ecological Survey and Assessment (ECOSA) between 2017 and 2018, including bat scoping surveys of the buildings onsite, a ground-level tree assessment, emergence / re-entry surveys, bat transect surveys and bat automated detector surveys. The results of which are detailed within the associated ECOSA report - Environmental Statement – Technical Appendix 9.3 – Ecological Baseline (Report Reference 2921-9.3.F0).

Due to the number of years since the original bat surveys were undertaken and the potential for bats to roost within previously unidentified features or those which have developed overtime, UES were commissioned to undertake updated bat ground-level and aerial tree assessments to determine the suitability of the trees onsite to support roosting bats. UES were also commissioned to undertake updated bat scoping and bat presence / absence surveys where necessary.

UES carried out an updated bat scoping survey in June 2024, with a follow up scoping survey in September 2024 of Building 6, which could not be internally accessed in June. Two buildings, Buildings 1 and 5, were subject to bat presence / absence surveys after being found to present low and moderate suitability to support roosting bats, respectively. No bats were identified within either building during the presence / absence survey. All other buildings to be impacted by the development have been assessed as providing negligible suitability to support roosting bats (see report reference UES04099/03 for full details).

An updated ground-level tree assessment was undertaken by UES in July 2024 which assessed all trees for their suitability to support roosting bats that may be impacted by arboricultural works, including felling or pruning works. A subsequent aerial tree assessment was conducted of trees that are to be removed which contain PRF-M or FAR features between August and September 2024. No bats were identified within any trees during these aerial tree assessments (see report reference UES04099/05 for full details).

3.1.1 Mitigation measures

Bats in buildings

No bats were found to be using Building 1 and Building 5 on site to roost, and the remaining buildings covered during the inspections were assessed as having negligible suitability to support roosting bats. Therefore, no further survey work or compensation measures are required for the development to proceed, with regards to bats.

Bats in trees

ECOSA carried out bat ground-level tree assessments of all trees located within the development boundary in August 2018. A single tree was identified as having moderate potential to support roosting bats due to the presence of a woodpecker hole, whilst seven

trees were assessed as having low potential due to dense ivy *Hedera helix*. All other trees onsite were assessed as having negligible potential to support roosting bats.

Due to the number of years since the original surveys were undertaken and the potential for bats to roost within previously identified features or those which have developed over time, UES were commissioned to undertake updated bat ground-level and aerial tree assessments to determine the suitability of the trees onsite to support roosting bats. The updated bat ground-level tree assessment covered sixty trees across the site, of which twenty-six were found to contain potential roosting features for bats. Inspections were conducted on all trees that are going to be impacted by the development, as detailed within the tree removal plans which have been provided to UES. For the sake of clarity, the trees have been numbered in accordance with this plan.

Twenty-two trees were found to contain potential roosting features suitable for individual bats (PRF-I), and three trees were found to contain potential roosting features suitable for multiple bats (PRF-M). Trees identified with PRFs suitable for multiple bats included:

- G1014a - Leyland cypress *Cupressus leylandii* with a stem split
- H1161b - Canadian poplar *Populus x canadensis* with a stem cavity
- T1013 - Leyland cypress with a split stem.

In accordance with BCT guidelines, no further survey work is required for the trees that have been assessed as having only PRF-I features. However, soft felling techniques should still be used to minimise any incidental risk of harm to bats as a precautionary measure. The trees must be removed in sections, which will be lowered to the ground and left for a period of 24 hours before removing them from the site. Alternatively, the features associated with these trees could also be inspected by a suitably experienced and licensed ecologist immediately prior to the felling of the tree to confirm that no roosting bats are present.

No evidence of bat roosting activity was associated with trees with PRF-M features despite a full suite of surveys being conducted (three aerial assessments total). Therefore, no further survey work is required for the proposed works to these trees, although soft-felling techniques should still be used to minimise any incidental risk of harm to bats as a precautionary measure as described above/

Trees assessed as having “none” may be felled without restrictions relating to bats.

3.1.2 Compensation and enhancement measures

Bat boxes will be provided onsite to provide an enhancement in the availability of roosting opportunities. Bat boxes will be installed on a south facing aspect in close proximately to good quality habitat for bats such as hedgerows, tree lines, woodland, wildflower grassland and waterbodies.

The proposed makes and models of bat boxes have been chosen to target species likely to be present on site or within the local area. The use of woodcrete or woodstone boxes will be prioritised due to their durability and longevity. The following bat boxes will be installed onsite:

- Vivaro Pro build-in woodstone bat boxes – integrated within the external wall of the newly constructed buildings. The bat boxes should be positioned as high as possible on the southerly aspect to expose the boxes to high levels of sunlight.

- Manthorpe ridge roost – installed at the end of a ridgeline and creates an enclosed space suitable for crevice dwelling bats.

- Schwegler 2F and 2FN bat boxes – fitted to semi-mature / mature trees which are due to be retained within the proposed development site. The boxes will be placed at a height of 4-6m and on a south-facing aspect.

- Schwegler 1FW – fitted to mature trees which are due to be retained within the proposed development site. The boxes will be placed at a height of 4 – 6m under the shade of the existing canopy of the trees.

The exact number of boxes to be installed are stipulated within UES' Ecological Protection and Enhancement Plan which has been produced to discharge Condition 18 of the granted consent. It should be noted that once inhabited by a bat, boxes may only be inspected or disturbed by a licenced bat ecologist. Once installed, the bat boxes should not require any management in the long-term.

Bat boxes can be installed any time of year. Artificial lighting will be designed and directed to avoid overspill on all bat boxes, in order to minimise disturbance and increase the likelihood of occupancy. Where necessary, this may require the use of cowling or the relocation of light sources or bat boxes if necessary. A sensitive lighting strategy will be developed in accordance with the Bat Conservation Trust's (BCT) bats and artificial lighting at night guidance note (08/23), as per condition 15 of F/4/20/OUT.

3.2 Birds

ECOSA's Environmental Statement – Technical Appendix 9.3 – Ecological Baseline (Report Reference 2921-9.3.F0), indicates that wintering bird surveys were undertaken by Artemis between November 2015 and February 2016. UES have not been provided with a copy of the wintering bird survey report produced by Artemis at this stage, but the ECOSA Environmental Statement indicates that 56 bird species were recorded within the proposed development site during the wintering bird surveys; no species associated with the Arun Valley Special Protection Area (SPA) were found to be associated with the proposed development site.

ECOSA also undertook breeding bird surveys of the proposed development site between May and June 2017, which recorded species on both the red and amber lists breeding onsite including skylark *Alauda arvensis*, song thrush *Turdus philomelos*, dunnock *Prunella modularis*, and stock dove *Columba oenas*. Additional red and amber listed species were also recorded using the site during the wintering bird surveys undertaken by ECOSA between December and February 2019. These surveys also determined that the habitats onsite may be suitable for species associated with the designation of Arun Valley SPA but recognised that regular disturbance across the site may reduce the suitability and conditions for these species.

There are a number of habitats onsite which are suitable to support nesting birds including woodland, hedgerows, trees, dense scrub, scattered scrub, tall ruderal, arable fields and buildings. Bird's nests were identified within some of the buildings during the updated bat scoping survey undertaken by UES in June 2024, and the other buildings have potential to support nesting birds.

3.2.1 Mitigation measures

General

Building demolition, tree felling, arboricultural works and vegetation removal could result in the direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season. As such, building demolition, site clearance, tree felling, arboricultural works and vegetation removal (including enabling works) are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works. This is in accordance with condition 24 of F/4/20/OUT.

3.2.2 Compensation and enhancement measures

Bird boxes will be provided onsite to provide an enhancement in the availability of nesting opportunities. Bird boxes will be installed on a north facing aspect in close proximately to good quality habitat for birds such as hedgerows, tree lines, woodland, parkland and waterbodies.

The proposed makes and models of bird boxes have been chosen to target species likely to be present on site or within the local area. If the proposed model of bird box is not available due to stock shortages, an alternative model can be used instead. All proposed changes must be discussed and agreed with the project ecologist to ensure that they provide similar nesting opportunities. The use of woodcrete or woodstone boxes will be prioritised due to their durability and longevity. The following bird boxes will be installed onsite:

- Schwegler 1B bird nest box (26mm, 32mm and oval entrances) – affixed to semi-mature / mature trees which are due to be retained within the proposed development site, at a height of 3-6m, and should be positioned on the northern or eastern aspect of the selected trees, thus avoiding the strongest sunlight and wettest winds.

- Vivara Pro woodstone swift nest box – integrated within the external wall of the newly constructed buildings, below the eaves on the northern elevation. The box should be installed at a minimum height of 5m with an unobstructed entry point beneath the box.

- Vivara Pro woodstone house martin nest – integrated within the external wall of the newly constructed buildings, below the eaves on the northern elevation.

The exact number of boxes to be installed are stipulated within UES' Ecological Protection and Enhancement Plan which has been produced to discharge Condition 18 of the granted consent. Once installed, the build in bird boxes for house martin and swift should not require any management in the long-term. However, Schwegler 1B bird nest boxes (or equivalent if alternative used) will require annual maintenance over the winter months. This maintenance should occur between September to February inclusive and should include the removal of the previous years' nest remnants. The nails and fixings used to attached the boxes to trees should also be monitored each year in case a replacement is needed.

3.3 Amphibians

GCN impact assessments and environmental DNA (eDNA) analysis were carried out of ponds that were accessible within 500m of the site by ECOSA in 2017 (see corresponding report reference: 2921-9.3.F0). Of the ten ponds located within 500m of the site during the previous surveys, four (Ponds 6 – 9) were subject to eDNA analysis which returned negative results, indicating the absence of GCNs.

Whilst there are no waterbodies onsite, the terrestrial habitats have some suitability to be used by GCNs including woodland, hedgerows, dense scrub, tall ruderal and grassland habitats. In addition, there are numerous ponds and ditches within 500m of the proposed development site.

Given the lack of access to some of the offsite ponds in 2017 and the amount of time that has passed since the previous surveys, UES carried out updated GCN HSI and eDNA surveys in June 2024 (see report reference UES04099/11 for further details). Access was provided to Pond 1 and Ditches 1, 2, 5, 6, 7 and 8. Pond 1 and Ditches 5 and 8 were subject to eDNA analysis which returned negative results, indicating the absence of GCNs; Ditches 1, 2 6 and 7 were dry at the time of survey and therefore could not be subject to eDNA analysis.

Given the results of the surveys undertaken to date, GCN are considered as likely absent from the proposed development site. However, due to the potential presence of common amphibian species, the following reasonable avoidance measures (RAMs) will be implemented during the construction phase of the development to protect amphibians on the chance they are present onsite during the works:

- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45 degree angle to allow amphibians to escape. Any open excavations should be checked for amphibians in the morning prior to start of works on site.

- Materials will be stored on pallets off the ground in order to reduce the risk of amphibians sheltering underneath them.

- UES will remain on-call throughout the development and if any newts are encountered, work on site is to stop immediately and ecological advice is to be sought.

The provision of native tree, hedgerow and scrub planting along with the wildflower grassland will provide commuting and foraging opportunities for amphibians. In addition, a total of seven hibernacula (see specifications below) and dozens of log / brash piles will be installed within IRM which will provide sheltering opportunities. The number of log and brash piles will be determined by the extent of vegetation removal, with a preference to utilise cut wood on site as opposed to chipping or removing from site. See Appendix UES' Ecological Protection and Enhancement Plan – Infrastructure Reserves Matters, Appendix 1 for mapped locations (report reference UES04099/22).

Each hibernacula will be created by excavating pits in the ground (500mm depth, 2000mm length, and 1000m width). Ideally, these pits will then be filled using materials already present on site, including hay, brash, cut timber / logs and brick / rock hard-core, or the materials can be sourced from elsewhere if necessary. The pits will be piled up to a height of approximately 1000mm above ground level. Hibernacula will then be loosely capped with topsoil and turfed over, ensuring that access is still available through to the lower layers at the margins. This will provide GCNs with a sheltered place to rest and suitable conditions for overwintering amphibians. The hibernacula will also provide sheltering and hibernating opportunities for reptiles, other common amphibians, small mammals and invertebrates.

The following diagram provides a visual representation of the hibernacula, with the only additional requirement to the diagram being that a pit is first excavated.

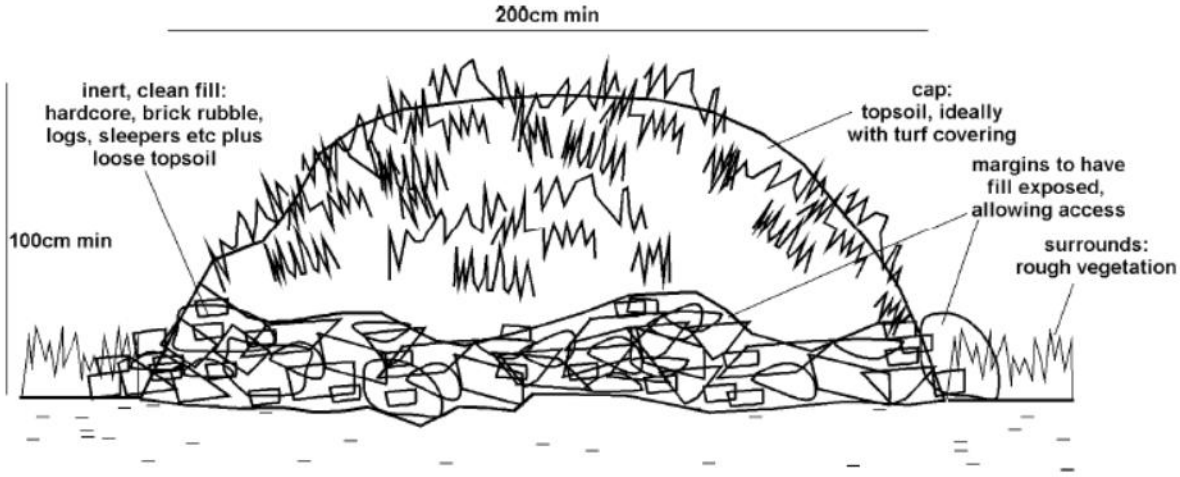


Figure 1 – Hibernacula design.

3.4 Reptiles

Artemis Ecological Consulting Limited carried out a Phase 1 Habitat Survey in July and August 2015, and August 2016, which identified a single, adult common lizard *Zootoca vivipara* within a grassland in the eastern section of the proposed development site.

A full suite of reptile surveys were undertaken by ECOSA in 2017 (see report reference: 2921-9.3.F0). A single adult common lizard was identified in July 2017 within the northern section of the northern land parcel. In addition, two slow-worms *Anguis fragilis* were identified offsite but directly adjacent to the eastern boundary of the proposed development site during the GCN impact assessment and eDNA survey undertaken by UES in June 2024.

Habitats onsite which are suitable for common reptile species, such as grassland, dense scrub and woodland edges, will be lost in areas to facilitate the proposed development. However, the proposed green infrastructure plan incorporates the creation of parkland with green corridors, hedgerows, SuDS features, dense scrub, woodland, grassland and wildflower meadows which will provide a connected landscape for commuting and foraging reptiles in the local area.

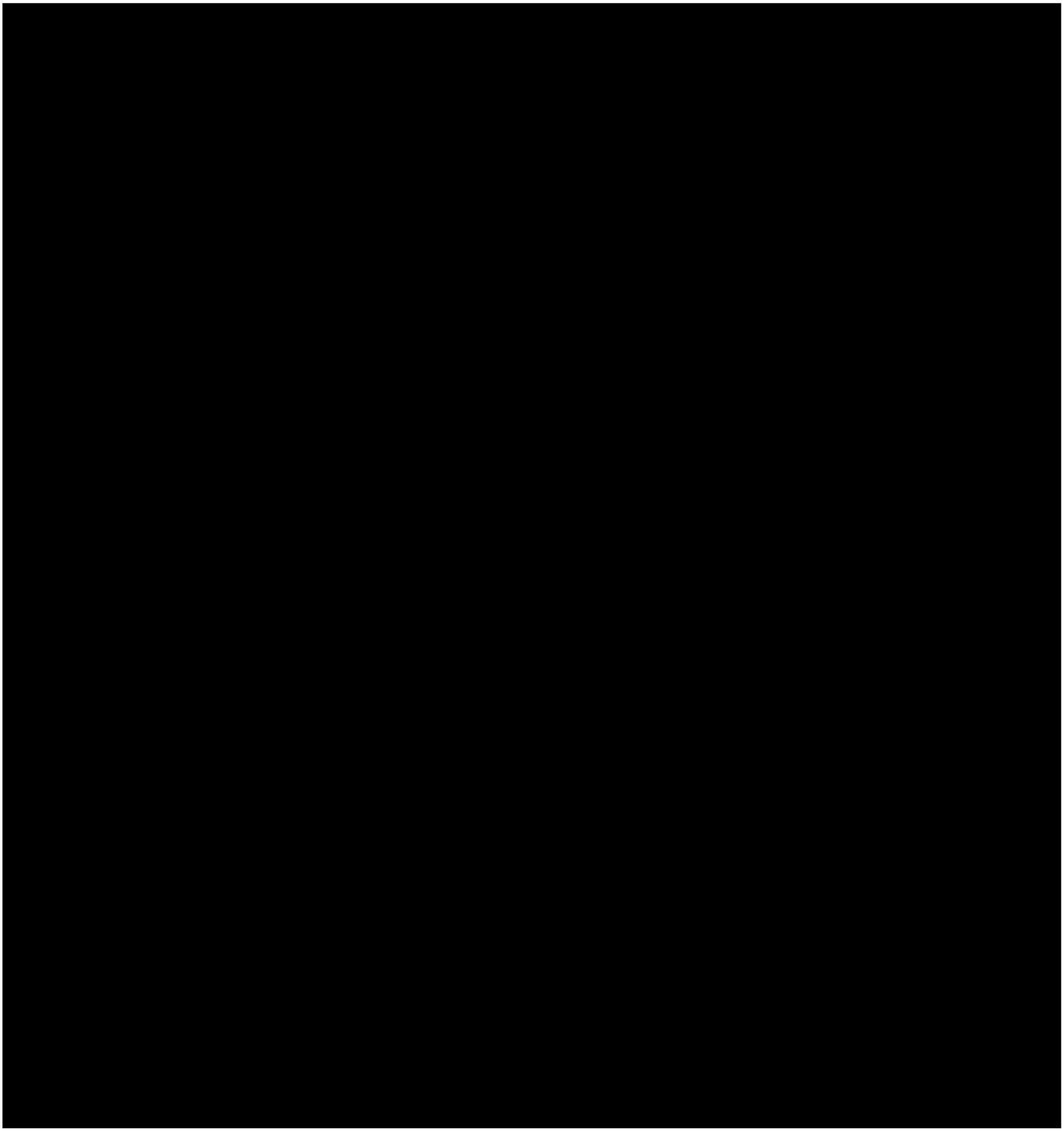
Due to the known presence of reptiles within the surrounding area, the following RAMs will be implemented during the construction phase of the development to protect reptiles on the chance they are present onsite during the works.

- The unmanaged arable fields, tall ruderal and any areas of grassland within the proposed working area are to be mown to have a sward length below 10cm. This mowing is to take place at least 24 hours prior to the start of development works. This is to give any reptiles present time to move off site of their own accord. The mown / cleared areas will then be maintained with a short sward until the works on site have been completed.

- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45-degree angle to allow trapped wildlife to escape. Any

open excavations should be checked for trapped wildlife in the morning prior to start of works on site.

- Where possible, materials will be stored on pallets off the ground in order to reduce the risk of reptiles sheltering underneath them.



3.6 Hedgehogs

To allow continued use of the site by hedgehogs *Erinaceus europaeus* and to ensure commuting routes are not blocked, any fences installed onsite will be designed to allow passage of hedgehogs. This can either be through the choice of material e.g. choosing a fence style that naturally contains suitable sized holes at the base or through the inclusion of hedgehog highways. Hedgehog highways are small 13cm x 13cm holes at the base of fences. Hedgehog highways will be incorporated at a distance of every 15m in all installed fences.

