



Tweedbank - Vision for Growth and Sustainability

A Community for the Future

Delivering Development Quality: Design Guide

Scottish Borders Council

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This Design Guide, which must be read in conjunction with the Tweedbank Expansion Supplementary Planning Guidance (SPG), is structured as follows:

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1 Introduction

Introduction

- 1.1 This Design Guide is intended to guide and inform all development proposals and planning applications relating to the site ensuring that the expansion of Tweedbank is delivered in the most appropriate form and design. It requires the use of innovative solutions which take cognisance of climate change impacts and environmental quality on the site to maximise benefits and opportunities. The Design Guide provides guidance on good design practice and seeks to balance the need to achieve specific structural goals and land use objectives, with the need to allow developers to develop appropriate and high quality solutions in collaboration with the Council.
- 1.2 This Design Guide must be read in conjunction with the Tweedbank Expansion Supplementary Planning Guidance (SPG). It seeks to:
- ensure that the aims of the SPG are realised in order to manage and guide development quality; and
 - to maximise the benefits to the community at Tweedbank, its visitors and businesses, and for the economy of the Central Borders.



2 Development Vision

Development Vision

2.1 As stated within the Tweedbank Expansion SPG the overall vision for the development is:

The site provides a unique opportunity to support the sustainable expansion of Tweedbank with a range of historical, cultural and environmental assets to create a distinct and exemplar development with a strong sense of place. These important assets will be safeguarded and enhanced, encouraging their recreational use and enjoyment by the local community and visitors. The integrated and expanded settlement of Tweedbank will be an inclusive, well-connected community which people will aspire to live in and visit.

2.2 Responding to this vision, the Design Guide sets out a practical approach to achieve the following strategic objectives:

- to deliver new development sustainably and sensitively within this attractive landscape setting;
- to create a coherent, inclusive, well-connected settlement which is fully integrated into Tweedbank and which is readily and conveniently accessible from the surrounding area;
- to lead by example implementing the Scottish Government's and the Council's commitments to the achievement of net zero carbon emissions and to facilitate the establishment of a responsible, resilient, forward-looking community which responds decisively to the challenges of climate change, employing state-of-art technologies and producing its own renewable energy;

- to realise a place which embodies the concept of 20-minute neighbourhoods; that is well-laid out, designed with clear, logical linkages that appeal to residents, visitors, and business users alike; and which encourages active travel, utilises and develops the site's green infrastructure and supports healthy lifestyles;
- to deliver a development with a strong sense of place which is an integral part of Tweedbank and sympathetic to its site and setting;
- to respect the core landscape, built heritage, natural environmental assets and topography of the site and its surroundings;
- to ensure that future generations will continue to benefit from the site's qualities and that this character underpins delivery of a unique sense of place;
- to support the needs and wellbeing of all members of the community within a coherent, resilient and inclusive place; and
- to deliver a development which makes nature an integral component part and which encourages and promotes biodiversity within and around the site.

3 Planning Process & Site Zones

Planning Process & Site Zones

- 3.1 Prospective developers must consider carefully the instructions of this Design Guide. It is the developers' responsibility to demonstrate compliance with this Design Guide and to consult the Pre-application Checklist on page 45 of the Tweedbank Expansion SPG – Vision for Growth and Sustainability SPG and provide all other supporting information that accounts for the form of the proposed development. Advice on making a planning application, or obtaining pre-application advice, can be obtained [here](#). **Discussion with the Council is recommended at an early stage.**

Site Zones

- 3.2 The following map is taken from the SPG and shows the developable zones.



4 Phasing & Service Infrastructure

Phasing & Service Infrastructure

- 4.1 It is critical to the success of the development of the site and to ensure a high quality response to the site that the different phased elements and Zones relate well to each other and that there is a cohesive link to each other in design terms.
- 4.2 It is considered that the Design Guide offers scope for creative solutions and diverse interests, while still adhering to the SPG. As such, developers should be aware that the Council does not anticipate any significant reallocation of land uses out with the SPG. The SPG presents a balanced and viable way forward and the first objective remains to develop the site appropriately.
- 4.3 Servicing for the overall site should be considered holistically. In designing the servicing, adverse impacts on important trees, woodland, landscape features, historic assets and archaeology should be avoided. Visible infrastructure, including on street apparatus, meter boxes, flues etc. should be located and designed to be discreet and minimise clutter.
- 4.4 It is anticipated that the phasing of the site will be as set out below. This takes into account the need for service infrastructure and in particular the need for a vehicle bridge over the railway:
- Phase 1 – Business Zone 1
 - Phase 2 – Business Zone 2
 - Phase 3 – Residential Zone 3 (with access being obtained via the existing estate track from the south east temporarily until such a time that the railway crossing is implemented)
 - Phase 4 – Zone 5 (Business/Residential)
 - Phase 5 – Residential Zone 4
 - Phase 6 – Residential Zone 2a
 - Phase 7 – Residential Zone 2
 - Phase 8 – Residential Zone 1
- 4.5 The Neighbourhood Centre (the area around Lowood House and existing buildings) is currently served by the existing access arrangements to the estate and it is possible that some development can take place here in the short term without any significant improvements to the existing infrastructure. This area is therefore excluded from the phasing plan.

5 Heritage, Biodiversity & Landscape

Heritage, Biodiversity & Landscape

5.1 Lowood is an exceptional site in terms of its natural setting and heritage assets. There is an ordered, although organic arrangement to the existing site which is largely reflective of the original estate management for agriculture and leisure, and how it has developed over time. This is dominant within the form and structure of this high quality designed landscape, which is articulated around estate buildings, boundaries, woodlands and policies as well as site topography.