Brash / deadwood piles will also be created across the site, including within the woodlands, to provide sheltering and hibernating opportunities for a variety of wildlife onsite including small mammals, invertebrates and amphibians. The brash / deadwood piles will be created using arisings from any vegetation clearance works undertaken onsite. The arisings will be cut into different shapes and sizes and will be stacked in loose and randomly created piles, measuring approximately 0.5m x 0.5m x 0.5m to 1m x 1m x 1m in dimension. The brash and deadwood piles will be created as and when material becomes available during the vegetation clearance works.

In addition, hedgehog nesting boxes will be provided onsite to provide sheltering opportunities for hedgehogs. A total of four hedgehog boxes will be provided as part of this application. The boxes will be located in quiet, shady, sheltered, and dry locations. The exact specification of the box will depend on the specific model purchased, which will depend on availability. However, the following features will be ensured:

- Boxes will be constructed from timber which can be treated externally only. No creosote or non-water-based preservative or paint should be used on the boxes as the fumes may linger and can be harmful over a long period of time.
- The roof may or may not be covered with a waterproof coating such as a polyester roofing felt, but the roof should not be nailed down regardless of if the waterproof coating is used.
- An interior or exterior tunnel should be provided such that predators of hedgehogs (e.g. badgers or foxes) cannot reach hedgehogs within their boxes

The exact number of boxes to be installed are stipulated within UES' Ecological Protection and Enhancement Plan which has been produced to discharge Condition 18 of the granted consent.

3.7 Hazel dormice

ECOSA carried out hazel dormouse *Muscardinus avellanarius* surveys in June-September 2017 (see report reference: 2921-9.3.F0). No evidence of hazel dormice was identified during these surveys and as such, they were considered likely absent from the site.

There are limited areas of suitable habitat within the surrounding landscape and the majority of the proposed development site is unsuitable to support hazel dormice. The relatively small areas of woodland and hedgerows onsite provide somewhat suitable habitat for hazel dormice; however, they are isolated from the wider landscape and the site is unlikely to be colonised

by hazel dormice in the future. Despite this, the works should be completed under RAMs to reduce the risk to the lowest practicable level and to adhere to good practice guidelines. The below RAMs will be implemented during the construction phase of the development, including a pre-commencement check, to protect hazel dormice on the chance they are present onsite during the works.

- No woodland, scrub or hedgerow clearance will take place between June and September inclusive when females would have dependent young, or between December and March inclusive when dormice would be hibernating.

- Phased vegetation clearance of any existing hedgerows, woodland or scrub that will be impacted by the works. These habitats should be removed in a way that directs individuals in the direction of remaining suitable habitat such as retained hedgerows at the site boundaries.

3.8 Invertebrates

Insect boxes will be provided onsite to provide an enhancement in the availability of breeding and sheltering opportunities. Insect boxes will be installed on a south facing aspect in close proximately to good quality habitat for insects such as hedgerows, tree lines, woodland, parkland, wildflower grassland, as well as ornamental planting. Additional freestanding insect hotels will also be provided in St Mary's Meadow and Ryebank Park. Whilst those installed on trees may be subject to higher rates of predation and shading, a greater variety of habitat niches are provided by installing both tree-mounted and free-standing hotels so it is considered appropriate to include both.

The proposed makes and models of insect boxes have been chosen to target species likely to be present on site or within the local area. The following insect boxes will be installed onsite:

- Bee brick – integrated within the external wall of the newly constructed buildings. The bee bricks should be a minimum of 1m high on a southerly aspect to expose the boxes to high levels of sunlight.

- Schwegler insect nesting aid – fitted to semi-mature / mature trees which are due to be retained within the proposed development site. The boxes will be placed at a height of 4-6m and on a south-facing aspect.

- Lipari Pole-Mounted Insect Hotel – to be installed in unshaded but vegetated areas.

The insect boxes installed will provide breeding and sheltering opportunities for solitary Hymenopterans species that are known to be present onsite or are likely to be present within the local area.

Once installed, the insect boxes should not require any management in the long-term.

4 CONCLUSION

Once implemented, the landscaping and habitat enhancements will provide a biologically diverse landscape and deliver a net benefit for biodiversity. The green infrastructure network onsite will promote the natural distribution of species, ensuring that ecological resilience is maintained within the wider landscape. Further details on the net benefit for biodiversity will be provided in a separate biodiversity statement prepared by UES.

Provided the measures within this report are followed, it is considered that the proposed development will be compliant with all relevant legislation and planning policy and will result in a positive outcome for biodiversity.

APPENDICES

Appendix 1 – Illustrative masterplan

POS types	Site Wide Policy Compliant POS Provision	RM1 Delivery	RM4 Delivery	IRM Delivery	Future Phase Requirement / Remaining Provision
Amenity green space	1.980ha	-	0.172ha	0.957ha	0.851ha
Natural and Semi-Natural green space	5.940ha	-	0.236ha	5.421ha	0.283ha
Parks & Gardens	2.640ha	-	2.777ha	-	-
Allotments	0.825ha	-	0.825ha	-	-
Outdoor Sports	3.230ha	-	-	-	3.230ha
Play provision	1.815ha	-	0.270ha	0.650ha	0.895ha
TOTAL (POS)	**16.430ha**	**-**	**4.280ha**	**7.028ha**	**5.122ha**

For further details on the acoustic and landscape mitigation, please refer to drawing TOR-RMIN-XX-DR-L-P-026

For further details on the acoustic and landscape mitigation including footpath alignment, substation layout and specifications, please refer to drawings TOR-RMIN-XX-DR-L-P-024 and P-025

- Approved Outline Application Boundary
- RM1 Application Boundary
- RM4 Application Boundary
- Infrastructure RM Application Boundary
- Timber closeboard fence 1.8m high
- Timber closeboard gate 1.8m high
- Timber post and wire fence 1.2m high
- Metal post and rail in black 1m high
- Metal post and rail gate in black 1m high
- Cleft chestnut post and rail fence 1.2m high
- Timber knee rail 0.6m high
- Close boarded fence 1.8m high
- Post and wire deer proof fence 2m high
- Acoustic barrier fence
- Brick wall 1.8m high *(to match architects specification)*
- Primary, Secondary and Tertiary Streets (incl parking bays / driveways): Macadam surface road
  Street Kerb/edging: Charcon British Standards BN Kerb 145x255mm, 125mm upstand
- Mews Street: Charcon Woburn Rumbled in Autumn, 200x134, 45deg herringbone
  Kerb/edging: Charcon Eco Countryside Kerb 145x255, 50mm upstand
- Mews Junction: Charcon Woburn Rumbled in Brindle, 200x134, 45deg herringbone
  Kerb/edging: Charcon Eco Countryside Classic Flat Top Edging 50x250, 50mm upstand
- Parking Courtyards and Semi-private drives: Charcon Woburn Rumbled in Brindle, 200x134, 45deg herringbone
  Kerb/edging: Charcon Eco Countryside Classic Flat Top Edging 50x250, 50mm upstand/laid flush
- Parallel parking bays: Charcon Woburn Original in Brindle, 200x134mm, stretcher bond
  Kerb: Charcon Eco Countryside Kerb 145x255mm, 50mm upstand
- Parallel parking bays: Charcon Woburn Original in Rustic, 200x134mm, stretcher bond
  Kerb: Charcon Eco Countryside Kerb 145x255mm, 50mm upstand
- Driveways: Charcon Woburn Rumbled in Autumn, 200x134, stretcher bond
- Public footpaths/Cycleway: Macadam surface
  Kerb/edging: Charcon British Standard Flat Top, 50x250mm, laid flush
- Macadam surface footpath/cycleway, 3m wide
  Kerb: Charcon British Standard Flat Top Edging 50x250mm, laid flush
- Type 1 limestone surface course with 25mm lime dust dressing course. 3m wide Cycleway/footpath and bridleway
- Private footpaths: Charcon Stonemaster Flag, 450x450mm in sandy buff, stack bond
- POS footpaths: Compacted hoggin
- Proposed sand to play areas (indicative)
- Raised table and ramps - Block paving in accordance with engineers drawings
- Rumble Strips: Charcon Woburn Original in Graphite, 200x134mm, stretcher bond
- Apartment patios: Charcon Stonemaster Flag, 450x450mm in sienna buff, stack bond
- Bin Collection Points: Charcon Woburn Rumbled in Autumn, 134x134mm, stack bond
- Timber Seat
- Timber Seat
- Timber bench to allotments
- Timber picnic bench
- Banquet table
- Timber raised planters
- Bike stores
- Extent of equipped and natural play area
- Location of play / fitness / parkour trail stations
  (Refer to hardworks drawings for locations)
- Sheffield cycle stand (or equal approved)
- Waste bin
- Interpretation board
- Public Art
- Signage post
- Proposed bund
- Existing public rights of way
- Existing vegetation to be retained
  (Refer to arboriculturists AIA)
- Vegetation to be removed
  (Refer to arboriculturists AIA)
- Proposed trees
- Native hedgerow
- Low single-species hedgerow
- Private ornamental planting
- Communal ornamental planting
- Woodland structure planting
- Communal native planting
- Native scrub
- Basin marginal planting
- Rear gardens
- Private front lawn
- Amenity grass
- Flowering Lawn
- Long grass margins
- Wildflower meadow
- Wildflower meadow (SUDs feature)
- Grasscrete
- Allotment plots
- Permanent water
- Log piles *(ecological feature)*
- Hibernacular *(ecological feature)*
- Shrub mix A
  (maintained at 4.5m high)
- Shrub mix B
  (clipped 2m high where located within Rising Main Easement)
- Shrub mix C
- Single species hedgerow with pleached trees
  FAGUS sylvatica or equal approved
- Climbers
- Light bollards
  (to be single sided distribution with back shields, low upward light output (<1.5%). P6 class)
- Light Column
  Refer to engineers drawings for details)

Notes/Revisions

C	14/07/2025	Post submission amendments in response to consultee comments
D	21/07/2025	Post submission amendments to reflect consultee comments
E	24/07/2025	Minor amendment to car barn and parking adjacent to plots 166-168, RM1.

0 50 100 150 M

Ford Airfield
Vistry

N

Composite Landscape Masterplan
RM1, RM4 and RM Infrastructure

Status:	Drawn by:	Checked by:
For Planning	DL	TF
Project Number:	**Scale @ A0:**	**Date:**
180641	1:2000	08/2024
Drawing Number:		**Revision:**
TOR-RM4-XX-DR-L-P-030		E

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Appendix 2 – Green infrastructure plan

03 - Building with nature

Building with nature

Nature is essential to health and well-being, promoting biodiversity, providing sustainable drainage, mitigating climate change, and creating beautiful places to live. The proposals that come forward should ensure nature is intrinsic to the design, creating a well-integrated place for people and wildlife.

3.1 Well designed green infrastructure is also key to bringing new and existing communities together and promoting sustainable and healthy lifestyles.

3.2 The masterplan should create a place that is experienced as part of the local area, responding to and enhancing the existing features and natural resources of the site. The redevelopment of the site provides the opportunity to knit together the local area and revitalise and enhance the landscape of the parish of Ford as well as the setting of neighbouring settlements.

3.3 The approved proposals seek to re-interpret the history of the site through the landscape design, including the former canal and Ford Airfield. This ethos should be carried through into the detailed design.

3.4 The following key objectives for the natural environment were identified through the outline planning consent:

- A range of high performance, attractive and usable open spaces for sport, play, multi-use and informal recreation must be accessible by all;
- Public open spaces must be of high quality, well connected and located at accessible distances from every dwelling to promote their use;
- Green links through the site must be created to create a permeable and well connected green infrastructure for both people and wildlife;
- Biodiversity must be enhanced by creating a structurally diverse network of connected natural habitats;
- Opportunities for people to connect with nature must be a common thread of all open spaces;
- Healthy lifestyles must be promoted by providing a safe, accessible and rich environment for walking, running and cycling through the site and into the wider area;
- Existing boundary vegetation must be retained and improved where possible and new planting incorporated to balance visual integration into the local area as well as soften views into the site and screen less desirable neighbouring land uses; and
- Where possible, physical features of the site should be retained or emulated through the proposed development, including mature vegetation, boundaries and historic features.

3.5 The landscape concept illustrated in figure 3.1 is based on a figure of eight that will create an attractive walking loop connecting the green open spaces through the site as well as to the existing local communities.

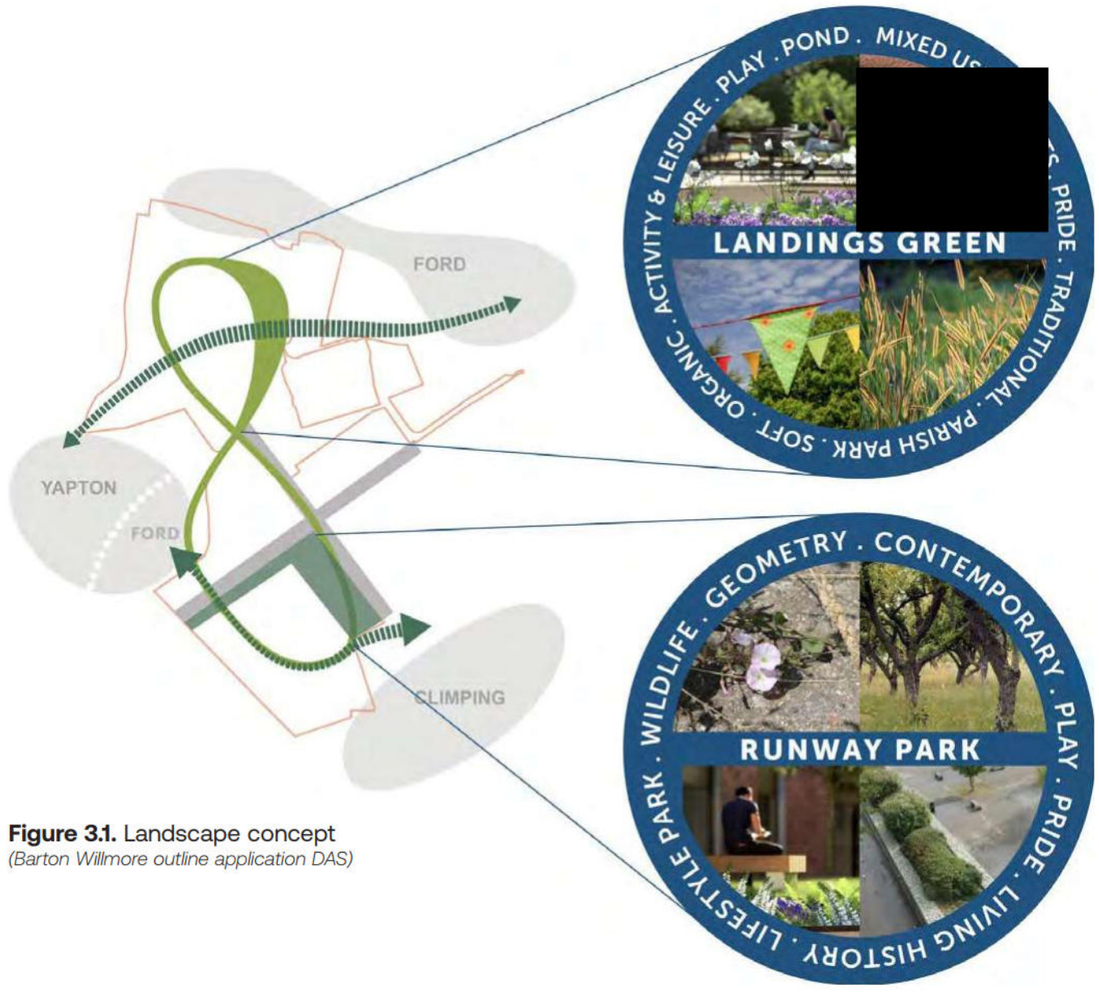


Figure 3.1. Landscape concept
(Barton Willmore outline application DAS)

Public open space provision

3.6 A minimum of 16.43ha of net open space must be provided across the masterplan in accordance with the approved green and blue infrastructure parameter plan and to accord with Arun District Council's Open Space, Playing Pitches & Indoor & Built Sports Facilities SPD (2020).

3.7 This net open space figure includes allotments and outdoor sports provision, along with greenspace, parks and gardens, and play provision.

3.8 Applying the SPD quantity standards, the following minimums against each open space type (based on 1,500 units) should be provided:

Amenity greenspace:	1.98ha
Natural and semi-natural greenspace:	5.94ha
Public parks and gardens:	2.64ha
Allotments:	0.825ha
Outdoor sports:	3.23ha
Play provision:	1.815ha

3.9 Figure 3.2 sets out the required distribution and quantum of each open space type required to meet the local quantity standard. The distribution of each type has been determined by the intended function and character of each space. This is further expanded on over the following pages.

3.10 Should any small redistribution or re-categorisation of any space be required, this must be agreed with Arun District Council and with clear technical justification (for example, adjustments to the drainage strategy) prior to approval of the relevant RMA.

3.11 A comprehensive play strategy is outlined on pages 38 to 39, which sets out the areas (totalling 1.815ha) and hierarchy of play space required across the site. The areas of play stipulated must be excluded from the area calculations for each open space type.

3.12 Figure 3.2 outlines an approach which is compliant with the SPD quantity standards and so excludes play from the area calculations (areas of play stated on figure 3.16 excluded from the areas stated below).

3.13 Provision of net open space must also exclude all SUDs features, woodland planting required for mitigation (as set out on the approved green and blue infrastructure parameter plan) and very small incidental spaces which have limited or no recreational function such as roadside verges.



Figure 3.2. Public open space provision

Green infrastructure strategy

3.14 Public spaces must include combinations of activities that help bring people together including play, social meeting, resting, and enjoyment of nature.

3.15 Figure 3.3 sets out the broad green infrastructure strategy and the hierarchy of spaces that must be incorporated in to the detailed proposals.

Site boundaries; interface and integration

As a partially green field site with a variety of different adjoining uses and developments, appropriate edge treatments are important to ensuring that the development both assimilates with the wider rural environment and integrates with adjoining developments and settlements.

Urban greening - Streetscape

The principal and low order streets should maximise soft or 'green' surface cover. Wildlife enriched verges, swales and incidental spaces must be incorporated utilising wildlife beneficial and native species and supplemented with principally native standard trees, maximising mature canopy cover across the development.

Connective landscapes - green corridors

The green corridors play an important role in connecting people to the destination spaces and providing green connections between natural habitats for foraging and dispersing fauna.

Neighbourhood parks

Three neighbourhood parks with a minimum area each of 0.2ha must be provided, creating a leafy heart on the doorstep of each small neighbourhood. They must provide a place to meet with neighbours, play, and to be in nature, a short walk from every home.

Principal spaces - parklands

It is anticipated that the site's eastern parklands will become important spaces not just for the new neighbourhood but the wider communities of Climping, Yapton and Ford. In this respect, integration into the wider active movement network must be a key component of the wider green infrastructure (GI) network.

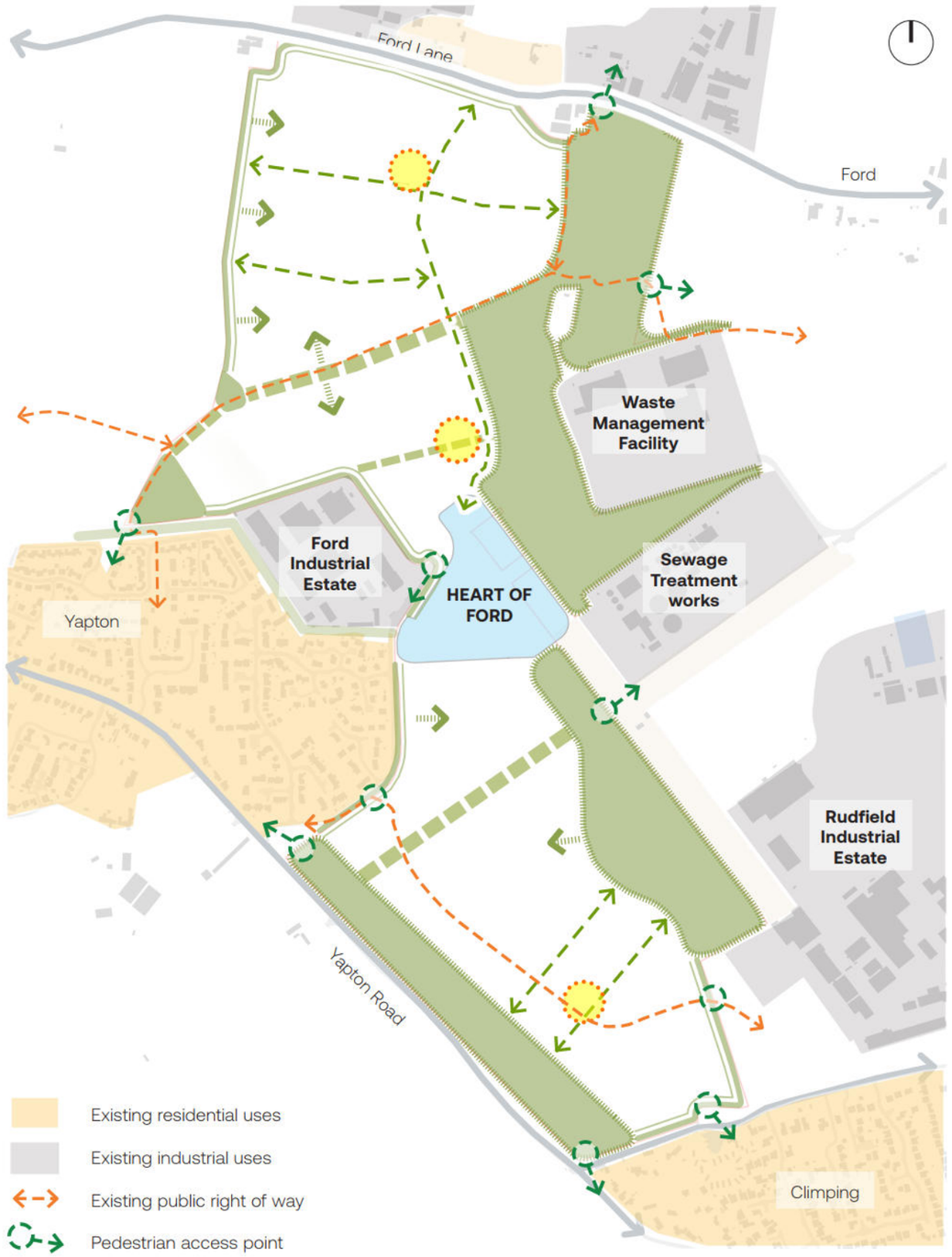


Figure 3.3. Green infrastructure strategy

Principal open spaces

3.16 The development will incorporate three parks: Runway Park, Landings Green, and Arun Way. These larger public open spaces will provide the opportunity for all ages and abilities to access the outdoors, connect with nature, socialise and lead an active lifestyle.

3.17 The principal open spaces must be multi-functional and high performance, providing flexible recreation and social space, productive landscapes, natural habitat enhancement, drainage function and contribute to the wider area's visual amenity.

3.18 The different spaces must all contribute to a range of recreational, social and community activities, improving the health and well-being for existing and proposed communities. The open spaces will also contribute to enhancing biodiversity and ecological quality within and around The Landings.

3.19 While the three parks will be part of a cohesive green infrastructure, they should each have a distinct character, creating a rich and varied environment.

3.20 A fourth large public open space, Ryebank Park, will form a buffer between Yapton Road and the southern development edge. Characterised by a series of attenuation basins, it will primarily serve a drainage function for the southern neighbourhood, but will also provide a landscape setting with opportunities for informal recreation and play, and biological enhancement.

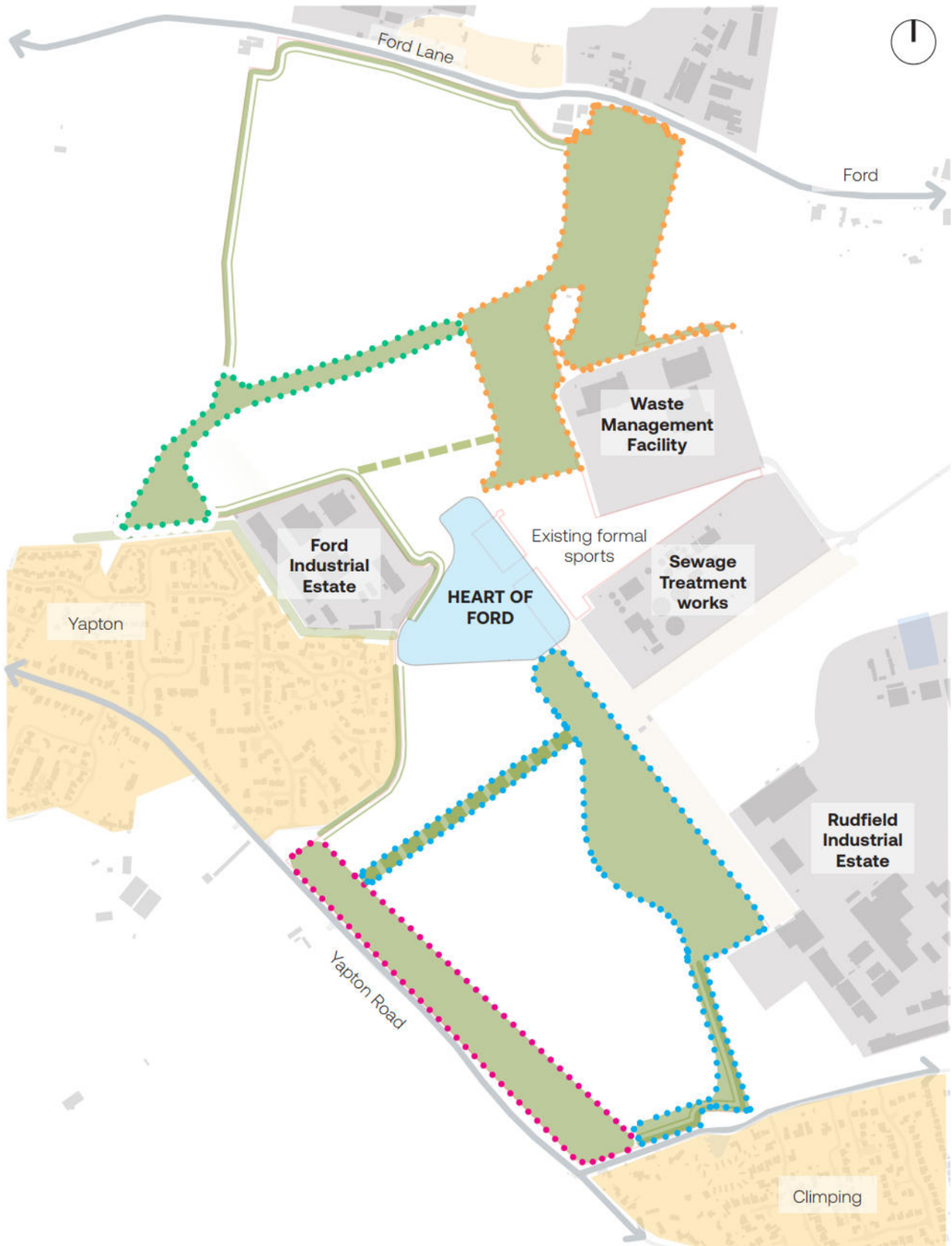


Figure 3.4. Key landscape spaces

Runway Park

Runway Park is located in the south eastern corner of the site on the edge of Climping (to the south) and Rudfield Industrial Estate (to the east) and includes a green corridor following the alignment of the former airfield runway.

Landings Green

Landings Green is a large park connecting the proposed local centre through to Ford Lane in the north east, incorporating the alignment of the former canal tow-path.

Arun Way

Arun Way is a green corridor connecting Landings Green and intersecting the site as far as the western boundary adjacent to Navigation Drive and incorporates an existing public footpath.

Ryebank Park

Ryebank Park forms a buffer between Yapton Road and the southern development edge.

Landings Green: overview

Overview

3.21 Landings Green is a large park that will stretch from the local centre along the eastern boundary through to Ford Lane in the north east.

Character

3.22 The park should transition from a more intensely active and sports zone adjacent to the local centre at the heart of the development, to an open and naturalised country parkland to the north as far as Ford Lane, providing a sensitive interface with the adjoining rural land and countryside to the north.

3.23 The alignment of the former canal should be reflected in a branch of the park.

Function

3.24 Landings Green must make provision for the following uses:

- A range of playable landscapes including a Neighbourhood Equipped Area for Play (NEAP), Track Zone, LEAP, opportunities for incidental play including kick-around space, fitness trail and a series of Local Areas for Play at appropriate locations;
- Formal sports provision, with adequate space around the pitches for run-off purposes, changing facilities, parking, and flexible kick-about space;
- Amenity green space providing flexible multi-functional spaces for a range of active and quiet recreational activities;
- Structural planting and improved interface with neighbouring industrial uses, providing screening and appropriate level of enclosures; and
- New, locally indigenous habitats which are structurally diverse and connected with protected areas where disturbance is more limited.



Figure 3.5. Landings Green framework plan

Landings Green: design requirements

Movement and access

3.25 Public rights of way through the park are to be retained and enhanced by appropriate resurfacing, utilising planting to improve amenity of these recreational routes and clear way-marking of important destinations such as Ford Station and Ford Lane.

3.26 An extension to the public right of way network should be provided, creating a single continuous and legible pedestrian / cycle link from Ford Lane to the new local centre and beyond to Yapton and Climping.

Boundaries

3.27 Dwellings must overlook the parkland and not 'back on', to achieve a strong edge and achieve adequate natural surveillance.

3.28 A woodland buffer is to be located along the boundaries with the adjacent industrial uses, with a minimum 10 metre buffer to neighbouring uses for visual screening and noise attenuation in accordance with the green and blue infrastructure parameter plan.

Hardworks

3.29 Surface treatments should be consistent with the rural character of the parkland, using natural materials and earth tones.

Planting

3.30 Existing trees must be retained within the open space wherever possible. Selective removal should be considered only where there are accessibility benefits or to achieve adequate natural surveillance.

3.31 Planting should comprise a high proportion of native species mixed with ornamental accents which provide colour and variation in texture but should overall create a soft and naturalised character.



Acceptable surface treatments appropriate to the parkland setting

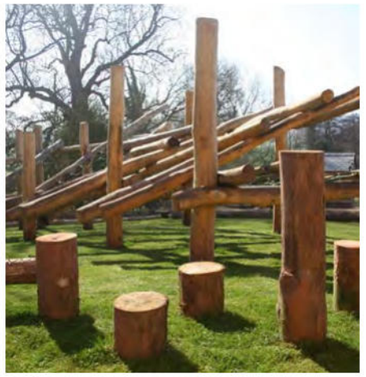


Ensure spaces are accessible to all

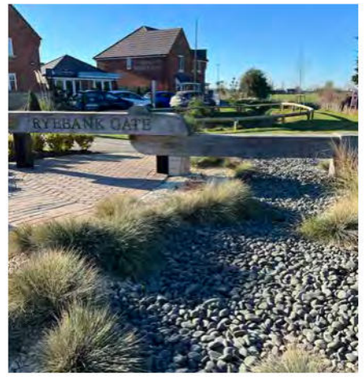




Provide flexible amenity space



Utilise natural play features





Utilise public art and features that communicate the site's history

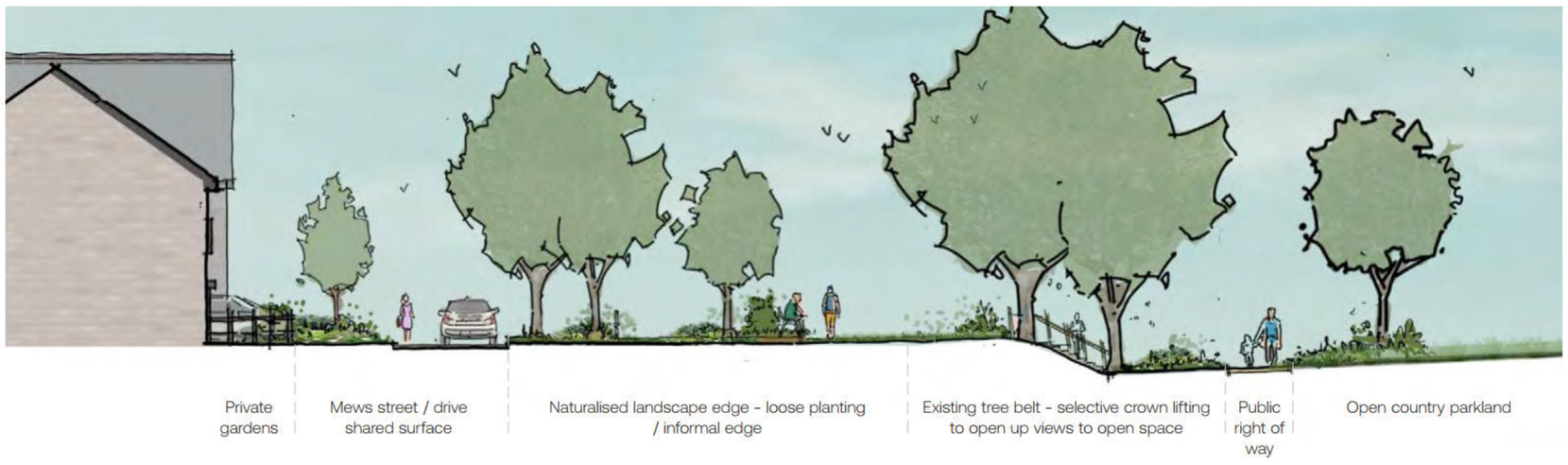


Figure 3.6. Typical section through Landings Green showing an acceptable approach to design and materiality

Arun Way: overview

Overview

3.32 Arun Way will provide a green link from east to west across the northern part of the development, connecting into Landings Green.

3.33 Principally, it will provide a corridor for both people and wildlife, linking the existing settlements of Ford and Yapton, contributing to the amenity of the new neighbourhood and providing doorstep spaces for play and social interaction.

Character

3.34 The key characteristic of Arun Way should be the mature tree belt and landscape structure. Any enhancements or modifications to the space must maintain the integrity of this tree group, creating a natural green corridor which should help assimilate the built development in its rural context. New planting or hardworks should seek to enhance this rural feature, supplementing with native species and informal character.

Function

3.35 Arun Way must make provision for the following uses:

- Doorstep play spaces including trim trail utilising natural play features;
- Series of small insular spaces for social interaction and quiet contemplation;
- Structural planting and improved interface with neighbouring industrial uses, providing screening and appropriate levels of enclosure;
- New, locally indigenous habitats which are structurally diverse and connected with protected areas where disturbance is more limited; and
- Enhancement of the key east-west footpath link between Yapton and Ford Station.

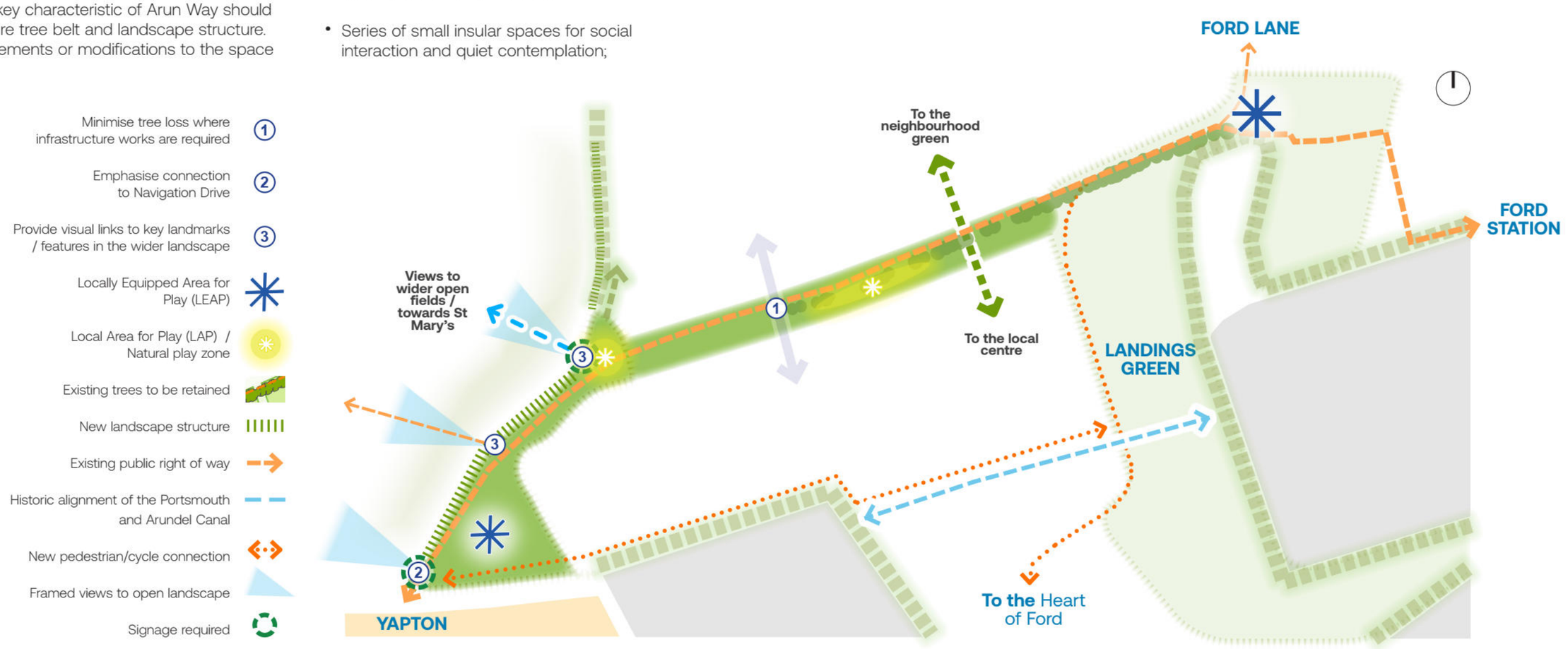


Figure 3.7. Arun Way framework plan

Arun Way: design requirements

Movement and access

3.36 The open space should follow the general alignment of the existing public right of way (PROW) which should be retained and enhanced to provide a safe and overlooked route for new and existing residents. Where passing through or adjacent to existing trees, adequate clear canopies should be maintained and sub canopy vegetation removed to improve surveillance and safety.

Boundaries

3.37 Strong, formal or urban boundaries should be avoided in favour of soft planting and use of appropriate enclosure such as post and rail or cleft chestnut pale fencing.

3.38 Dwellings must overlook the parkland and not 'back on', to achieve a strong edge and achieve adequate natural surveillance.

Hardworks

3.39 Surface treatments should be consistent with the rural character of the green corridor and wider parkland, using natural materials and earth tones.

Planting

3.40 The existing line of conifers at the west of this walk will undergo a slow phased removal and replacement with a more appropriate and dense line of native trees and a low hedgerow, which should ensure that the screening properties of the field boundary are maintained.

3.41 Planting should be predominantly native with ornamental species used sparingly, using visually appropriate and wildlife beneficial species to provide accents.



Arun Way should include intimate, insular spaces for doorstep play and social interaction



Features should be of a small scale, utilising tactile and natural materials

Small scale doorstep play should for under 5 age groups.