5.2 Vision

5.2.1 The vision is to work with the setting, retain all that is significant within the natural and built environment; to conserve connections with the existing estate with a view to ensuring the endurance of the high quality landscape framework and historic setting of the site. The existing framework of natural and built heritage on the site will inform a character-led response to new development. New development proposals should strengthen and enhance the existing framework to deliver a strong sense of place. The site should be developed to reflect this unique sense of place, and should be done in a cohesive manner, expressing strong linkages in and between the different phases of development.

5.3 Baseline

5.3.1 The Lowood Estate is located on the river bluffs and terraces in a meander of the River Tweed. Although not within any local or national designation it is clearly a well maintained, high quality designed landscape with a fine balance of woodland, parkland, pasture and water bodies of local if not wider significance and incorporating some high quality historic buildings.

5.3.2 The estate retains a strong designed landscape character although small in scale, reflected in the features of the eastern part of the site including bands of deciduous woodland enclosing the open parkland meadows and framing views, with scattered ancient and mature specimen trees, and an attractive meandering driveway leading (the view/viewer) from the eastern access gateway to the pond and Lowood House. A sense of isolation created in the eastern part of the site offers a level of tranquillity and rural beauty despite its proximity to busy roads, railway and urban development.

5.3.3 The more functional western half of the site consists of mature and younger woods and conifer plantations on former tree lined field sites as well as open pasture. Historic maps show evidence of former tracks, orchards, wells with an associated pump and tank (Well Park) and walled gardens with associated structures to the south of the core of the estate, of which a number of structures survive. The estate buildings are of 1-2 storeys and arranged fronting or perpendicular to the road, around courtyards and in informal clusters. They display vernacular forms and materials characteristic of the central Borders, with design and detailing that gives evidence of their original functions.

5.3.4 The river, riparian strip and pond are also notable features of the estate as are the stone walls defining much of the southern boundary and the southern approaches to Lowood House and the associated cluster of estate properties. A series of generally well used paths, tracks and former rides, ancient and modern criss-cross the estate.

5.3.5 The Lowood estate is fairly inward looking due to its location on the valley floor, surrounded by hills, boundary walls and screened by woodland belts. Despite this, significant views to the River Tweed, the iconic Eildon Hills and the Buckholm Hills amongst others are retained. From the higher ground of the south western part of the site there is greater visual connection across the railway line with Tweedbank.

5.3.6 The estate and its green infrastructure act as an important 'green' break in urban development along the Tweed river corridor limiting physical coalescence and intervisibility of neighbouring Galashiels, Easter Langlee and Tweedbank. The mature tree resource of the Lowood estate forms an important backdrop and foreground in views to and from neighbouring development and along the river valley contributing significantly to the amenity and setting of adjacent areas.

5.4 Strategy

5.4.1 While there is scope to develop large areas of the site, there is also a need to consider how best to conserve the built and natural heritage resources appropriately, and how these can in turn inform development. The existing features and character of the estate - its buildings, walls, trees, topography, parkland and water bodies - offer valuable resources that can physically connect to the past, giving a unique sense of place, and simultaneously articulate a place that is grounded appropriately in its heritage. This also offers exciting potential to accommodate new and innovative development, which delivers a strong sense of place rooted within this existing framework.

5.4.2 Planning applications should demonstrate that account has been taken of landscape, visual and heritage matters which address the importance of the surviving buildings, structures, boundaries, landscape and estate character, and their contribution to the site's character and setting. Notwithstanding this, the following prominent features of the site are considered to be important to the estate and parkland character of the site and must be protected and enhanced:

- Lowood House
- Cluster of predominantly stone with some harled cottages and outbuildings
- High stone boundary walls, giving a strong sense of enclosure, and the hierarchy of other historic boundaries on site

- Historic driveway giving a carefully curated sense of arrival to Lowood House
- Deciduous woodland blocks and tree belts that relate to the parkland/estate design
- Mature and veteran trees
- Lowood Pond – natural character defining visual asset of biodiversity significance
- Relationship with the River Tweed and protection of the habitat corridor adjacent to the River Tweed SAC/SSSI
- Network of historic routes through the estate, including access tracks/paths/cycling routes
- Gentle slopes and steeper river terraces creating distinctive topography and sweeping views
- Views to and from the wider landscape including the River Tweed and Eildon Hills

5.4.3 Development must seek to protect and enhance those features that contribute to the historic estate and parkland character of the site and seek to secure positive enhancements for biodiversity. The relationship between the key natural and built assets on the site should be retained, and views preserved where possible within, to and from the designed landscape.

5.5 Instruction

5.5.1 Landscape

The overall landscape and estate layout and character of the site is critical to its sense of place. The best opportunities for development are seen to coincide with existing meadows, paddocks and poorer quality areas of woodland. The route and character of access roads and tracks should be conserved as far as reasonably possible, re-purposed for 21st century living and recreational use.

5.5.2 Existing Buildings and Structures

The estate's existing buildings are attractive and valuable historic structures which should, wherever possible, be retained within their existing uses or re-purposed appropriately. Developers should identify innovative uses and ways of conserving these structures as faithfully as possible. New build elements should not detract from any understanding of the original purpose and hierarchy of the buildings and therefore should clearly read as modern additions and alterations which nevertheless respond to the key characteristics of the site.

There are numerous historic boundaries on the site that form an important part of the original estate. High stone boundary walls are particularly characteristic of the estate and give a strong sense of enclosure and interest. Lower stone walls / retaining walls, hedges and some evidence of estate railings also exist forming a hierarchy to boundaries on the site. These historic boundaries provide a useful and visually attractive structure to the site. The clear framework and hierarchy to the boundary treatments should be retained. Any proposed removals or reductions would require sound justification to be provided. New boundary treatments should seek to reinforce this and ensure the legibility of the original estate layout survives.

5.5.3 Woodlands and Trees

Woodland and mature trees on the site contribute to the quality of the designed landscape; provide visual cohesion with, and inclusion within, the wider landscape, and offer significant environmental and ecological benefits, all of which enrich the appearance, amenity and biodiversity of the site and surrounding area. These resources should be retained wherever possible and where practical, actively enhanced.

Fully detailed tree surveys in accordance with BS5837:2012, will be required to inform development layout. Category A and B trees, as identified within the SPG, should be safeguarded and protected unless reasons for loss are exceptional, and justifiable. Although Category C trees may have lower amenity value, they may still be worthy of retention; for example, due to their screening value, their contribution as a significant landscape feature, or for biodiversity. Proposals to remove trees must be justified, and supported by an accurate and up-to-date Tree Survey. An appraisal of landscape and visual effects of development will be required in support of planning applications.

Some information is provided by the findings of the initial Tree Assessment undertaken during the preparation of the SPG. This is attached as an Appendix to the SPG. However, this does not override the need for a full and accurate tree survey to be submitted as part of any planning application. Guidance relating to Trees and Development, can be viewed [here](#); and relating to Landscape and Development, [here](#). Some guidance can be found [here](#) for the conservation of hedge, tree and shrub planting and no-dig footpaths.

Retention of mature trees within and around the development zones will be essential to the achievement of good visual connections between the site and the surrounding landscape; with existing woodland forming backdrops, framing new development and mitigating adverse effects of development. Retained trees, woodland and landscape features should be integrated into development design as part of the area's character and setting, taking any and all opportunities to incorporate these within areas of communal amenity, active travel routes, meeting places and focal points for community interaction. Key physical connections should also be maintained within the landscape between habitat areas, including through the formation of new green corridors, green routes and infrastructure planting.

New tree planting, retained mature trees and orientation of new buildings should all be factored in, in relation to visual amenity, with existing key views retained and/or enhanced. New views should also be established; particularly in terms of achieving a strong and inclusive visual connection between the site and the existing settlement at Tweedbank.

In the event that it is considered necessary for trees or hedges to be removed in order to facilitate appropriate development, the Council wherever practical, will seek the reinstatement of woodland and trees to conserve the site's landscape character and quality.

Appropriate measures will require to be put in place to ensure long term maintenance of all new planting including trees to ensure all new woodland, landscape and planting are implemented and thereafter maintained to a high standard. The Council will carry out a management and maintenance plan for woodland trees within its ownership.

5.5.4 **Water Bodies**

The pond is an attractive visual asset and key part of the designed landscape. The pond should be retained and integrated into the eastern half of the development as a visual and physical focal point. Connections to other open spaces should be retained and established, via recreational routes and retained parkland. Its biodiversity value should be preserved and enhanced, including measures set out below.

The site is framed by the River Tweed and incorporates the riverside corridor which provides unique habitats, riverside walks and an outstanding setting. The relationship with this significant natural asset and opportunities this presents should be strengthened through the proposals, ensuring the development maximises its value through enabling views and access to the river from the public realm, and through building siting and orientation. Biodiversity value should be preserved and enhanced, including measures set out below.

5.5.5 **Biodiversity**

The range of the existing site provides varied habitats for a number of species. This is particularly due to the range of habitats on site, including semi-improved grassland, long-established parkland woodland, trees and existing buildings. The existing pond and river corridor of the River Tweed are also key natural assets for the site.

Ecological surveys for protected species such as otter, bats, badger, red squirrel and breeding birds and local biodiversity will be required. Any works affecting relevant protected species either directly or through disturbance may require a licence, as appropriate and may require provision of alternative sites for relocation.

Development across the site should ensure sufficient areas of habitat and connectivity are provided for existing populations to be sustained. Important habitat corridors for bats and mammals will need to be safeguarded. This should include maintaining corridors that connect woodland within the site and Lowood Pond to the River Tweed. Where roads divide these corridors, mammal tunnels should be incorporated. Lighting schemes for the new development need to be sensitive to the setting and ecological receptors within and adjacent to the site including bats, badger, otter and the River Tweed corridor including protection of key bat habitats, buffer and transition zones in accordance with good practice here. Development must adhere to any site wide mitigation strategy which is developed holistically for the overall site. The development will secure positive effects for biodiversity throughout all elements of the design, including where appropriate:

- Bat and bird boxes within areas of retained woodland.
- Bat bricks and boxes, swift bricks and boxes and a range of other bird boxes on new buildings.
- Green roofs (where appropriate to the design) to further promote biodiversity.
- Amenity areas should use native planting where possible and avoid

large areas of low species diversity grassland. Where possible creation of wildflower meadow areas should be considered for species diversity. Plant species should be appropriate for site conditions and climate resilience and require low maintenance.

- Enhancements to Lowood Pond through additional planting of native trees in a buffer area adjacent to the pond and through planting of marginal vegetation (e.g. reeds iris etc.) and maintaining grassland buffer margins to avoid nutrient enrichment of the pond (see LUC Ecological Appraisal Appendix A.2 of the SPG).
- Enhancements to the river corridor through creation of wildflower meadow areas. Creation of new areas of woodland through compensatory replanting can enhance the buffer area along the River Tweed corridor, through woodland creation of native and mixed woodland that is consistent with the historic landscape and soil conditions.

Given the particular sensitivities of the site and opportunities provided by retaining and enhancing long established habitats, development should meet the Building with Nature Standards, and seek accreditation through this scheme (refer to Appendix 1).