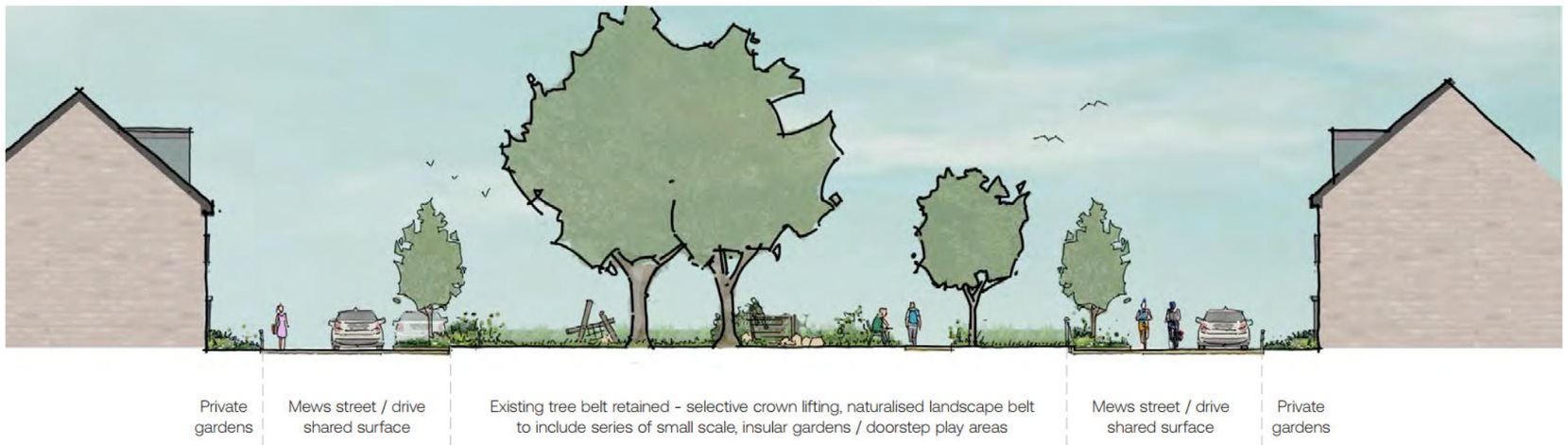


Figure 3.8 Typical section through Arun Way showing an acceptable approach to design and materiality

Runway Park and Ryebank Park: overview

Overview

3.42 Taking inspiration from the former airfield, the Runway Park is located on the south eastern corner of the site and should provide a mix of recreational functions and appropriate transition to and interface with the village of Climping and Rudfield Industrial Estate.

3.43 A linear green corridor is an important extension of the park through the development, providing doorstep spaces for play and interaction. Further coding on the Runway Corridor is provided on pages 36 to 37.

Character

3.44 Runway Park should be contiguous with other open space within the development, sharing key characteristics and semi-informal, naturalised character appropriate to the wider rural setting and reflective of nearby townscapes. This is critical to ensuring that the neighbourhood feels cohesive and creates a shared sense of place.

3.45 Within this framework, Runway Park should be distinct, both in terms of function and through subtle variations in the landscape's geometry, use of accents, features and public art to ensure the landscape's time-depth is maintained, reflecting the site's former use as an airfield.

3.46 Such landscape features must not significantly urbanise the landscape and it is important that, while creating a rich tapestry of immersive, yet contemporary green spaces, the landscape's overall character should remain semi-informal, with an appropriate natural and low key interface with Climping

3.47 Ryebank park is principally a space which has been provided for floodwater attenuation. However, this space should be designed to ensure that it makees a signifcant contribution to the setting of the built development, providing a rich, naturalised series of semi-wet and permanently wet habitats.

3.48 Sufficient width of space between the top of basin and semi-private drives of a minimum 5m for ciirculation shall be provided including off-highway pedestrian and cycle links between Yapton and Climping. Additional insular spaces for play, contemplation and quiet obervation of the natural habitats shall be provided through the linear park at key convergences with green corridors / links.

Function

3.49 Runway Park must make provision for the following uses:

- A range of playable landscapes including a Locally Equipped Area for Play (LEAP), opportunities for incidental play including kick-around space, fitness trail and a series of Local Areas for Play at appropriate locations;
- Allotments including provision for a range of plot sizes, raised and accessible beds, community orchards, communal area, parking and mains water supply;
- Amenity green space providing flexible multi-functional spaces for a range of active and quiet recreational activities;
- Structural planting and improved interface with neighbouring industrial uses, providing screening and appropriate levels of enclosure; and
- Enhanced, locally indigenous habitats which are structurally diverse and connected with protected areas where disturbance is more limited.



Figure 3.9. Runway Park framework plan

Runway Park and Ryebank Park: design requirements

Movement and access

3.50 The public right of way connecting Yapton to Climping / Rudfield Industrial Estate must be retained. Where diversions are sought, these should be considered in terms of the wider benefit to the development structure and legibility and should avoid significant deviations from the existing route.

3.51 Condition 7 requires the design code to provide details of the provision of interpretive material and a heritage themed walk along the route of the former western arm of the runway. Further details on this can be found under heritage landscapes on pages 36 to 37, and public art and signage on pages 68-69 .

3.52 Opportunities to create new connections to the existing movement network including Rollaston Park and incidental open space on Horsemere Green Lane should be explored where viable.

Boundaries

3.53 The new site edges should comprise structural native planting providing adequate screening of existing industrial development (to the east) and to achieve a clear visual barrier between the new development and Climping to prevent coalescence and protect the village's integrity.

Hardworks

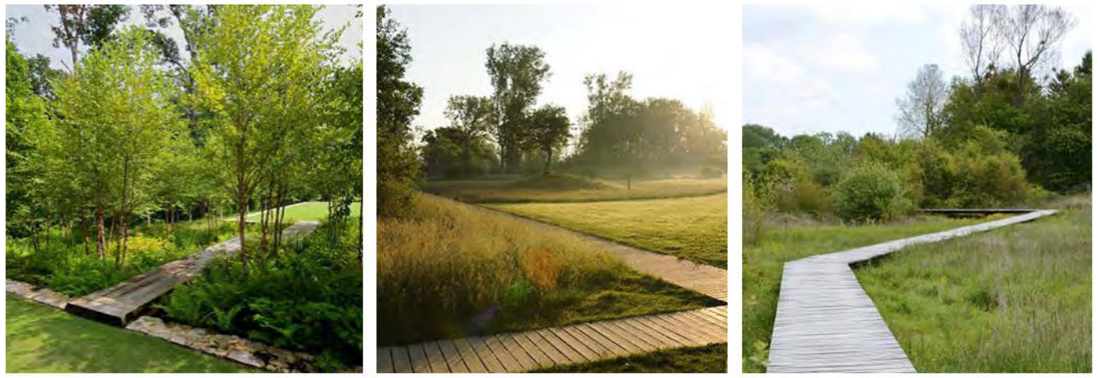
3.54 Surface treatments should be consistent with the rural character of the parkland, using natural materials and earth tones.

3.55 The landscape design should take cues from the site's former use as an airfield, translating the airfield's geometry and utilising furniture and structural forms which reflect the site's history. These features should read as subtle accents and should avoid urbanising the landscape and jarring with the surrounding rural context.

Planting

3.56 Planting should comprise a high proportion of native species mixed with ornamental accents which provide colour and variation in texture but should overall create a soft and naturalised character.

3.57 Planting should seek to improve the habitat and amenity value of existing boundary vegetation by replacing extensive non native species where they appear incongruous in the landscape.



Paths to be laid out on a linear geometry, following the airfield's setting out, but should be set out in a soft and naturalised landscape.





Utilise structures and furniture reflecting aeronautical forms as accents in the landscape



Setting out of orchards/trees should provide further linear accents



Figure 3.10. Typical section through Runway Park showing an acceptable approach to setting out and character

Heritage landscapes: Canal Corridor

3.58 Remnants of the area's industrial heritage are a key defining and unique characteristic of the site which must be preserved and incorporated into the development. Evidence of this heritage is reflected in the landscape pattern, structural planting and areas of hardstanding which is in some contrast to the wider environs. Other features of the site's past, such as the Portsmouth and Arundel Canal, have been eroded but remain an important asset.

3.59 The development presents an opportunity to preserve and enhance the site's heritage and, through a sensitive and high quality design, should improve understanding of the site's significance in modern history. The outline masterplan makes provision for broad corridors which preserve and reflect both the airfield's former runway and the Portsmouth and Arundel Canal.

3.60 The following pages set out the principles and mandatory requirements for both the canal and runway, which will ensure that these heritage assets are preserved but also make a significant contribution to the distinct sense of place.

3.61 Pedestrian footpaths shall continue beyond the extent of the heritage parks, ensuring these spaces are linked into the wider existing public rights of way and proposed pedestrian/ cycle network through the site, and allowing these spaces to be enjoyed by all. This includes continuing a pedestrian footpath along the northern boundary of Ford Airfield Industrial Estate to the junction of PROW 363 and 200, connecting the proposed canal park with the reinstated route along the old towpath within the recent Emerald Gardens development to the west in Yapton.

Canal Corridor

3.62 Running east to west through the central neighbourhood is the historic alignment of the Portsmouth and Arundel Canal. Although it is no longer evident on the site, the proposed development should celebrate this piece of history and reflect the former alignment of the canal through a linear park that connects from the primary street to the Landings Green.

The Canal

The former canal alignment must be clearly defined in the landscape and reflect its full width of 4m along the entire length of the section within the site. The canal shall take the form of a shallow depression of 0.3-0.5m in the landscape, defined by high quality paved edging.

The depression shall function as a rain garden, supporting semi-aquatic species that tolerate intermittently dry conditions, in addition to a rectilinear pond, minimum 4m by 10m, adjacent to the Lock Keepers Wharf.

The rain garden will be supported by run off from the site, unless this is deemed unfeasible (for technical reasons only), then a comparably high quality and distinct design must be sought and fully justified for Arun District Councils approval prior to approval of the RMA.

Lock Keepers Wharf

The Lock Keepers Wharf should act as a landmark along the canal alignment, stepping forward of the adjacent building line so that it is prominent from either end of the canal.

It must be distinctive within the street scene, with a contrasting brick colour to the adjacent buildings and shall include the use of hypergraphics / wording reflective of the black wording typically found of wharf buildings (see The Lock Keepers image overleaf), for example through the use of black bricks within the brickwork façade, stepped bricks and painted black lettering.

The scale and architectural style shall be reflective of the old canal buildings typically found along a canal, with industrial style black metalwork and balconies, and black window surrounds.

Public art

The public art strategy must comprise minimum 3 installations with clear reference to the former canal's industrial heritage, and include a large, life-size lock gate closely associated with the Lock Keepers Wharf. The lock gate must be constructed of hardwood and steel powder coated black.

In addition to the sculptural elements, interpretation of the site's history must be aided by information panels at the terminus of the canal and where it leaves the site, describing the canal's place in the wider network and connections to key local industrial sites. Further interpretation of the site's heritage shall be aided by incidences in the landscape, including panel inserts to surfaces, bespoke signage and paving features.

Further information on public art can be found on pages 68 to 69.

Play

The overall corridor shall be a minimum 15m wide (excluding any roads, front gardens, and/ or dwellings) and include a well integrated neighbourhood park of a minimum 0.2ha and play space.

Pages 40 to 41 set out the theme and play strategy including the type and character of play spaces located within the Canal Corridor. The play area within the corridor shall include two LAPs/ doorstep play spaces aimed at young children under 6.

A single LAP must be located at a key node adjacent to the Lock Keepers Wharf. A further LAP shall be located at a key and prominent location to be agreed at the RMA stage.

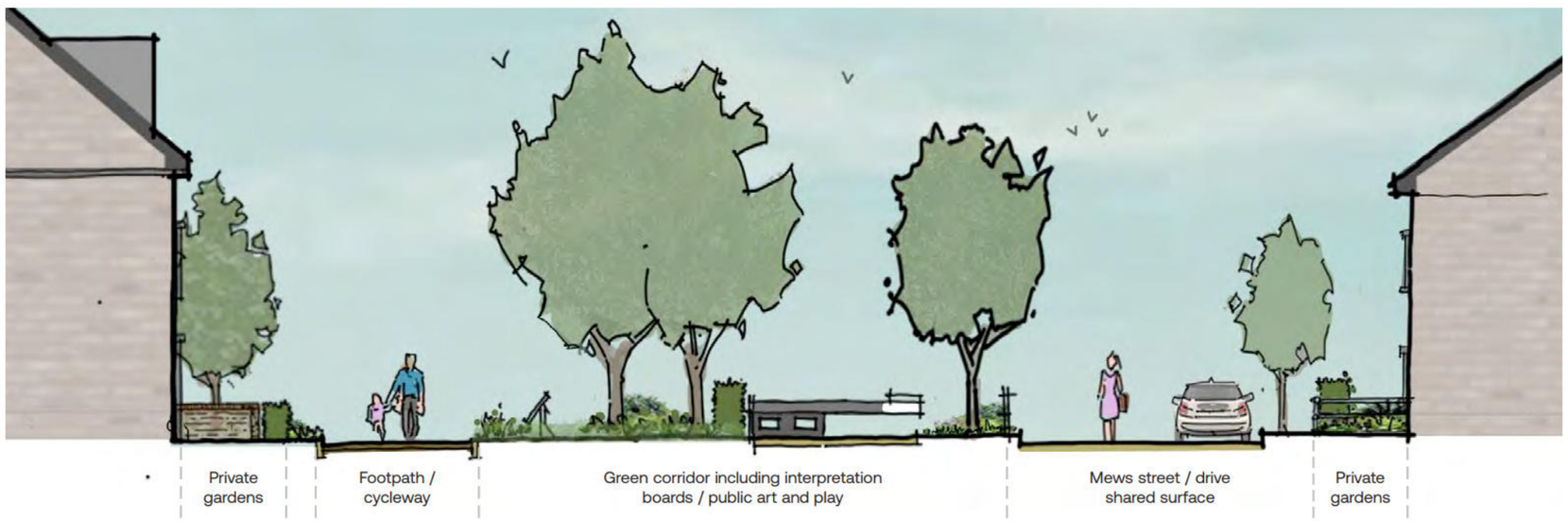
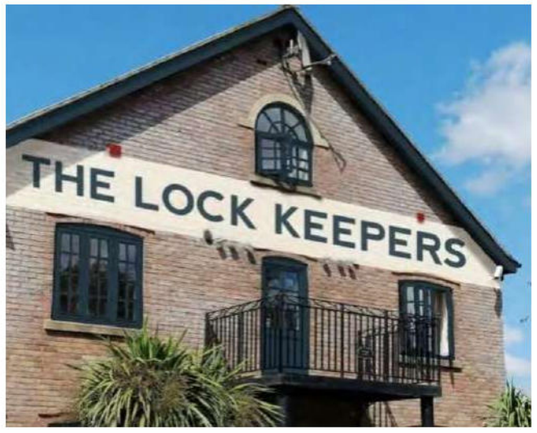


Figure 3.11. Indicative section through Canal Corridor (A-AA)

Heritage landscapes: Canal Corridor



Public art and signage shall indicate the continued route / ultimate destination of the canal where it leaves the site's boundary and include clear references to the site's industrial heritage.



Architectural detailing should reflect the canal's industrial heritage and contribute to the canal park's distinct character. A landmark building, stepping forward from the building line, should be provided to represent a Lock Keepers wharf style building. Adjacent to the wharf, shall be a key focal point, including a standing water body, informal seating, play, and public art installation.



Visual cues, including planting, paving and localised use of bioretention swales and permanent water adjacent to the Lock Keepers Wharf, should be used to define the former canal's entire length and width (4m), enhancing the sense of place and time depth.



Signage and interpretation boards shall be located at key nodes to signpost key connections to other areas of the development as well as signposting the former route of the canal and key landmarks in the local area.

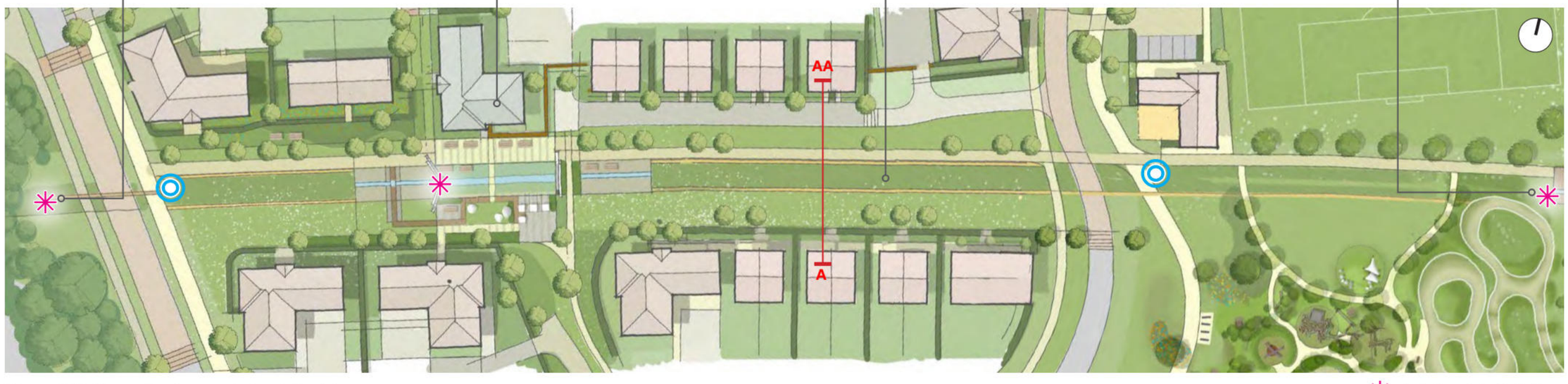


Figure 3.12. Illustrative layout of Canal Corridor

Heritage landscapes: Runway Corridor

Runway Corridor

3.63 The Runway Park forms a defining feature of the southern neighbourhood. A branch of the park follows the existing alignment of the western arm of the runway, Runway 07. The geometry and features within the space should reflect the site's former use as an airfield and the strong rectilinear alignment of the runway.

3.64 The principal feature of the Runway Corridor shall be a heritage themed walk following the alignment of Runway 07. This page, together with the public art and signage coding to reflect the site's aviation heritage on pages 68 to 69 within the **PUBLIC SPACES** section, and zone specific coding for the Runway Park on pages 32 to 33, set out the components of the landscape strategy which will aid in the preservation and interpretation of the site's heritage.

3.65 The transect provides an indicative approach for the Runway Corridor and demonstrates how the principles could be translated into a detailed design. Although not shown here, a consistent approach must be followed for the entire length, ensuring that the key elements described here are followed for the entire length of the Runway Corridor.

Layout and character

The landscape design shall take cues from the site's former use as an airfield, translating the runway's linear geometry.

Two key elements; a series of low level, low lumen lighting elements and a strong avenue of semi-mature trees (maximum 10m intervals) shall define and emphasise the path of the former runway. Within this prominent linear framework, the path shall deviate, creating a varied and interesting walk through a series of spaces.

The built form must further emphasise the runway's geometry, creating a bold development edge with a strong repeated rhythm, reflected in the roof profile, facade and boundary treatments. A combination of the built form, boundary treatments and structural planting must achieve a high degree of enclosure, creating an insular space with a clear visual focus along its axis.

Function

The Runway Corridor shall be a highly active space, designed as a key axis of movement from Yapton to the Heart of Ford and Ford Market, as well as providing doorstep amenity space for the new neighbourhood.

Along the length of the corridor, a series of six insular and diverse spaces must be created, which support social and recreational uses for the community. These spaces shall include opportunities for play, including small scale sport pursuits (such as table tennis or boules), informal seating areas, quieter spaces for contemplation, and flexible spaces for impromptu community events.

Public art

The proposals must include interpretive material and public art as focal features at key nodes and principal spaces, at the convergence of the public right of way (PRoW) with the Runway Corridor, and at the terminus of the corridor within the Runway and Ryebank parks. The locations and further detail are provided on pages 68 to 69.

Public art shall be of an aeronautical theme located throughout the length of the 'runway'. A large scale focal piece at the southern end of the corridor shall form a strong framed feature along the vista of the Runway Corridor from the Runway Park and from within the Ryebank Park / southern gateway to the development.

Play

Pages 40 to 41 set out the theme and play strategy including the type and character of play spaces located within the Runway Corridor. The play area within the corridor shall include two LAPs/doorstep play spaces aimed at young children under 6.

A single LAP must be located at a key node at the convergence of the Runway Corridor with the existing PRoW. A further LAP shall be located at a key and prominent location to be agreed at the RMA stage.