5.5.6 **Sustainable Urban Drainage**

Sustainable urban drainage (SuDs) will be required to be incorporated within developments and must work both technically and in terms of place making using nature based solutions. It should be a primary consideration in the design process and proposals should be prepared by those with appropriate professional expertise. Locations for SuDS should be established at the outset and draw on best practice examples (Ciria C753), considering how they should be maintained. SuDs should be designed as an integral part of the landscape, reflecting the high quality of the Lowood estate landscape and the specific site context. SuDs should form part of the 'streetscene' and road hierarchy and be integrated with street tree planting or form separate planted features. They should be utilised to create spaces for communal amenity and provide further opportunities for biodiversity enhancements

including wildflower grassland around the SuDs basins and swales, reedbeds as well as native tree and scrub planting. The success of the proposed SuDs will be dependent on appropriate long term maintenance and the cost implications should be integrated into the development costs. A strategy for its management should be developed and submitted as part of the planning application(s). The Council's Supplementary Planning Guidance relating to SuDs provides useful guidance, the document can be viewed [here](#).

6 Movement Infrastructure

Movement Infrastructure

6.1 It is integral to the realisation of the SPG that the expansion of Tweedbank is a coherent, inclusive and well-connected place that is fully integrated into Tweedbank and readily and conveniently accessible from the surrounding area. The re-use of any existing routes (vehicular and pedestrian) of historic significance is encouraged.

6.2 Vision

6.2.1 The development should be an integral part of Tweedbank, augmenting this settlement while being the site of a well-connected, coherent and inclusive community. It should adopt the concept of 20-minute neighbourhoods and be well-laid out, designed with clear, logical linkages appealing to residents, visitors, and the community and business users alike.

6.3 Baseline

- 6.3.1 The relationship of the site to Tweedbank allows for it to be absorbed and augmented into the existing community.
- 6.3.2 The proximity to the railway and local road network makes this an attractive and accessible site, with diverse options to travel to and from the surrounding area.
- 6.3.3 There are several local paths/cycle ways and minor roads in and around the site, which have the potential to form attractive and convenient accesses, serving both practical and aesthetic purposes whilst supporting the principle of a 20-minute neighbourhood with key connections to business zones (old and new), the Borders General Hospital, local towns and the existing village centre.

6.4 Strategy

- 6.4.1 The most salient connections within and around the site, are identified within the SPG, although there are likely to be additional desire lines (most direct routes that people are likely to use) and linkages identified during design development.
- 6.4.2 There is a need to work around existing trees, estate boundaries and buildings, and other than where these linkages are existing, developers will need to investigate, and justify, the best choice for routes for accesses through and across the site. Careful consideration will need to be given to the balance between conserving the best of the site's heritage resources and the accommodation of the most effective and functional linkages across the site. It will be with developers to demonstrate the best ways to reconcile these matters, and accommodate all aspects of these proposals appropriately.

6.5 Instruction

- 6.5.1 Developers' must evidence the incorporation of 'Designing Streets' (document can be viewed [here](#)) principles both within the development zones and their connections with one another in line with the 'Development Access' plan on page 30 of the SPG.
- 6.5.2 In order to create an integrated addition to Tweedbank, new development must tie in with existing road, footpath and cycle links, and enable links to wider public transport connections, leisure and retail facilities and public spaces. By adopting the principles of 20 minute neighbourhoods, identifying the key desire lines (most direct routes that people are likely to use) including existing desire lines and establishing new connections, through or near to a development zone, these routes can help shape the layout and anchor it into the surrounding area. The key pedestrian desire lines should be identified and integrated into the layout of each zone. Active travel should be encouraged through route design, safe pedestrian and cycle links and clear, legible wayfinding.

- 6.5.3 The arrangement of streets and spaces within each development zone must always be aimed at creating permeable places for people walking, wheeling, cycling and vehicles that are closely knitted into the surrounding network of routes as outlined within Designing Streets. Cul-de-sac developments can inhibit the permeability of development and the relationship of development to its surroundings. Where possible, development should incorporate through routes linking a site into the wider access network. Access routes across the wider site should be coherent in terms of their design, boundary treatments and materials.
- 6.5.4 Generally it is preferable to provide more than one route into a site to enhance overall permeability of the streets network and disperse traffic within a neighbourhood. Interconnecting streets should inform the basis for all movement through the site, avoiding excessive segregation of pedestrian and vehicular access.
- 6.5.5 Parking must be incorporated within the development sensitively. Provision for electric car parking infrastructure is encouraged within all development zones.
- 6.5.6 Parking for housing development should be based on Scottish Borders Council's minimum requirements, and each house should also include bike storage facilities. The neighbourhood centre should incorporate sufficient parking to cater for the proposed uses, and should include visitor parking.

7 Climate Change, Utilities & Services

Climate Change, Utilities & Services

- 7.1 As the impacts of climate change become increasingly obvious at a local level, we must ensure that new developments are future proofed in order to contribute to reducing carbon emissions in line with Scottish Government targets. Scottish Borders Council declared a Climate Emergency in September 2020 and committed to the production of a Climate Change Route Map which was formally adopted in June 2021.
- 7.2 The Council is committed to delivering the Tweedbank Expansion in a way which fully addresses climate change mitigation and adaptation and which will ensure that the site becomes an exemplar of innovative site planning and sustainable design. The Council will lead by example, working with developers to implement the most appropriate and up to date energy technologies and evolving practices as the development of the site progresses.

7.3 Vision

- 7.3.1 The development will be a responsible, resilient, forward-looking 21st century net zero emissions community, which responds effectively and innovatively to the challenges of climate change. The development will stand as an exemplar of sustainable design to ensure that heat demand within buildings is met by zero direct emission systems, that will employ state-of-art technologies to best effect, ensure reliable and locally generated renewable energy; will reduce, if not eliminate, waste; and ensure that its infrastructure, utilities and services are sustainably responsible.

7.4 Baseline

7.4.1 Net Zero/Energy Requirements

To respond decisively to the Climate Emergency, Scottish Borders Council is committed to identifying and delivering viable opportunities to incorporate new, greener technologies into development to power and heat homes and businesses, and to manage waste responsibly; all in ways which will contribute to the overall goal of net zero emissions. The Tweedbank Expansion offers exciting opportunities lead by example, through the promotion and delivery of cutting-edge, innovative design and technological responses to the Climate Emergency. In practice, this requires delivery in collaboration with responsible, forward-looking key partners and developers.

- 7.4.2 Technological innovation within the energy, waste, resilience and transport sectors is constantly evolving, with technologies and adaptation and mitigation strategies undergoing rapid development and roll out. It is difficult to predict with confidence what opportunities will become available across the development timescale of the Tweedbank Expansion going forward, even in a relatively short-term. It is important, therefore, that expectations in this regard remain flexible and able to adapt to accommodate new technologies as they become available. To that end, it is the Council's clear expectation that renewable technologies must be applied to the highest standards, as they apply at the time, throughout the development.

- 7.4.3 At present, the Council is considering the scope for the development of district heat networks. The conditions for such developments normally include the presence of an anchor load to provide stable heat offtake , a predictable increase in demand to allow future extension to a network, agreement on which body would operate the network and the need for an Energy Services Company (ESCO) to manage customer supply and billing for heat. Heat networks can use heat sourced from ground, water or river source heat systems, with biomass systems becoming less

common. Technological innovation is developing quickly in this area. There are expanding opportunities for such systems to be accommodated in all sorts of different blue and green spaces, within and around settlements; technologies which may find some potential at Tweedbank.

7.5 Strategy

- 7.5.1 A preliminary energy analysis for the site was undertaken by ARUP in 2019 on behalf of the Council, based on a broad range of site development assumptions (number, size and location/orientation of housing zones, location and scale of office units, absence of significant anchor load) for the technologies assessed. The initial indications suggested that the most viable technology option at that time was distributed air source heat pumps. Roof-mounted PV and solar hot water heating could also provide a compatible renewable contribution of power and heat. However, the report represents a snapshot in time of constant evolution; in setting its expectations for the site, the Council will require developers to accommodate such changes in technology as may become available through the duration of the site's development and this may include site-wide energy delivery.
- 7.5.2 At the small scale, the priority must be for new buildings to achieve the highest standards of energy efficiency in their construction and subsequent energy demand, which will in turn lower the overall heat and power demand of the site. These requirements will underpin the case for additional low carbon generation infrastructure across the development.
- 7.5.3 At a wider level, there may be an opportunity to develop a viable heat network including the potential to serve the new development as well as the existing houses in Tweedbank. The Council will explore with developers all options to generate energy on-site, in order to identify the most appropriate, efficient and viable renewable energy solutions. If it is viable, it is expected that site-wide energy distribution should be employed.

7.5.4 There will be existing private and public services that could be encouraged to support and enhance the local circular economy. This may be through the use of local resources, materials, services, waste or skills. The Council intends to undertake a Circular Economy Options Appraisal for the Tweedbank site (current and expansion) to assess this potential.

7.5.5 In higher density parts of the site including, for example, the proposed care home, biomass fuelled or air sourced heat pump systems could be viable. Ambient loops pumping low temperature water may be a possibility at lower density but this would need to be tested. Again, if they are viable, it is expected that such methods should apply.

7.5.6 An energy options study must be carried out for each zone of development. This must test site specific opportunities, such as biomass (e.g. linked to new woodland planting) and include renewable energy sources. This should also look at the viability of a heat from waste water system as a possibility, this uses waste sewer water as the source for a heat pump to deliver low carbon heat to development.

7.6 Instruction

7.6.1 In considering the potential to incorporate and accommodate innovative green energy, and climate ready utilities and services at the site, developers are expected to address the following:

7.6.2 **Net and Direct Zero Emissions from Buildings**

To ensure that new buildings are fit for the future and will not require later retrofitting to achieve zero emissions, the Scottish Government is currently developing regulations which will require new buildings consented from 2024 to use zero emissions heating (and cooling). The Scottish Government is also, in parallel, reviewing the energy efficiency standards set by building regulations to ensure that Scotland's future buildings are highly energy efficient, in line with wider net zero ambitions.

7.6.3 With regard to the generation and use of energy – heat and power – developers must ensure not only that all new buildings comply with and, where possible, exceed the current building standards but also that every available opportunity is taken within the development to generate heat and power on site, from decarbonised sources. Heating properties makes up a significant part of our energy consumption and greenhouse gas emissions. Decarbonising energy for heat and power is essential to tackling climate change and will support a more resilient and carbon conscious community.

7.6.4 Waste Management must be addressed satisfactorily in line with the Council’s Supplementary Guidance on Waste Management (view [here](#)).

7.6.5 **Climate Change Adaptation**

Developers will be required to ensure that their schemes are climate conscious, incorporating adaptations appropriate to withstand and manage more extreme weather, particularly rainfall but also addressing increased summer heat and drought periods. Sustainable urban drainage should be incorporated and integrated within development zones, to manage surface water effectively, and new roads and surfaces should be served by drainage that can cope with a more extreme climatic regime. In order to maintain comfort in periods of increased summer heat, buildings must be orientated and designed to allow sufficient shading and air flow/ventilation, with adequate green infrastructure to offer additional cooling.

7.6.6 **Resources**

There are an increasing number of examples of net zero, climate ready masterplans and guidance materials becoming available for developers to access. The following provides some examples, but the Council can offer further guidance on sources of support across the above themes.