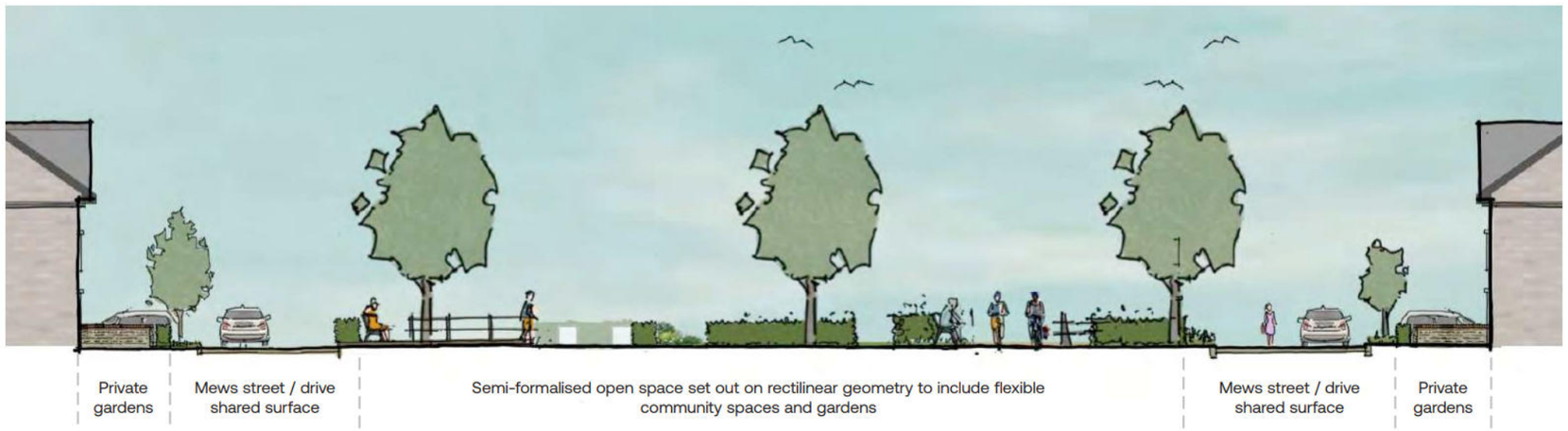


Figure 3.13. Indicative section through the Runway corridor (B-BB)

Heritage landscapes: Runway Corridor



Public art of an aeronautical theme located throughout the length of the 'runway'. A focal piece at the end of the park shall form a strong framed feature along the vista and shall be of a large scale (3-5m) and with a clear reference to historically locally stationed aircraft.



Links to the Yapton Road airfield memorial should be created, making a clear association between the runway, its significance during the war and those that sacrificed their lives.



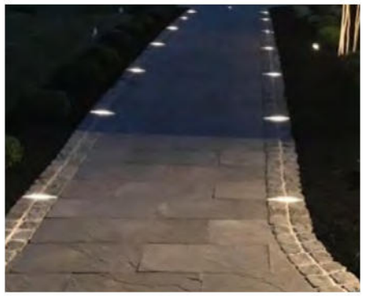
A sequence of six spaces shall be distributed along the length of the runway, set out on a clear rectilinear geometry.



Interpretation boards must be located at key nodes to communicate the airfield's history and the runway's significance during WW1 and WW2 (refer to pages 68 and 69 for locations and description).



A path along the length of corridor must be provided within the linear framework, characterised by straight lines and laid out along the axis of the runway for the entire length to the Runway Park and Ford Market.



Soft, feature, low lumen lighting elements and a strong avenue of large trees shall mark the path of the former runway at a maximum of 10m intervals.

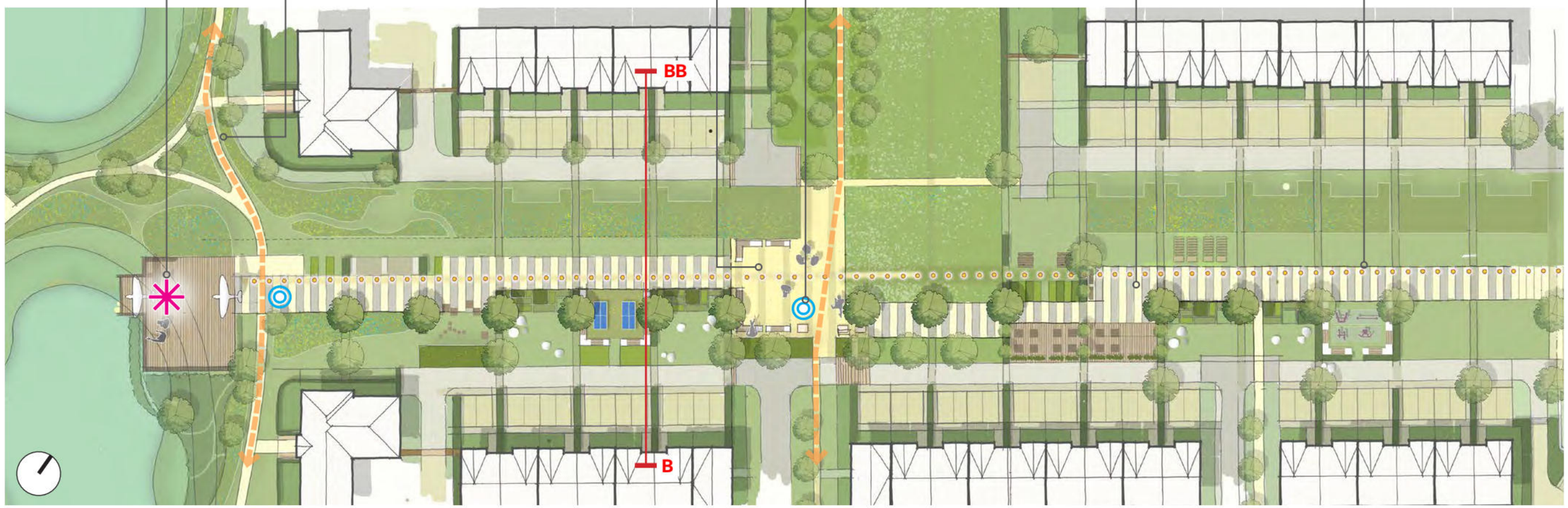


Figure 3.14. Illustrative layout of the Runway corridor

Public art installation
Signage

Play strategy

3.66 The following pages set out the network and hierarchy of play spaces which must be provided throughout the public open space as part of a comprehensive play strategy.

3.67 This section outlines mandatory design requirements in addition to the principles set out in the Planning and Design for Outdoor Sport and Play (2008) guidance produced by Fields in Trust, Play England's' 'Design for Play' and Arun District Council's Open Space, Playing Pitches & Indoor & Built Sports Facilities SPD (2020).

3.68 A policy compliant 1.815ha of formal play space must be provided on site throughout the site's public open spaces, as set out on page 25 of this document and in accordance with the Open Space, Playing Pitches & Indoor & Built Sports Facilities SPD.

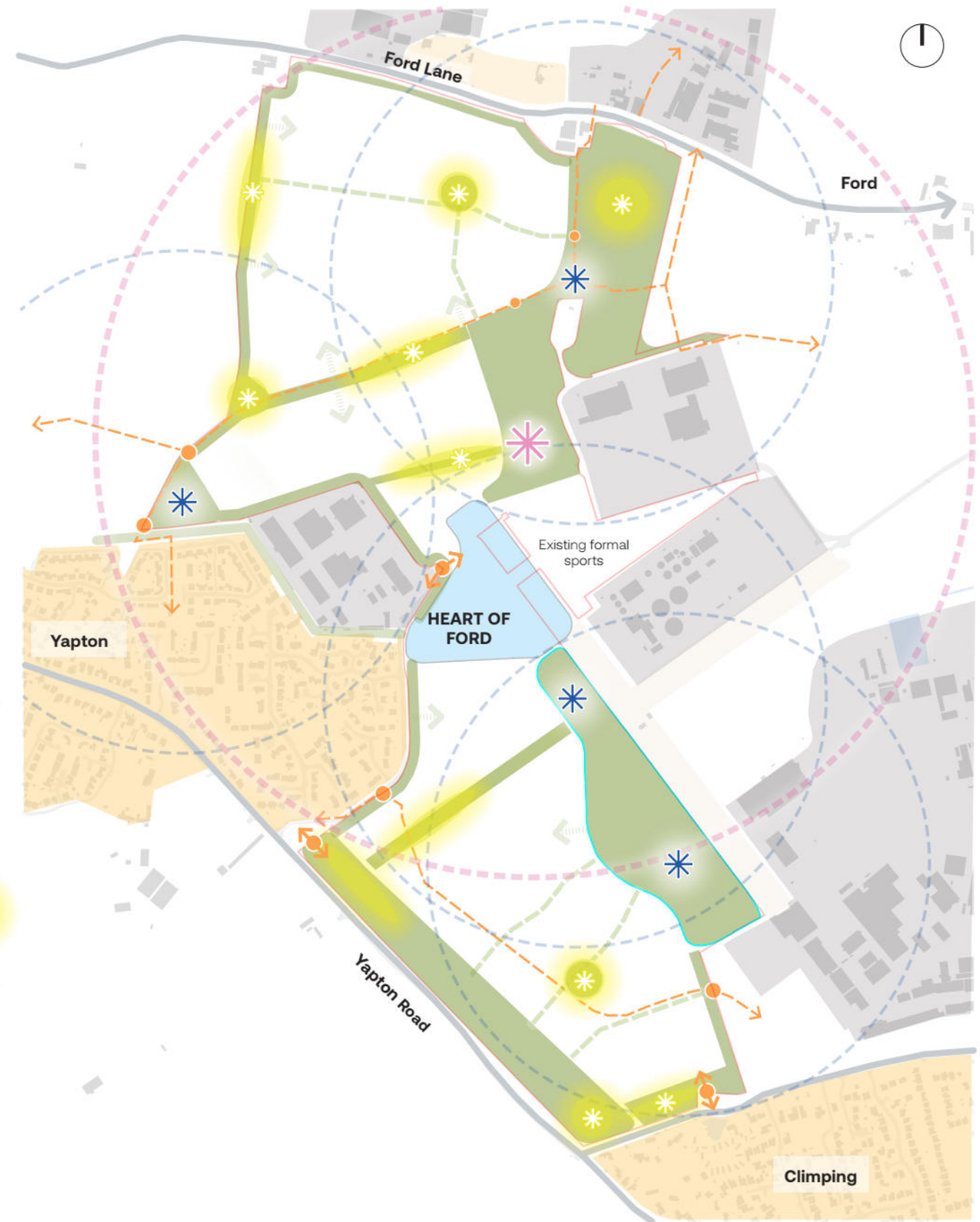
3.69 The following spreads set out the minimum areas for each type of equipped play space: many will need to be in excess of the minimum to ensure the combined play area is policy compliant.

3.70 The play strategy sets out how the mandatory local play quantity standard can be achieved through the provision of formal, equipped areas of play.

3.71 The equipped areas shall be supplemented by Local Areas for Play, fitness and play trails, and natural play.

3.72 Play spaces must include a variety of play experiences, including opportunities for informal play for all age groups. The play provision for each future development phase should therefore provide a complementary mix of play experiences as part of a site wide strategy to ensure the needs of all groups are adequately met.

3.73 The Track Zone described on pages 48 to 49 and located within Landings Green shall form the principal component of the play provision, and should respond to local need.



Neighbourhood Equipped Area for Play (NEAP) / Track Zone - precise location to be determined through future RMAs

Locally Equipped Area for Play (LEAP) - precise location to be determined through future RMAs

Local Area for Play (LAP) / natural play / play and fitness trails

Informal Open Space*

***Informal open space should include designated areas for playable features and interactive elements including sculptures, trim trails and natural play. The nature and aesthetic of these elements should reflect the underlying character of the open spaces and they should be located at key nodes or on designed play trails.

Figure 3.15. Play strategy

Play strategy

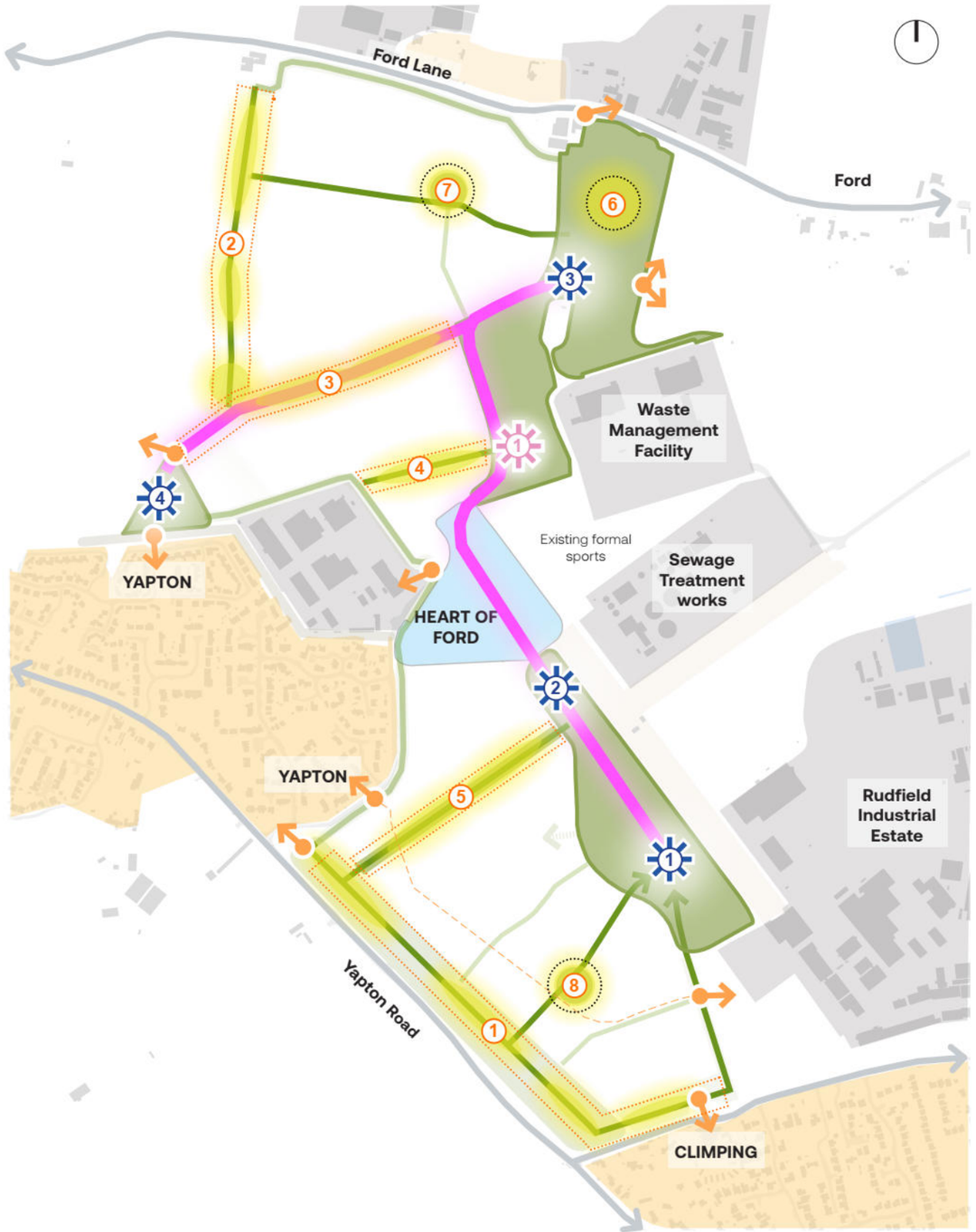


Figure 3.16. Play strategy: quantum

3.74 Figure 3.16 sets out the distribution of designated play spaces across the green infrastructure network.

3.75 For each play space, the area that shall be provided in each location is noted below. For the NEAP, LEAP and LAPs located in the neighbourhood parks, the play provision is to be provided in a single location.

3.76 The LEAPs and NEAPs shall be located within the principal open spaces along the eastern edge of the site and at key nodes along the principal cycle network including at the western end of Arun Way, on the edge of Yapton.

3.77 The location of each LEAP and NEAP shall therefore be located where activity levels are highest and in prominent locations on clear desire lines. The purpose of such is to encourage use of the play areas and maximise natural surveillance, but also encourage integration of the existing and new communities.

3.78 For each of the clusters, play provision is to be distributed along a network of designated spaces and must include LAPs, play/fitness trails and natural play areas as defined below. The type and requirements of each trail are set out on pages 44 to 45.

3.79 The play provision must be unique, high quality and bespoke, responding to and enhancing the character of the landscape in which it sits and contributing to the development's overall sense of place. Standardised approaches to play design must therefore be avoided.

3.80 The following pages set out the required character and minimum quality of the play space designs. They provide an overarching strategy designed to ensure that a comprehensive, complementary, and highly bespoke play scheme is delivered.

NEAP / Track Zone: 4000sqm (to include a parkour trail (300sqm) and kickabout area)

Locally Equipped Area for Play (LEAP)

LEAP 1: 1800sqm + 300sqm sensory trail
LEAP 2: 1800sqm
LEAP 3: 1800sqm
LEAP 4: 1800sqm

Local Area for Play (LAP) / natural play / play and fitness trails

Cluster 1: 1350sqm (to comprise 4no. LAPs)
Cluster 2: 1500sqm (to comprise 3no. LAPs and a senior fitness trail (circa 300sqm))
Cluster 3: 600sqm (to comprise 2no. LAPs)
Cluster 4: 600sqm (to comprise 2no. LAPs)
Cluster 5: 600sqm (to comprise 2no. LAPs)
Cluster 6: 1400sqm (to comprise a large natural play area inclusive of 1no. LAP and a fitness trail (circa 300sqm))
LAP7: 300sqm (to comprise a single LAP)
LAP8: 300sqm (to comprise a single LAP)

Play strategy: theming

3.81 The play scheme should contribute positively to the landscape. It should provide visual interest and enhance the development's character, responding positively to the site's heritage and context. Equally, it should support a variety of activities and experiences for all demographics and abilities. All play areas must therefore be entirely inclusive.

3.82 While the play areas are intended to enrich the lives of new and existing residents, they have a role in the development of young children and in promoting health and fitness for all.

3.83 To ensure that the play strategy provides a diverse variety of play experiences, a high quality play environment, and also targets key skills development, an overarching theming strategy has been set out to ensure that all play areas are considered holistically.

3.84 Figure 3.17 defines each distinct play zone which must comprise a complementary mix of play experiences and themes. Figure 3.18 overleaf sets out in more detail the theme of each zone, including the types of experiences supported, the character of the spaces and the targeted skills for which the play areas are intended.

3.85 The themes are broad and intended to respond to the immediate locality. So, for example, where the development's character responds to and enhances the industrial heritage of the site, the play areas shall respond accordingly, providing experiences which mirror industrial imagery, using appropriate materials of an industrial character and creating an overall rich and challenging environment.

3.86 These themes should be translated across the full hierarchy of play spaces, whether trails, LAPs, LEAPs or NEAPs. While the zones are concerned with the character and theme of the play spaces, the following spreads also set out the spatial and functional requirements of each designated play area.