Architecture and Design Scotland

Urban Food Production

https://www.ads.org.uk/community_growing_blog/

Energy Networks

https://www.ads.org.uk/climate-change_grahamcampbell/

Behaviour Change

https://www.ads.org.uk/hedonistic_urbanism_christophermartin/

High Density Development - Seestadt, Vienna

https://www.ads.org.uk/changing-climate_qualityliving_marianmarsh/

Climate Adaptation – Melbourne

https://www.ads.org.uk/melbourne_climatedesign/

8 Responsive Placemaking & Design

Responsive Placemaking & Design

8.1 This section considers how to make the expansion of Tweedbank a great place to live, work and visit.

8.2 Vision

8.2.1 The historic heart of the site provides a strong neighbourhood centre and acts as an anchor point for new placemaking. Together the historic estate character and high quality designed landscape offer an existing unique sense of place which provides a creative springboard for placemaking. New, innovative and bold development should build on this sense of place which encompasses a strong framework and setting across the site for uniting the different development zones. There is a real opportunity for the identified zones to provide unique, high quality design solutions which will act as an exemplar and introduce more creative and contextual contemporary design to the Scottish Borders.

8.3 Baseline

8.3.1 The site has a striking setting and existing assets which form an ideal baseline from which to respond and further build an attractive development with its own strong identity and local character. A new and shared identity with the existing settlement at Tweedbank will be created, drawing inspiration from its location within the Central Borders whilst being adaptive to the challenges of the 21st century.

8.3.2 Developers and designers should work with the existing landscape features and setting, including the riverside setting, topography, trees and woodland, parkland, pond, walls, routes and historic estate buildings, to integrate new build into an existing landscape, to develop a keen sense of a place that is new but which is nevertheless informed by and responds to the historic and

landscape characters of the site. Development should not read as suburban or urban transplants dropped into the rural landscape, nor seek to mimic or create a pastiche. Development should instead seek creative and bespoke design solutions to create a successful place based on the specific site constraints and character of Lowood.

8.3.4 New development must integrate fully and augment the existing settlement at Tweedbank, to form a coherent and inclusive community; a strong and resilient place, with state-of-the-art communications and transport networks. At the terminus of the Borders Railway, Tweedbank is a 'gateway' to visitors to the wider area, and the settlement as augmented by the development of the site therefore can make a great impression on its visitors and tourists.

8.3.5 The development of the site as a whole and the individual zones themselves are likely to be carried out in a series of phases, with each zone to be developed independently to ensure individual identity and variation across the site. Nevertheless, it is essential that this is underpinned by a sitewide character framework that responds to Lowood's historic estate and landscape delivering a joined-up, cohesive sense of place at a neighbourhood level. Infrastructure and associated landscape spaces (including compensatory planting) require a site-wide strategy. It will also be important to ensure that each phase of work can be completed fully, including appropriate boundary treatments to avoid having "raw" edges while interfacing successfully with neighbouring zones.

8.3.6 Due to the scale of the development opportunity and the sensitivity of the biodiversity, landscape and heritage of the site, any development is expected to be of exemplary high quality design, material and detailing.

8.4 Strategy

8.4.1 The 'Tweedbank – Vision for Growth and Sustainability' Supplementary Planning Guidance sets out a series of design principles for the site, and for each development zone.

8.4.2 The following guidance builds on the existing design principles to steer development for the site without prescribing its specific design. It is split into two sections: the first provides guidance that applies across the whole site, to ensure a joined-up and cohesive underlying character and sense of place for the neighbourhood. The second section provides separate guidance for each development zone, acknowledging their distinct conditions, constraints and characters. It should be read in conjunction with relevant national and local guidance:

- Creating Places
- Designing Streets
- Placemaking and Design SPG
- Building for nature
- NatureScot: Placemaking and Green Infrastructure
- Trees and Development SPG

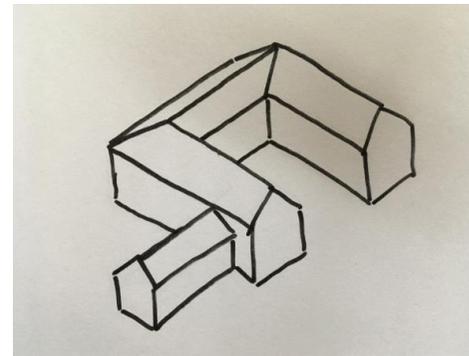
8.5 Instruction

The following sections provide overall site wide guidance.

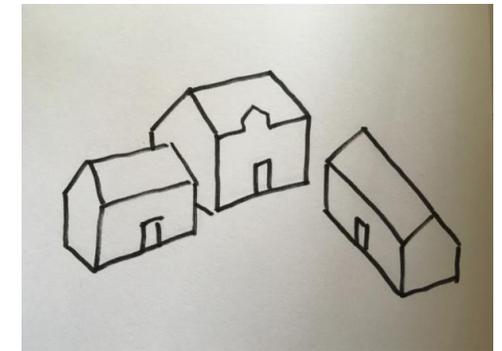
8.5.1 Establishing a Sense of Place

Two elements of the existing character of Lowood can be drawn upon in developing designs for new development i.e. the built estate character and the landscape character. Key elements of these are illustrated in the following pages as a start point for understanding character and developing a distinct identity. The two elements of character are closely inter-related. There is much cross-over in their features and the interplay between them is important. They nevertheless provide opportunity for different design responses to come forward, as illustrated in the precedents set out in the relevant sections below.

8.5.2 Responding to the 'Built' Estate Character



Courtyard arrangements



Clusters of buildings



Hard landscaped yards



Buildings fronting directly on to lanes/open yards. Narrow roads of varied width and geometries. Varied building line and boundary treatments.