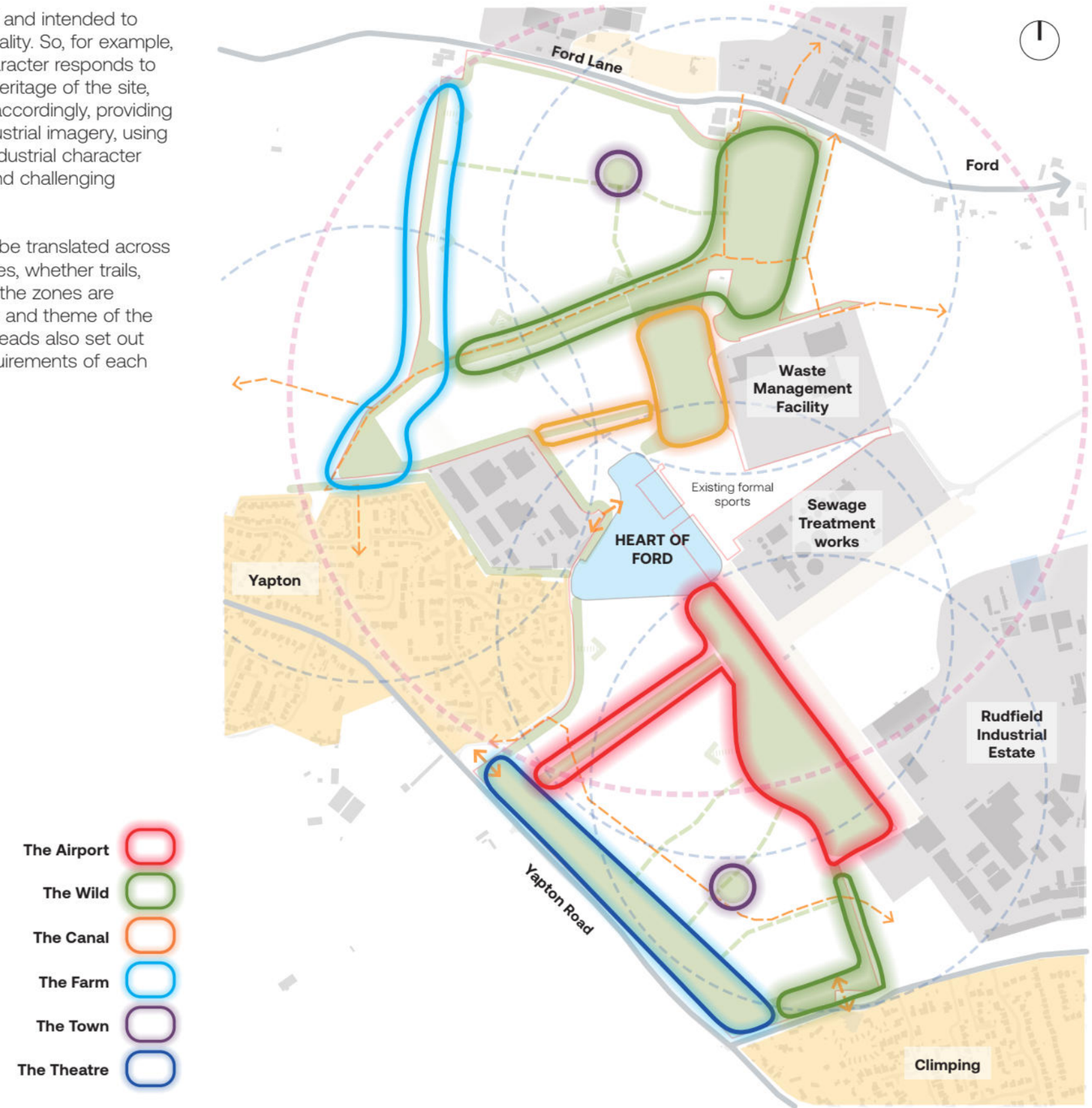


Figure 3.17. Play zones

Theme: The Airport - aeronautical themed play areas including a mini 'runway' feature and airport themed equipment.

Key types of play: mechanical / active play features to be incorporated including a plane, runway feature and control tower, in addition to other moving aerial play features such as zip lines.

Targeted skills development: fine motor skills / problem solving and imagination / spatial awareness / depth perception.

Character: formalised layout to accentuate and reflect the strong geometry of the former runway and new Runway Park.

Colour and materiality: timber and powder coated steel (RAF colours to be utilised throughout - azure blue/grey-green).

Theme: The Wild - discovery and exploration of the natural world.

Key types of play: explorative play and discovery / active / adventure play.

Targeted skills development: gross motor skills; balance, coordination, agility, fitness.

Character: nature focused informal layout to complement Landings Green / Arun Way / Climping edge. Play features should be set within a strong, naturalised landscape structure, including large trees, shrub planting and long grasses.

Colour and materiality: natural materials and earth tones only.

Theme: The Canal - local industry and the Portsmouth and Arundel Canal

Key types of play: rule based play with strong emphasis on kinetics and how things move. Play features should include engineering elements with a medium / large boat play feature and other elements with strong references to the canal.

Targeted skills development: gross motor skills, balance, coordination and cognitive reasoning.

Character: linear arrangements and industrial features to strongly accentuate and reflect the former canal route.

Colour and materiality: timber and powder coated steel (blue tones but avoiding bright colours).

Theme: The Farm - role play focus with strong emphasis on creative expression.

Key types of play: socio-dramatic play / creative expression / role play / social play.

Targeted skills development: fine motor skills / imagination / creativity / empathy / emotional regulation.

Character: local farm animal themed play elements in informal arrangements to encourage use of imagination.

Colour and materiality: natural materials and earth tones only.

Theme: The Town - home and living themed play including market / shop / school / emergency services.

Key types of play: socio-dramatic play / creative expression / social play / active play.

Targeted skills development: social skills / imagination / creativity.

Character: formalised series of spaces, set at an intimate scale to encourage social interaction.

Colour and materiality: natural materials with muted colours / avoiding primary and bright colours.

Theme: The Theatre - to have a strong focus on performance and creativity.

Key types of play: this zone should have a strong emphasis on creative expression including music and socio-dramatic play / role play / social play.

Targeted skills development: fine motor skills / imagination / creativity / empathy / emotional regulation.

Character: inviting and suggestive arrangement to encourage interaction with sensory elements.

Colour and materiality: natural materials with muted colours / avoiding primary and bright colours.

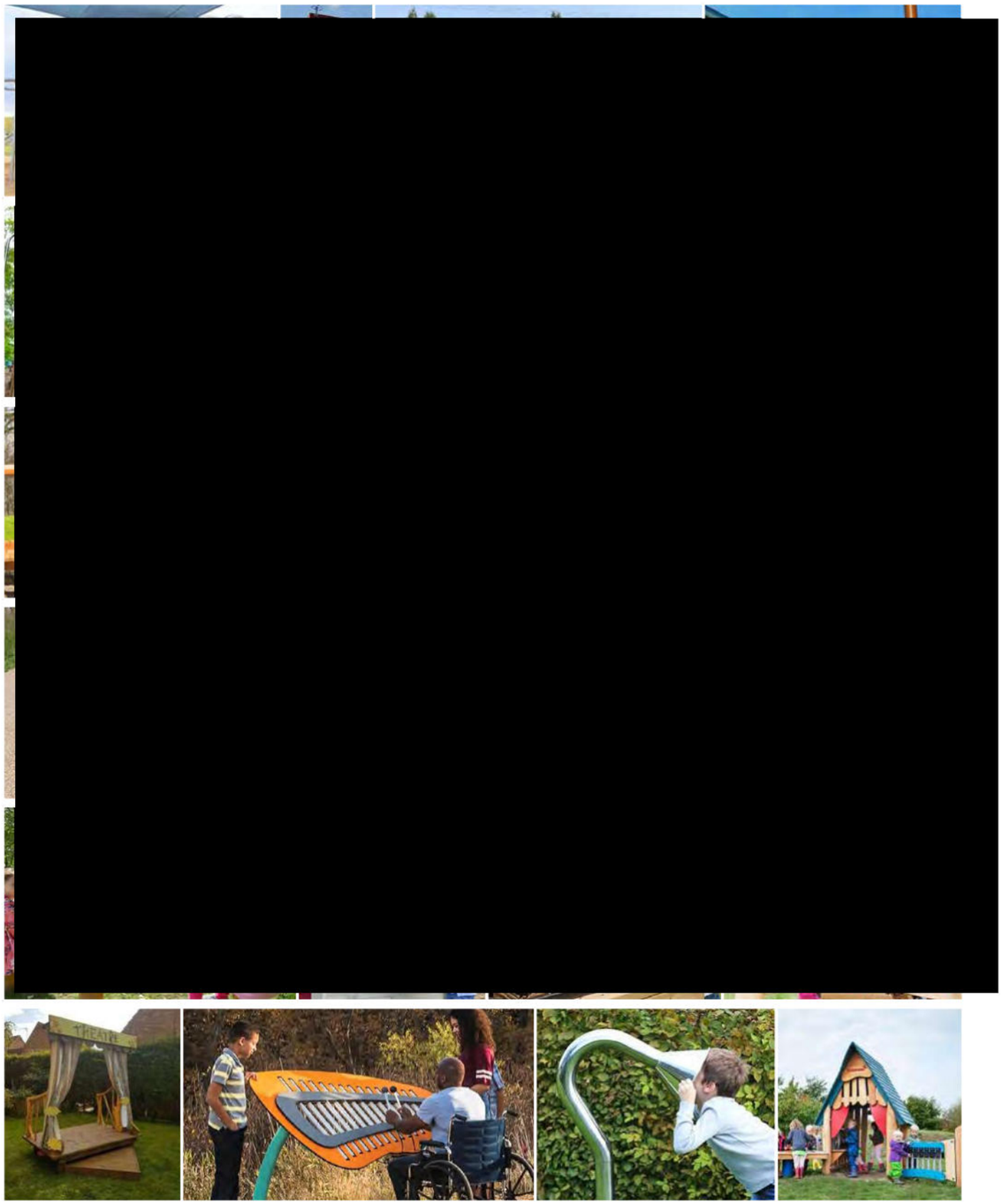


Figure 3.18. Play theming strategy

General play design requirements

3.87 The standards set out on this page apply to all play spaces including equipped spaces and informal play.

3.88 Each play space must be well located, on clearly way marked pedestrian and cycle routes, in safe locations free from high volumes of traffic, and with good natural surveillance. Each play space must be distributed according to the play strategy plans in figures 3.15 and 3.16, set out on pages 38 to 39.

3.89 Each playable space must be high quality and 'bespoke', responsive to the wider site context as well as the immediate setting, ensuring that the play spaces contribute positively to the landscape as well as providing play opportunities which reflect and enhance the surrounding environment.

3.90 Play spaces must be designed imaginatively, utilising variations in landform set within a well designed soft planting scheme.

3.91 Primary and bright colours must be avoided in favour of natural materials and neutral tones.

3.92 Play designs must make use of natural elements, with strong visual and physical associations with the natural environment, maximising opportunities for wider exploration and informal play.

3.93 Play provision must provide a wide range of play experiences including physical, explorative, social and constructive play, and include quiet and open, flexible spaces.

3.94 Play areas must include both formal and informal spaces that offer stimulating and challenging environments.

3.95 Play opportunities must be entirely inclusive, appropriate to a range of age groups, abilities, and gender, and avoid tensions with other uses, ensuring appropriate buffers are employed to private residences.

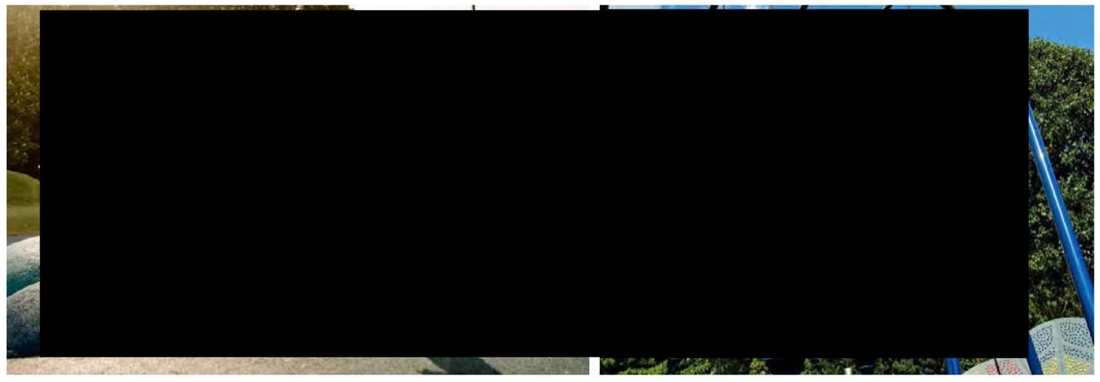
3.96 To aid future maintenance and clearly define long term management obligations, the areas of LEAP and NEAPs must be clearly defined but, where possible, avoid using fences and enclosures in favour of soft and semi-open boundaries allowing children to connect with the surrounding natural environment.

3.97 As part of a comprehensive play strategy, a network of small play areas, fitness trails and play trails must be distributed throughout the green infrastructure. These spaces must be located at highly visible locations on clearly way-marked routes.





Play experiences must be appropriate to the target age group and ability and sufficiently challenging.



Play spaces must be closely associated with the natural environment, encouraging wider exploration.





Play spaces must be designed imaginatively and make a positive contribution to the landscape.

Figure 3.19. Acceptable approach to design and materiality for play areas

Equipped and playable space

3.98 Playable spaces can greatly extend the range of play opportunities offered to children and can be highly cost effective. Children and young people need to feel welcome in playable spaces. Most public open spaces and parks have enormous potential for play value, and children and young people should be encouraged and supported in playing in these spaces.

3.99 In addition to formal equipment, each designated play space should include high quality, natural and informal playable spaces which encourage discovery and exploration. Playable spaces must be bespoke, reflecting the themes outlined on pages 40 to 41, and offer meaningful and challenging opportunities for play.

3.100 Areas for imaginative play shall include natural play features as well as integrated landscape features which, by association with equipped spaces and clear design cues indicating playable space, should be incorporated into designated play areas.

3.101 The following pages set out the spatial requirements for the LAP, LEAP and NEAP/Track Zone. The following are stipulated and mandatory requirements for each designated play space:

- The spatial requirements of each designated space including the proportion of equipped and playable space;
- Buffers to nearest habitable rooms;
- The minimum number of play experiences;
- The scale and type of experiences required;
- The target age ranges and abilities; and
- Other requirements including furniture.

3.102 Where included, multi-experience play features only count as one play experience.

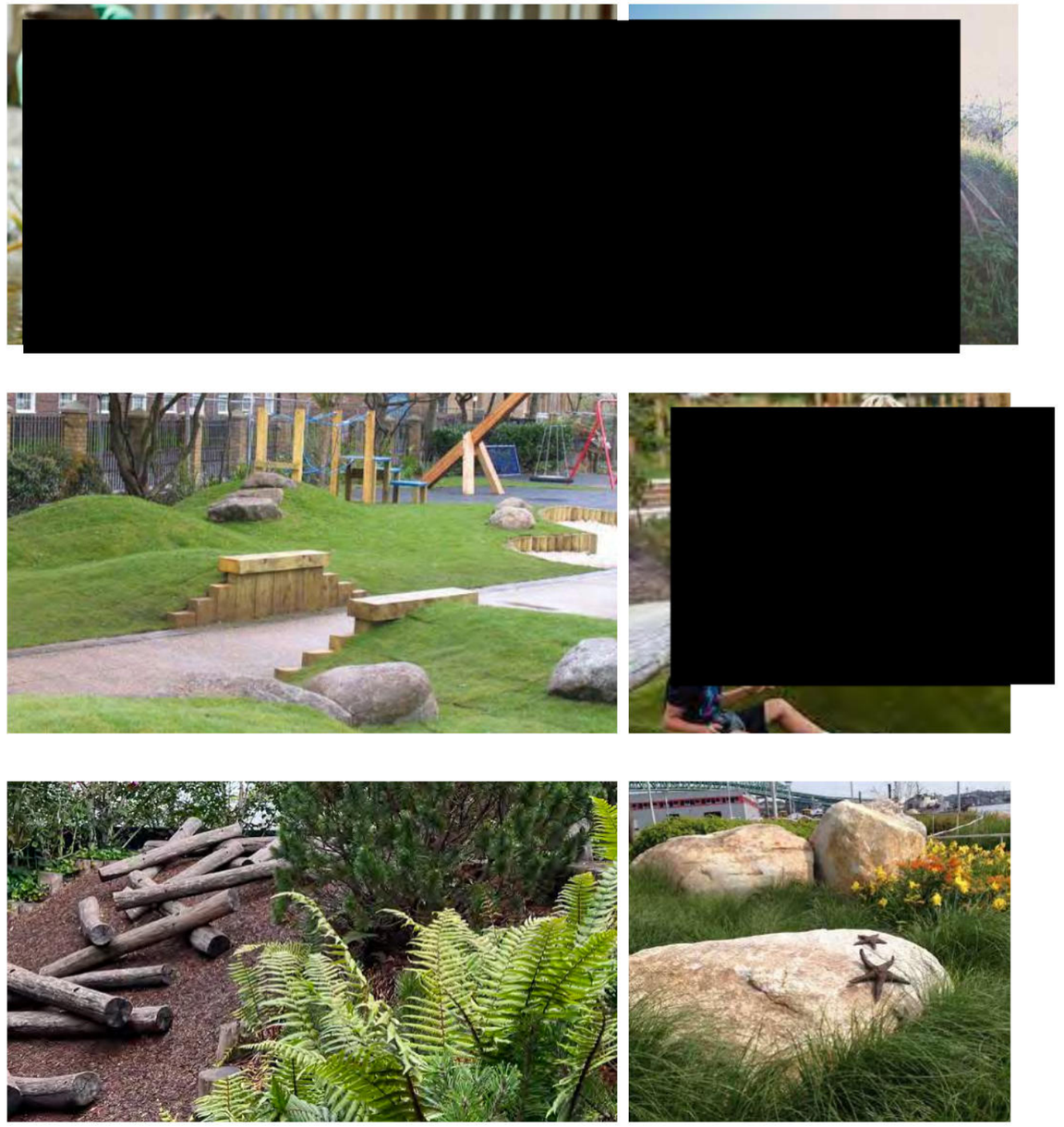


Figure 3.20. Acceptable features of playable spaces

Play and fitness trails

3.103 Throughout the primary green infrastructure, provision must be made for a network of play and fitness routes. These routes must be clearly way-marked with features placed at suitable locations where they can be used without interference or disturbance to residents or sensitive natural habitats.

3.104 The provision of fitness trails must be supplementary to the areas provided for LAPs, LEAPs and NEAP. Each play trail should constitute a total of 400sqm and comprise of ten, clearly defined stations.

Key trail components

3.105 The play and fitness trails should follow the play strategy theming set out on pages 40 and 41 to ensure they are appropriate to the context, and provide a variety of exercise options for all ages and abilities.

3.106 Each route must promote physical exertion including balance, fitness, and parkour, and should be sufficiently challenging for a range of different age groups and abilities.

Senior fitness trail

3.107 A senior fitness trail shall be located in St Mary's Meadows and must be purposed for active ageing, and should be highly accessible with good natural surveillance.

3.108 The trail must have a focus on low-impact, specific exercise equipment that offers a range of movements for strengthening, balance, motor skills, and mobility. This can include equipment such as: wave bar, hip spring, balance boards and shoulder arches.

Fitness trail

3.109 The fitness trail must be suitable for use by all age groups and abilities, and will be located within Landings Green under the wild play strategy theme. It must make use of natural materials where possible.

3.110 The trail must offer a series of opportunities for physical exertion, including cardio, balance, and agility. This could include equipment such as hurdles, balance beams and trapeze.

Parkour Trail

3.111 The parkour trail will be located within the canal themed play zone and the trail design should incorporate 8no features that complement the historic canal setting.

3.112 This trail should provide a connected series of challenging and highly active exercises. This can include an assortment of un-prescriptive equipment such as railings, walls, vaults, boxes and steps, that encourage exploration and creativity in movement.

3.113 The parkour trail must be closely associated with the NEAP/Track zone and is aimed at older children and young adults.

Sensory trail

3.114 The sensory trail must have a series of 8no experiences along the route that are designed to engage the different senses and collectively immerse people in a multi-sensory journey.

3.115 The sensory trails must be planned specifically for people with disabilities, especially people with sensory impairments and young children (under 6's).

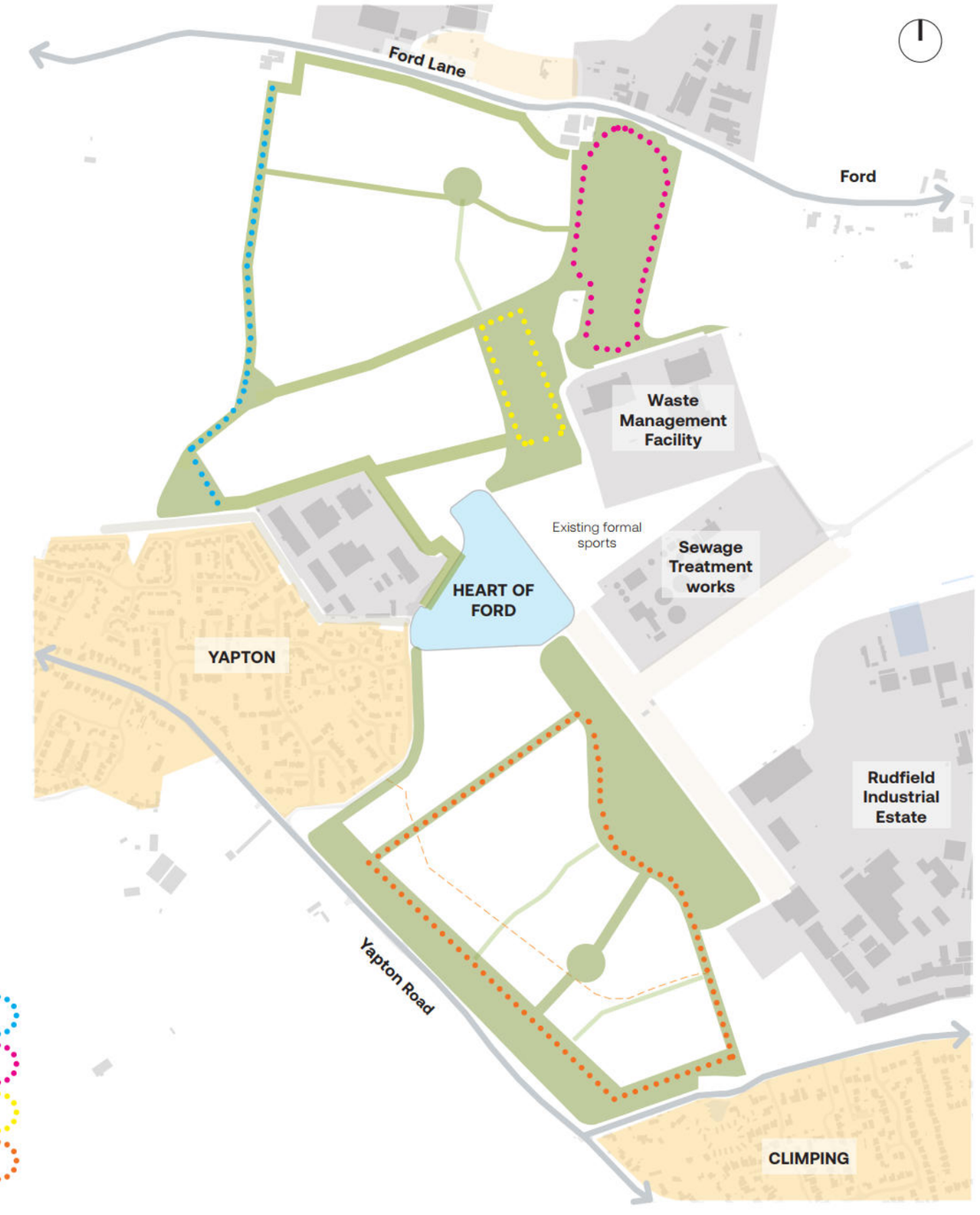


Figure 3.21. Play and fitness trails

Play and fitness trails



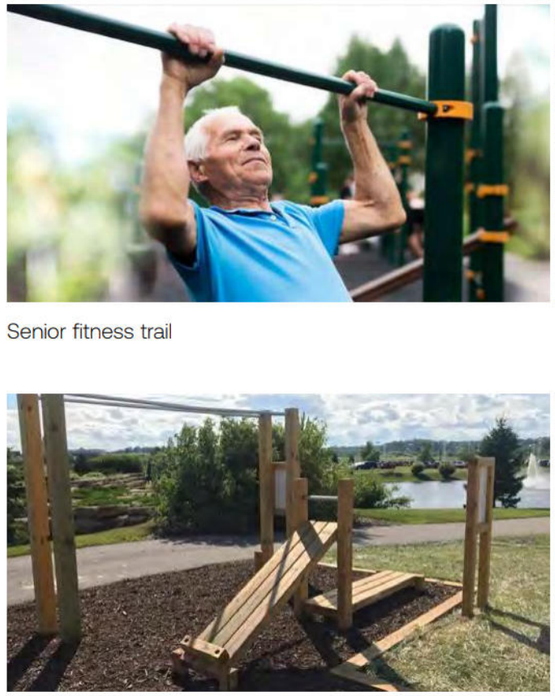
Senior fitness trail



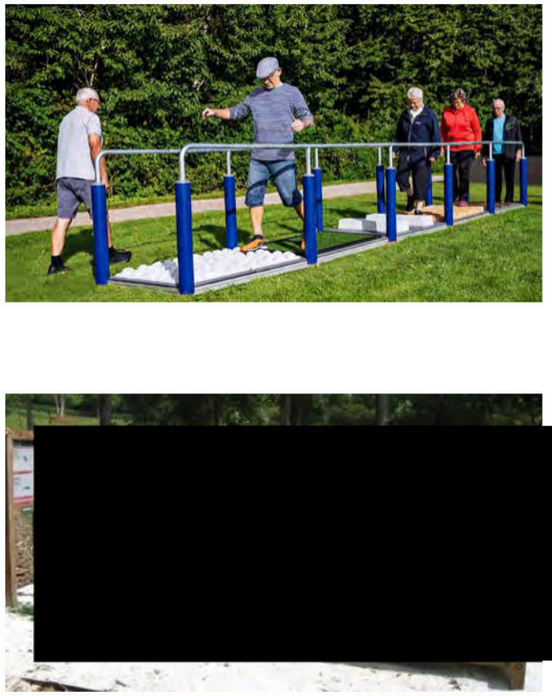


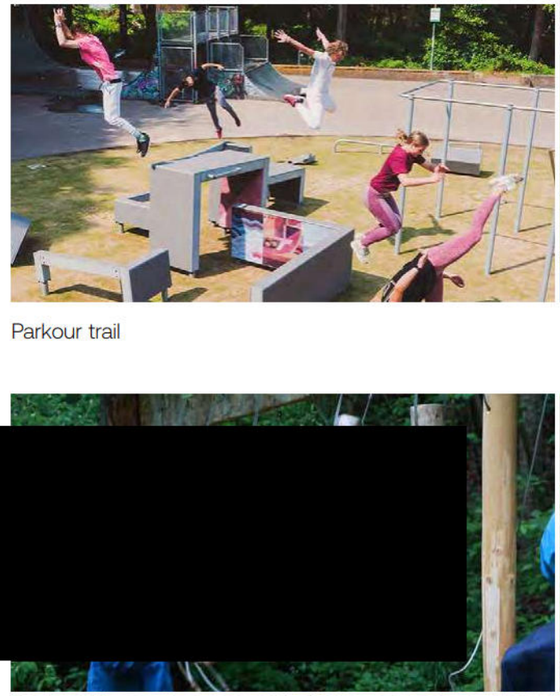
Parkour trail





Fitness trail





Sensory trail



Figure 3.22. Play and fitness trails - acceptable approach to design and materiality

Local Areas for Play

3.116 Local Areas for Play (LAP) must be designed for younger children (under 6), and should provide spaces and features that develop cognitive reasoning, emotional regulation, creativity, and fine and gross motor skills. LAPs must provide a mix of smaller equipment as well as natural play features to create playful pathways and routes.

3.117 LAPs must be situated in doorstep locations where natural surveillance is strong, and that can be easily accessed by a short walk.

3.118 Activities must be close to the ground, or at low level to encourage young children to engage and explore.

3.119 LAPs must be designed imaginatively, avoiding random scattering of features in favour of a bespoke, highly interesting, and challenging space, which is highly adaptable

3.120 Each LAP should be semi-enclosed, avoiding hard enclosures but ensuring that the boundaries of the play area are clear, avoiding locations adjacent to roads, or utilising planting to prevent young children running into unsupervised areas.

3.121 Seating must also be provided to allow for adult supervision in locations that allow surveillance of the entire space.

Key components

3.122 Each LAP must include the following provision to achieve a high quality standard:

- A play zone of 300-450sqm comprising of a playable landscape for young children under 6, with 6-10 small scale play experiences including play and interpretation panels, play tables, play huts, balancing / climbing features, and themed creatures or objects as appropriate for each play zone;
- Play experiences should be in-keeping with the play zone themes set out in figures 3.17 and 3.18, in order to maintain the delivery of a high quality LAP;
- They should be designed for ease of use for younger children with provision of age appropriate small play experiences; and
- They should be set within a wider playable zone incorporating open spaces comprising of grass areas, earth mounding, and soft planting for breakout play.



Utilise natural play features which sit comfortably in naturalised landscapes

Figure 3.23. LAPs - acceptable approach to design and materiality

Local Equipped Areas for Play and Natural Play Area

3.123 Each Local Equipped Areas for Play (LEAP) must be located in the principal open spaces, in highly prominent locations that are easily accessible by foot from the adjoining neighbourhoods

3.124 A single natural play area shall be provided within Landings Green which is of a comparable size to a LEAP and will provide a complimentary mix of natural play features within the naturalised park. The Natural Play area shall provide a mix of natural play features including scrambling nets, balance beams, tunnels, bouldering and climbing walls suitable for children age 1-12 and so include a distinct play zone with experiences suitable for children under 6.

3.125 LEAPs must include play equipment for early school age children (4 to 12 year olds) that can play independently and unaided, but also include some small play experiences for younger children (under 5's).

3.126 In addition to active play equipment, LEAPs must also feature interactive elements, such musical elements, complementing features for motoric play with experiences that are built to nurture children's curiosity and creativity.

3.127 LEAPs must include equipment that provides graduated challenge and risk. Larger play features must provide a number of play experiences and should be multi-functional allowing cooperative play for children who develop at different speeds than their peers.

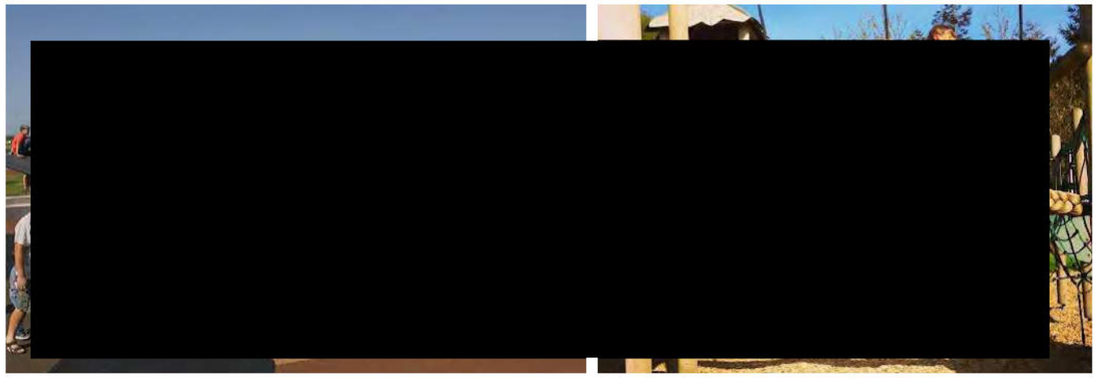
3.128 LEAPs must include high quality play equipment that is inclusively designed for all abilities, with consideration for ease of use, freedom of choice and access, legible, and safe, with elements of predictability.

Key components

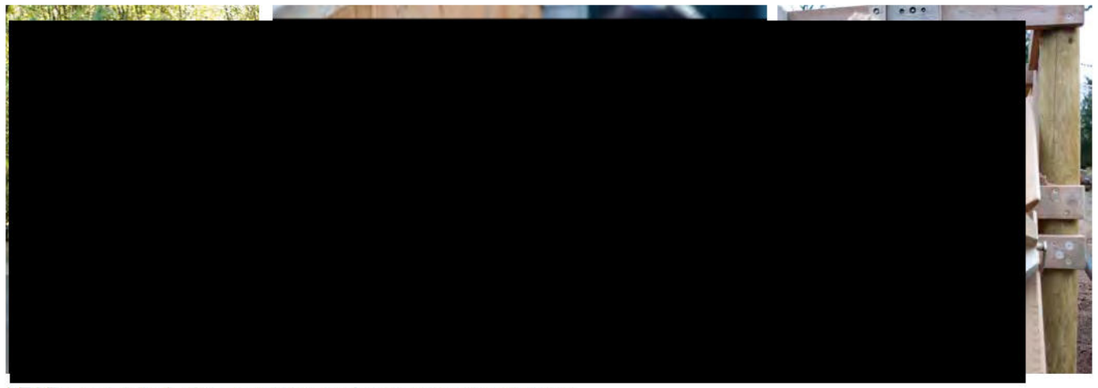
3.129 Each LEAP must include the following provision to achieve a high quality standard:

- An equipped zone of a circa 1300sqm;
- A minimum of 10 play experiences, including 2 medium-large multi-experience play features;
- An informal playable zone of circa. 500sqm which includes open space, planting, and structural elements such as boulders, walling, and earth modelling, to promote free play and breathing space for children;
- Provision of a buffer zone of 25m to the nearest habitable room;
- Structural planting including trees and hedgerows;
- Minimum 6no cycle stands;
- Minimum 2no waste bins;
- Benches and informal seating; and
- Areas of shade and cover.

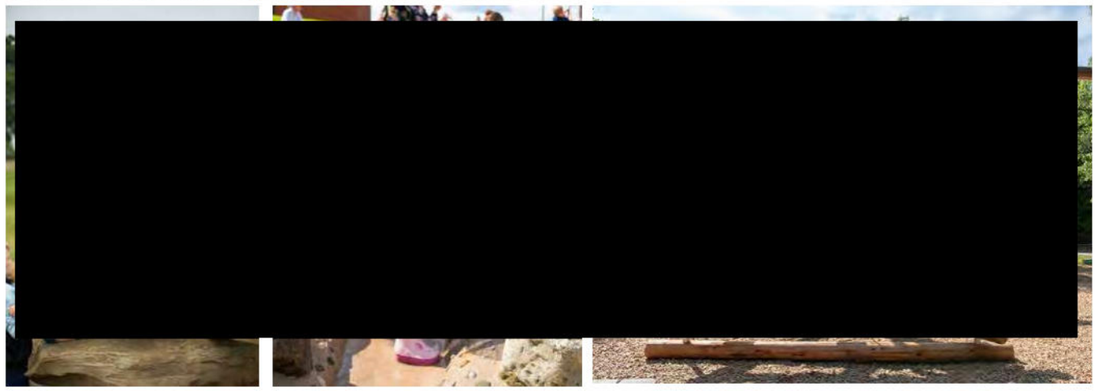
3.130 Play experiences should be exemplar and include bespoke design and function in order to maintain the delivery of a high quality LEAP that is in keeping with the play strategy themes set out in figures 3.17 and 3.18.



LEAPs must include equipment that provides graduated challenge and risk



LEAPs must include cognitive and sensory experiences



Play spaces should be designed imaginatively and include natural features and open breakout spaces

Image Source (all); Timberplay Ltd.

Figure 3.24. LEAPs - acceptable approach to design and materiality

Neighbourhood Equipped Area for Play

Neighbourhood Equipped Area for Play

3.131 The Neighbourhood Equipped Area for Play (NEAP) must be centrally located within the development on a principal footpath and cycle route and within close proximity to the central community facilities.

3.132 NEAPs primarily focus on older children (over 12's) and are typically more challenging and adventurous, with larger play structures and height. However, consideration within these spaces should still be taken for the integration of younger children and parents, allowing families to play as one, no matter of age or ability.

3.133 The equipment used for a NEAP play area is targeted mainly at older children but should contain an area for younger users. The NEAP must therefore include equipment that provides graduated challenge and risk.

3.134 NEAPs must also include play equipment that is inclusively designed for all abilities with ease of use, freedom of choice and access, legible, and safe, with elements of predictability.

Key components

3.135 The NEAP must include the following provision to achieve a high quality standard:

- A minimum of 15 play experiences including 4 large size multi-experience play features;
- An equipped play area of a circa 1500sqm;
- A buffer zone of 30m to the nearest habitable room;
- An additional playable zone of circa 500sqm which includes a kickabout area, hangout space, planting, and structural elements, including boulders, walling, and earth modelling, to promote breathing space for children;
- Bench and informal seating;
- Minimum 2no waste bins; and
- Minimum 6no cycle stands.

Track Zone

3.136 An additional Track Zone shall be provided that is closely associated with the NEAP, youth hangout space and with clear visual links to the parkour trail which weaves through the broader sports zone. It shall be a high quality, stand-alone, destination play space.

3.137 The Track Zone should primarily be focused at older children, but also be sufficiently safe and usable for smaller children and all genders.

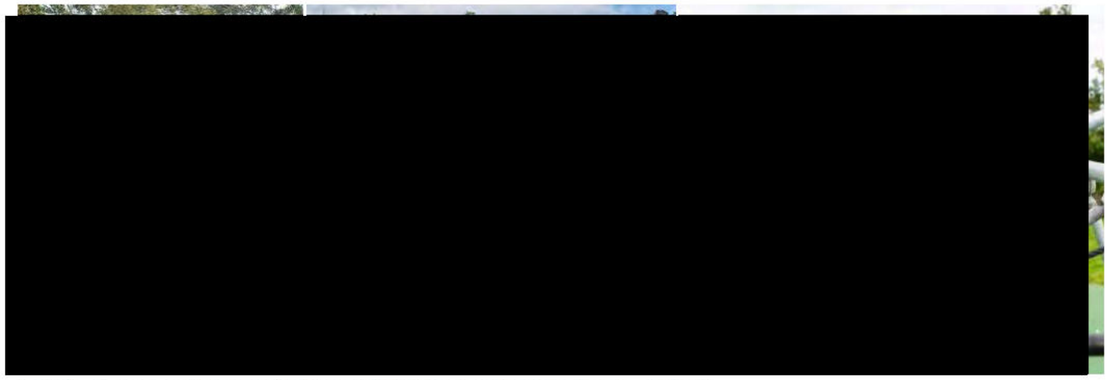
3.138 It shall be located adjacent to the NEAP, in a central and highly visible location that benefits from high levels of activity and good natural surveillance. It should exclude dominant enclosures.

3.139 The precise components are to be determined through the RMAs, but shall include wheeled sports tracks such as bike scrambling, or pump tracks.

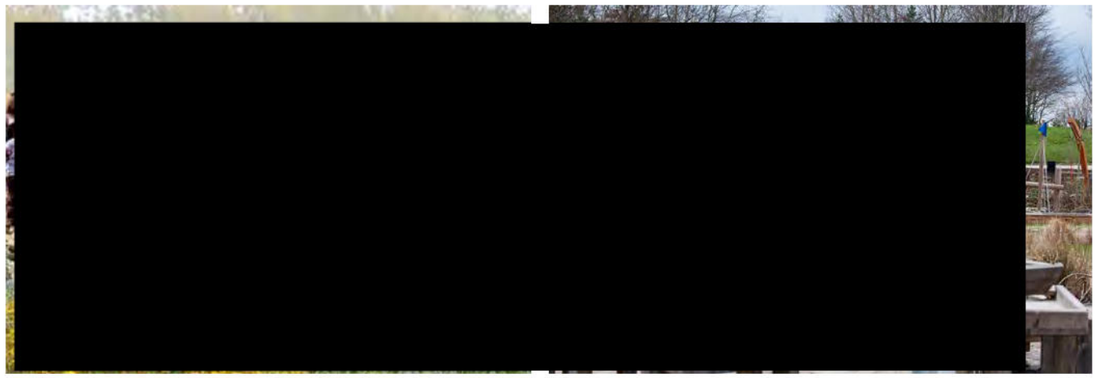
3.140 To ensure that the Track Zone remains safe and inclusive, natural surveillance and close integration with younger family spaces is essential.