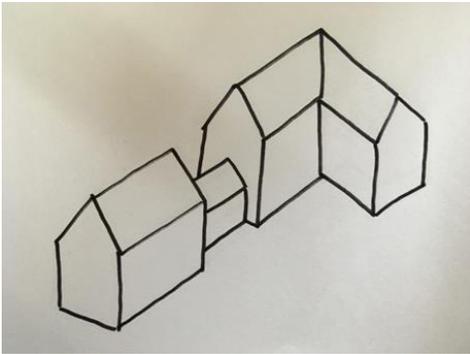
Scale and Form



One – two storey



Small building footprint



Varied rooflines



Steep pitched or piended slate roofs

Clearly Defined Boundaries



Stone walls, narrow lanes, soft verges/road edges



Estate fencing

Details and Materials



Curved or chamfered corners / roofs



Agricultural / service building details



Vernacular materials: Harling with and without contrasting window surrounds



Vernacular materials: whinstone with sandstone, contrasting quoins and window surrounds



Vernacular Materials: sandstone with matching quoins and window surrounds, slate roofs



Vernacular materials: timber painted in estate colour (green)

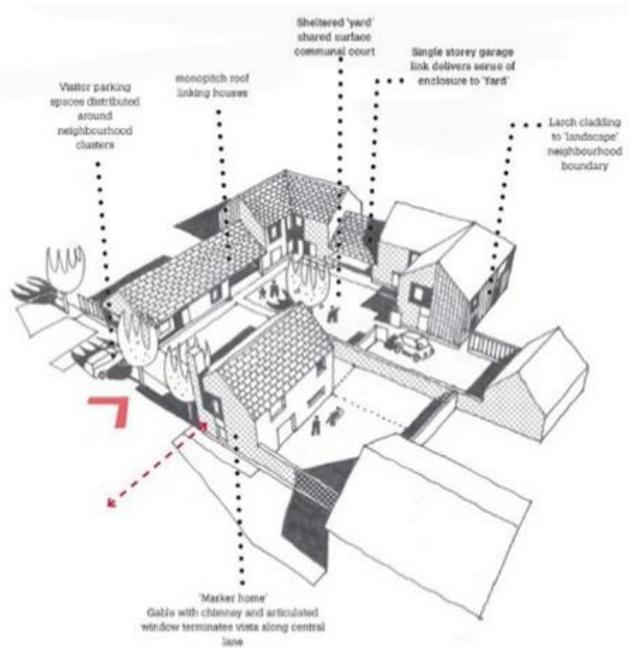
Built Estate Character Precedents

Design responses to Built Estate Character are based around a clear hierarchy of streets, variation in street geometries, buildings arranged in clusters and around yards, traditional building forms and footprints and vernacular materials. Whilst a contemporary approach can appropriately be utilised, the approach requires an accurate understanding and response to traditional rural development in the Borders.

Building Materials

The development of the site could incorporate a range of building materials whilst also allowing the opportunity for modern, innovative design and materials. Local building materials give an area a unique character. In order to reinforce this character, it is essential to first identify the local materials palette that exists then establish how proposed development can reflect this in the design. Materials used in new developments should be of high quality, sustainable and ideally from local sources. Consideration could be given to either incorporating existing traditional materials within the site, or alternative carefully considered choices of materials. For further information and guidance, refer to 'Placemaking and design principles' (page 61 onwards) of the Council's SPG on Placemaking and Design which can be viewed [here](#).

Precedents for Road Network/Overall Layout



- Clear hierarchy of shared surface streets, lanes, courts and a central square
- Small scale buildings using traditional forms
- Buildings arranged in clusters and around yards
- Traditional material palette

Polnoon, Eaglesham, East Renfrewshire Proctor and Matthews Architects

<https://www.proctorandmatthews.com/project/polnoon-eaglesham>



- Traditional architecture with good level of variety and courtyard forms and roofline variation
- Interesting use of colours

Knockroon Lachlan Stewart & Ben Pentreath

www.benpentreath.com/architecture/masterplanning-development/knockroon/



- Traditional forms
- Courtyard arrangements
- Varied material palette, using vernacular materials with sympathetic modern variants
- Varied roofline
- Mature landscaping incorporated
- Estate railings

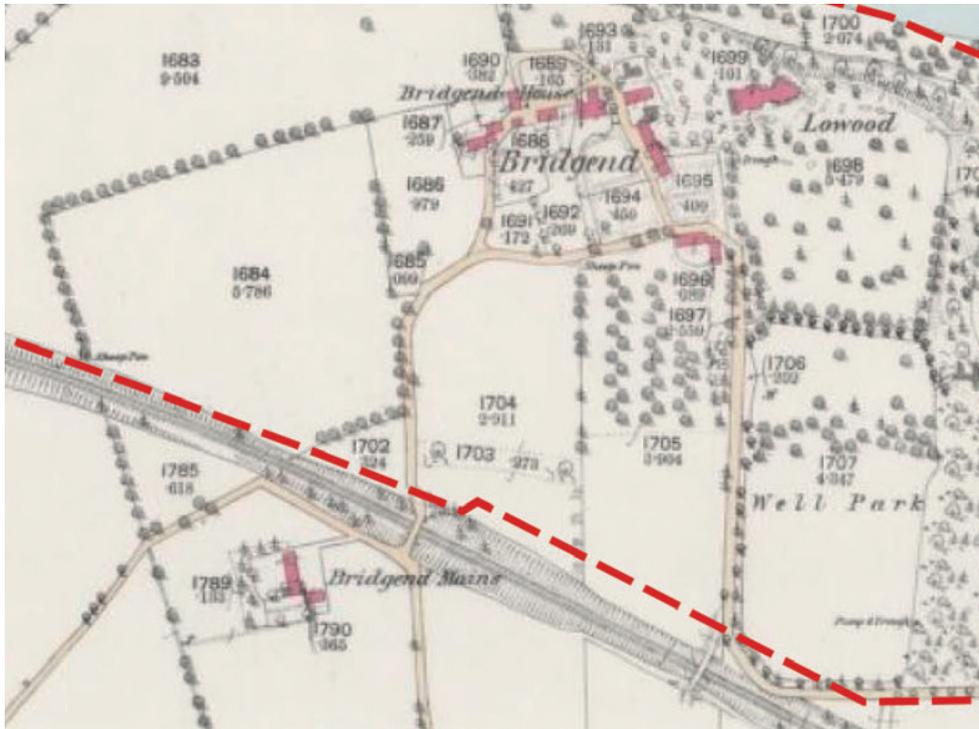
The Avenue, Saffron Walden Pollard Thomas Edwards