3.141 The Track Zone must cover a minimum area of 2000sqm including a track length of a minimum 200m and width of a minimum 3m.

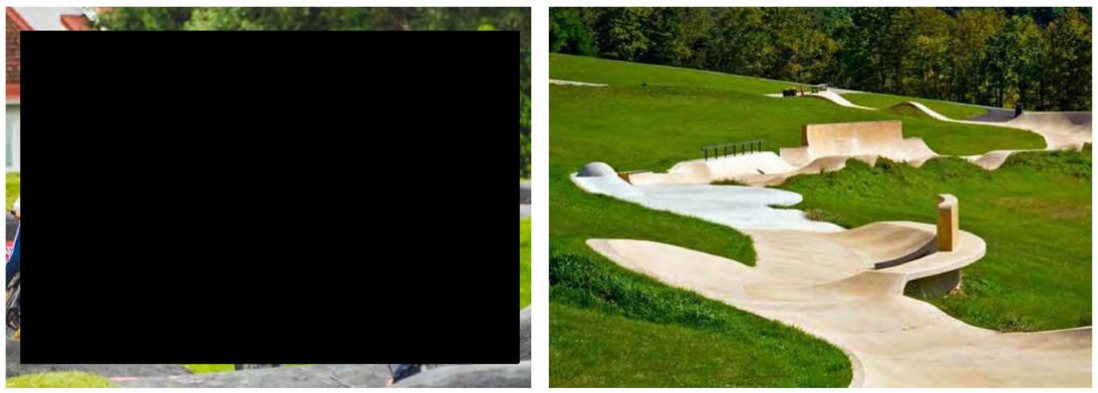
3.142 The track must be all weather and include elements including berms, rollers and steep turns suitable for more advanced as well as young riders.



Include play experiences which provide higher levels of challenge and risk.



The NEAP must be set within a strong and naturalised landscape structure including large deciduous trees.



Pump Tracks and Skate Parks must be designed to sit comfortably in the landscape, providing soft earth modelling to screen and absorb hard structures.

Figure 3.25. NEAP and Track zone - acceptable approach to design and materiality

Neighbourhood Equipped Area for Play

Key design elements

Key elements that will be essential to a high quality NEAP / Track Zone:

1. A sensitive degree of separation between age group activities whilst providing opportunities to play together
2. Good natural surveillance by considered low level planting, raised tree canopies, and open edges to the wider landscape
3. Designed with no dark / hidden corners to ensure all age and genders can play in a safe space
4. Activity zone / pump track for all wheeled sports
5. Age appropriate mix of play features and spaces
6. Offering a variety of single and multi-play experiences
7. Provision of a youth hang out space with cover to allow for use in all weathers
8. Provision of an informal kickabout area
9. Breakout spaces with benches / informal seating that allow for adult supervision of play including waste bins
10. Direct access from footpath / cycleway including cycle stands



Figure 3.26. Illustrative layout of the NEAP and Track Zone showing an acceptable approach to design and materiality

Planting

3.143 Species must be appropriate to the location, taking account of aspect, space available, and soil type, as well as long term viability.

3.144 Small ancillary spaces within the residential streets should be designed with a very high component of wildlife beneficial species, selected not just for their ecological value but because of the seasonality and amenity value that they offer.

3.145 Planting within residential areas should maintain good leaf cover during winter months and therefore comprise a relatively high percentage of structural and evergreen species. Perennial species should be used sparingly, to provide accents and seasonal interest.

3.146 Invasive, non-native species must not be selected, in line with DEFRA's list of species of concern. Any invasive species present on site shall be removed.

3.147 Table 3.1 provides a sample of typical species and cultivars that would be acceptable and shall provide the basis of planting schemes within the development and open spaces. The complete species mix must be highly diverse, utilising cultivars which are know to be resilient to both climate change and drought conditions, as well as avoiding species that are prone to diseases or pests which have been identified by DEFRA as of high risk to the UK's natural habitats.

3.148 Woodland / landscape buffers are to be provided along the boundaries, including with Horsemere Green Lane and the adjacent industrial uses, in accordance with the approved Green and Blue Infrastructure parameter plan, to provide a high degree of screening to reduce visual impacts of the adjacent industrial uses on the development, as well as the visual impact, inter-visibility and perceived coalescence between Yapton, Climping and the proposed development. Upon full maturity, the depth of planting, augmented by the existing, will be sufficient to reduce the visual effect on neighbouring visual receptors to nominal as intended by the outline planning application supporting Environmental Statement

HABITAT	BOTANICAL NAME	CODING
ORNAMENTAL STRUCTURAL PLANTING	*Hebe 'Midsummer beauty'* *Cornus sericea 'Flaviramea'* *Euonymus fortunii 'Silver queen'* *Prunus laurocerasus 'Otto luyken'* *Viburnum tinus 'Eve price'* *Lavandula angustifolia* *Pachysandra terminalis* *Sarcococca hookeriana 'Winter gem'*	Structural planting should comprise a high percentage of evergreen and flowering species. Where used on plot, structural planting species must be selected which are appropriate to their location with their ultimate spread and height not significantly exceeding the space available.
ORNAMENTAL ACCENT PLANTS	*Bergenia 'overture'* *Geranium sanguineum* *Heuchera 'pewter moon'* *Nepeta cataria* *Persicaria affinis* *Vebena bonariensis* *Geum rivale* *Salvia nemerosa*	Accent plants must be used sparingly with perennials comprising a maximum of 5% of the overall ground cover.
HEDGEROWS	*Acer campestre* *Cornus sanguinea* *Corylus avellana* *Crataegus monogyna* *Prunus spinosa* *Taxus baccatta* *Fagus sylvatica*	Where enclosure or structural planting is required, mixed native hedgerows with a high percentage of fruiting species must be used throughout the public open space. On plot boundaries including front gardens should comprise clipped hedgerows where required.
SHRUBS	*Cornus sanguinea* *Corylus avellana* *Crataegus monogyna* *Prunus spinosa* *Rosa canina* *Salix fragilis* *Viburnum lantana* *Viburnum opulus*	Within public open space, shrub planting should be used to form boundaries, for habitat value, to provide enclosure and screening and must comprise of a high percentage of native species.
TREES IN OPEN SPACE	*Acer campestre* *Quercus robur* *Fagus sylvatica* *Carpinus betulus* *Aescelus hipposcatanum*	A variety of locally prevalent native species shall be used throughout the open spaces, providing seasonal variety, visual interest, habitat value and enclosure.

Table 3.1. Indicative sample of plant species











Blue infrastructure

3.149 The proposed development must seek to reduce flood risk through the incorporation of Sustainable Drainage Systems (SuDS).

3.150 The SuDS strategy must be an integral part of the green infrastructure. In addition to providing a drainage function, the SuDS features should also provide additional recreational and wildlife habitat benefits.

3.151 The SuDS strategy should follow the 'four pillars' of SuDS design:

- **Water quantity:** controlling the quantity of runoff to reduce flood risk and protect the natural water cycle;
- **Water quality:** managing the quality of the runoff to prevent pollution;
- **Amenity:** create and sustain better places for people; and
- **Biodiversity:** create and sustain better places for nature.

3.152 SuDS can take a variety of forms including permeable hard surfacing, storage features, rainwater butts, swales, attenuation ponds and soakaways. SuDS are to be designed within accordance with the Drainage Hierarchy contained within Approved Document H of the Building Regulations.

3.153 To the north, surface water runoff will discharge into the attenuation basins within Landings Green. Due to the high water table in this area, the water will eventually discharge into a nearby water course at, or below, greenfield runoff rates.

3.154 In the south, surface water runoff will be conveyed to a series attenuation basins via gravity using a primary network of underdrain swales. Swales must comprise of naturalised drainage channels with a 'soft' and varied profile, and avoiding engineered, rectilinear forms. They shall be planted with a mix of amenity, wet meadow, and grassland species to enhance biodiversity.

3.155 The attenuation basins should be dual function, suitable for both attenuation and as a public amenity, with significant ecological value. The basins must incorporate an area of no less than 100sqm of meaningful contoured permanent water suitable for a wide range of aquatic mammals and breeding birds.

3.156 A viewing platform shall be delivered which marks the terminus of the Runway Corridor within Ryebank Park. The viewing platform must provide a slightly elevated position which allows open views over the ponds and linear park. The platform shall be a minimum 8x8m, of timber construction, and shall incorporate seating, interpretation panels and public art, allowing space for contemplation.

3.157 The semi-dry banks of the basins shall be seeded with a mixture of wet-meadow and grass species, and include native shrub planting. Importantly, the footprint and extent of the basin should not be easily identifiable by sharp or pronounced changes in planting or landform so that they sit comfortably in the landscape and appear as natural rather than man-made features.

3.158 Rather than fencing these spaces off, the basins should include shallow sloping sides designed in accordance with the RoSPA guidance, allowing residents to engage right up to the water's edge without jeopardising their safety.

3.159 Headwalls and retaining walls must be constructed using appropriate materials consistent with the surrounding hard landscape palette, avoiding brick or bare pre-cast concrete walling. Gabions filled with flint rubble consistent with materials found in West Sussex are a preferred treatment and soft planting should be used to screen drainage infrastructure.

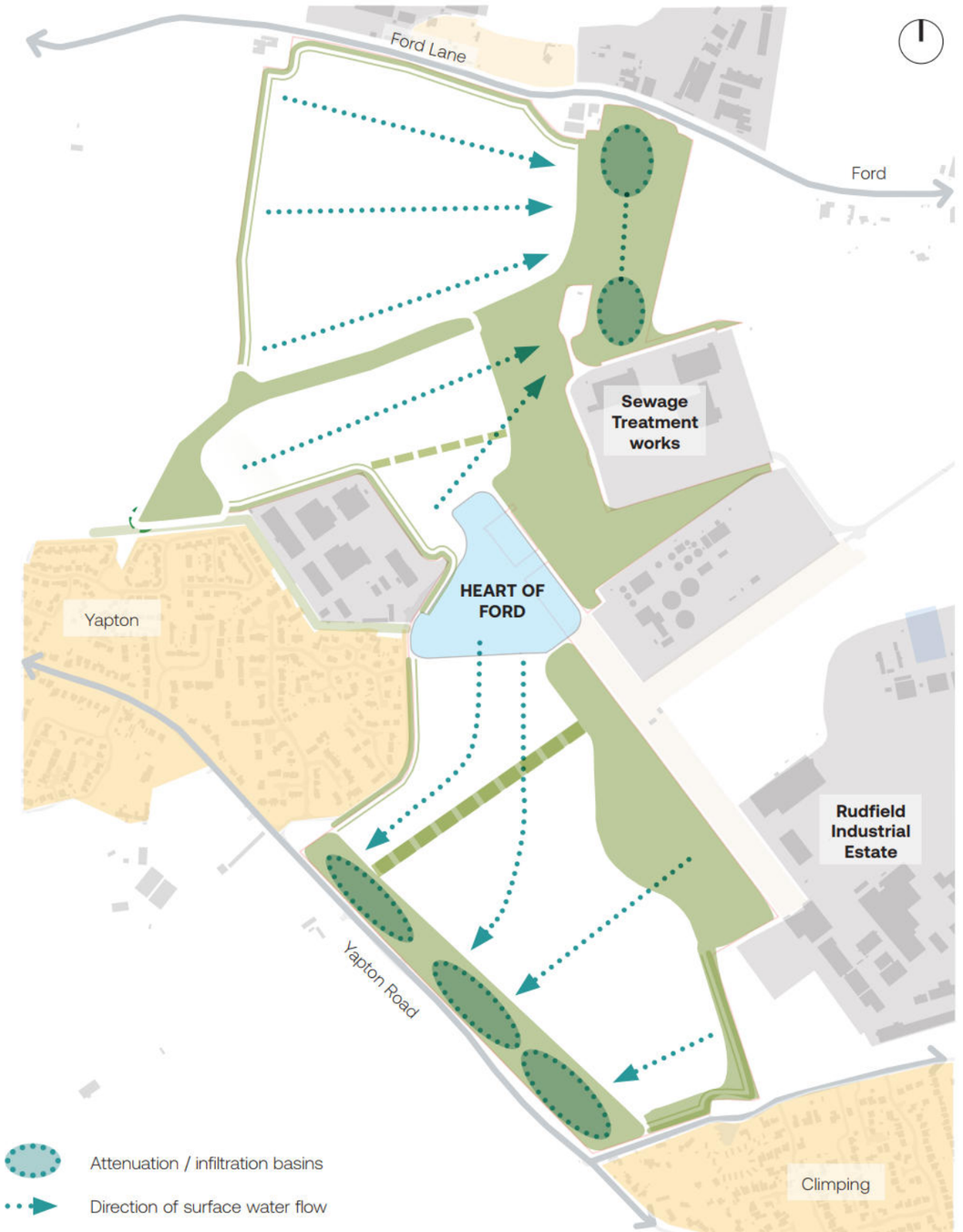


Figure 3.27. Indicative high level drainage strategy

Swales

3.160 Drainage swales will form a key component of the street scene within the southern neighbourhood, and their treatment will significantly impact on the character of the public realm. Cognisance of the character area in which the swales are located shall ensure that an appropriate treatment is applied. In all areas, however, heavily engineered forms must be avoided.

3.161 Swales shall be naturalised wherever possible, formed of a varied profile of 1:3-1:6 slope. The swale shall narrow and widen to create a naturalised appearance and allow for informal tree groupings.

3.162 Appropriate planting, including wet meadow species, shall be incorporated, avoiding mown amenity grass in favour of naturalised semi-wet habitats.

3.163 Trees shall be selected that are tolerant of intermittently dry and wet conditions, appropriate to swale conditions.

3.164 Permeability shall be maximised throughout the development and the swales must not be a barrier to movement. Culverted crossings shall be provided on clear desire lines, at junctions, and where green corridors intersect the road infrastructure.

3.165 Where culverts are required, their construction shall avoid bulky or pre-cast concrete engineered treatments and must be visually low profile, further softened by planting where possible.



Figure 3.28. Image examples of well considered and acceptable SuDS features

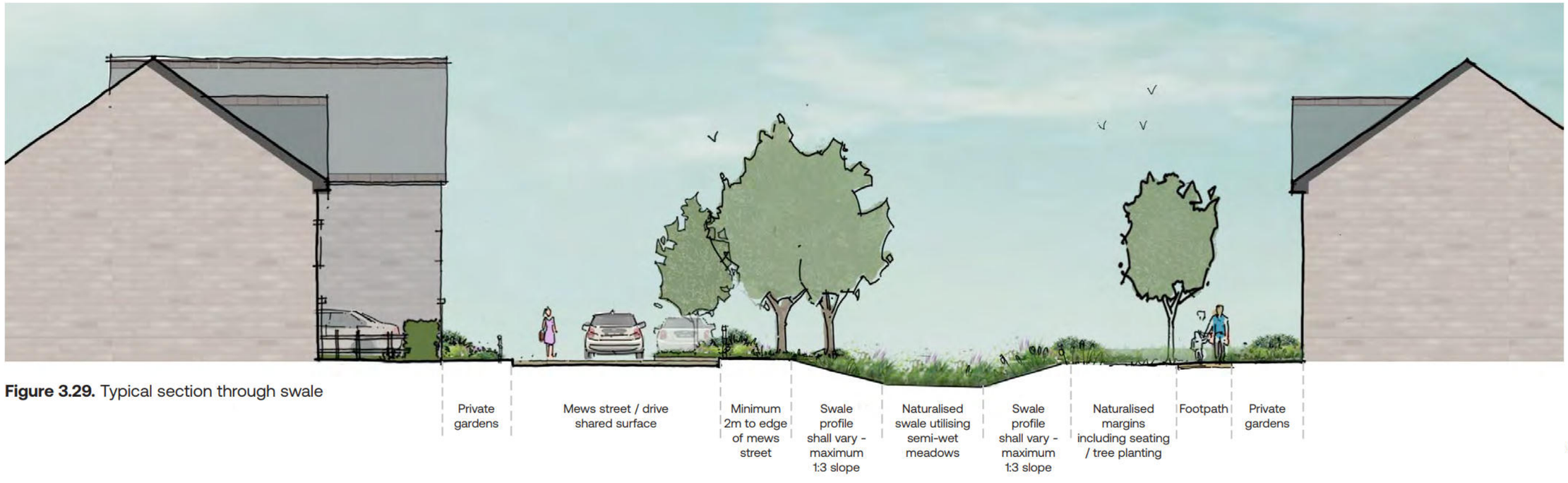


Figure 3.29. Typical section through swale

Biodiversity

Mitigation and enhancement

3.166 Proposals must aid in conserving and enhancing habitats for protected and valued species, as well supporting an increase in biodiversity.

3.167 The scheme proposes significant landscape enhancements, providing both a robust and attractive landscape setting to the new development, and a rich and interconnected network of habitats to integrate with, and improve, prevailing natural systems.

3.168 The provision of a mosaic of connected habitats along the site boundaries will contribute to the green infrastructure network on site, promoting the natural distribution of species.

3.169 The landscaping and ecological measures will provide a biologically diverse landscape. The bottom-up approach to improving the biodiversity on site, will ensure that the habitats on site can support a range of invertebrate species and provide other food sources, which will then in turn benefit fauna further up the food chain.

3.170 Native species-rich hedgerows, tree lines, orchard, grassland and wetland habitat will provide foraging, commuting, and sheltering opportunities for wildlife on site.

3.171 A sensitive external lighting scheme will be designed as part of the development to ensure that light spill on green infrastructure is minimised.

3.172 If protected species are found to be present on the site, appropriate mitigation must be put in place.

3.173 Trees within private ownership, e.g. in rear gardens, shall not count towards the site wide green infrastructure or biodiversity net gain (BNG) as the long term retention of these cannot be guaranteed.

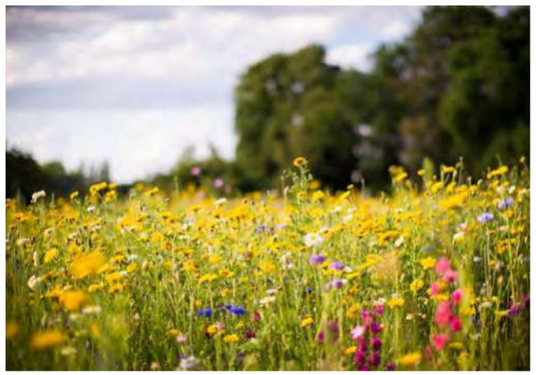
3.174 Mitigation and biodiversity enhancement measures should include:

- Existing mature tree belts and hedgerows to be retained and enhanced;
- Hibernacula and bee bricks in appropriate locations throughout the development;
- Significant new tree planting throughout;
- Streets to be designed to include tree cover and planting, creating ecological movement corridors throughout the development;
- An interconnected network of green open spaces both within and to the wider area that vary from large areas of parkland and wetland areas to smaller pockets of wild flower planting and ecologically rich groundcover;
- Planting species that support a rich and varied biodiversity;
- Naturalistic landscape features, including log piles and bug hotels, that are intrinsically low maintenance and will develop in biodiversity in the long term;
- Rain gardens where appropriate, especially within the Canal Corridor park, with semi-aquatic planting species that tolerate intermittently dry conditions;
- The incorporation of bat and bird boxes both within the landscape design and integrated into the proposed buildings; and
- A naturalistic water management system that incorporates SuDS that are set within and are integral to the wider landscape framework.

3.175 Although the outline planning approval does not establish a fixed figure for BNG, the proposed development must provide a biodiversity net gain in accordance with Arun Local Plan Policy ENV DM5

3.176 A large proportion of the open areas shall comprise grass, wildflower and wet meadows. An assessment shall be made of the soil condition and nutrient composition to determine the most suitable species mix and long term maintenance regime. Ultimately, the implementation of naturalised meadows shall seek to maximise biodiversity and so, a long term maintenance strategy should involve, through cutting and removal of arisings, the reduction of nutrients in the soil.

3.177 Regular annual monitoring of the meadows condition and composition shall be carried out to ensure its long term success.



Wildflower meadow



Street trees



Species rich planting

Figure 3.30. Image examples of measures that can provide biodiversity enhancement