The Avenue > Pollard Thomas Edwards
<https://www.essexdesignguide.co.uk/case-studies/the-avenue-saffron-walden-exemplar-design/>

8.5.3 Responding to Landscape Character

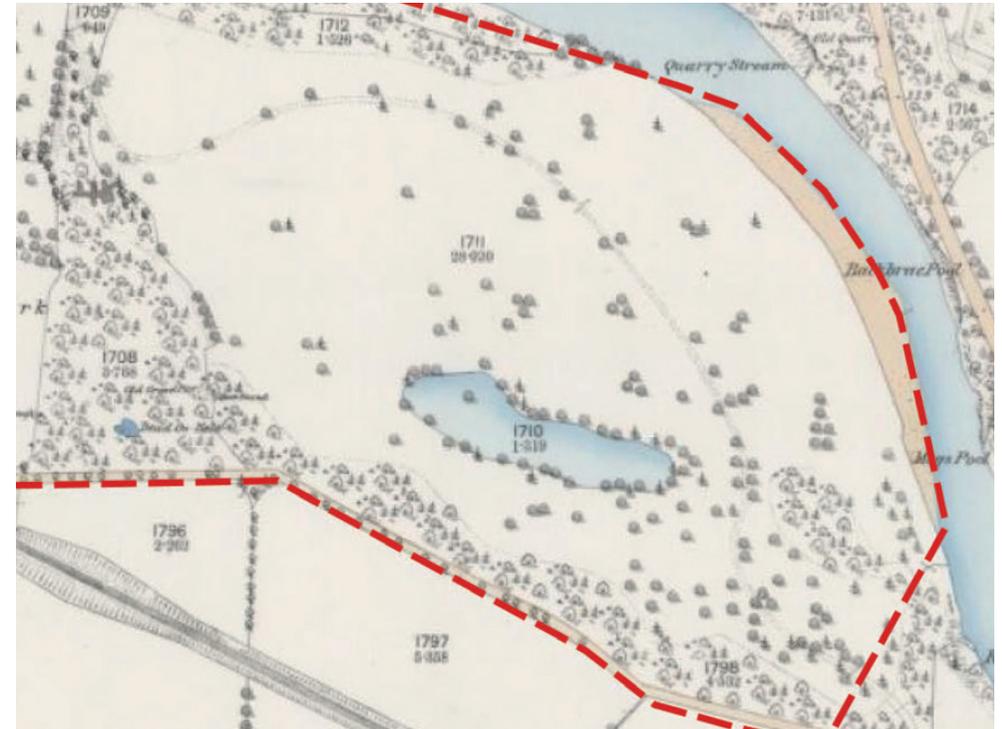
Layout – Rectangular

Rectangular forms of more functional estate area to the west of the site



Layout – Curvilinear

Curvilinear forms of picturesque style landscape to the east of the site. Informal layout responding to curvilinear forms of flowing topography, river bluffs, tree belts driveway, meandering river, curving wall edge lanes, layout responding to rectangular form of former field patterns, woodland blocks



Landscape Character Precedents

Design responses to landscape character focus on integration of new development into the existing landscape, by retaining wide areas of landscape and positioning development to retain significant landscape features, views and connections. The form and materials of buildings does not necessarily need to accurately follow the Borders traditional vernacular (although this may still be appropriate), but should be designed to have minimal impact upon the landscape.

Precedents for landscape integration and building design



- Wide areas of soft landscaping linking adjacent areas of landscape and enabling visual and physical links between them.

Tornagrain, Inverness

Ben Pentreath

[Tornagrain - Ben Pentreath Ltd](#)



- Wide areas of soft landscaping integrated into movement network
- Landscape integrated and designed for communal/ amenity uses
- Pedestrian parkland walks
- Soft verges to roads
- Existing hedgerows and specimen trees largely retained

Callaway Gardens, Westbury

Elderberry Walk, Bristol

Allford Hall Monaghan Morris (AHMM)

[Allford Hall Monaghan Morris | AHMM](#)



- Building position and roofline designed to allow views between them to woodland beyond
- Narrow form of buildings allows greater views

**Carrowbreck Meadow, Greater Norwich.
Hamson Barron Smith.**

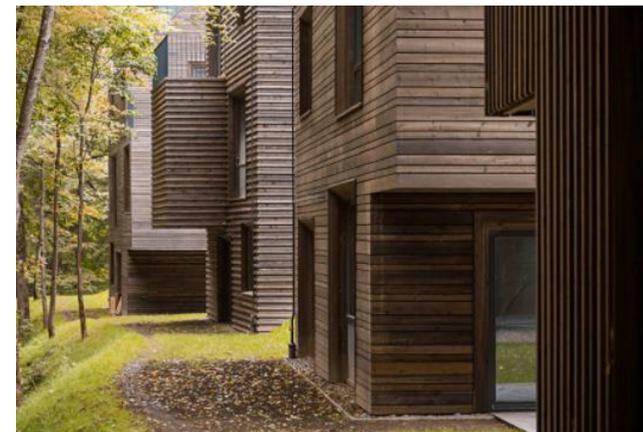
<https://www.hamsonbarronsmith.com/selected-projects/carrowbreck-meadow>
<https://www.hamsonbarronsmith.com/wpcontent/uploads/2016/07/Carrowbreck-Meadow-Monograph-Downloadable-002.pdf>



- Understated road design, soft verges
- Permeable / soft boundaries to surrounding woodland
- Buildings lower than and framed by woodland
- Use of natural timber cladding and/or recessive colours

**Rasu Namai, Vilnius, Lithuania.
Paleko Architecture Studija.**

<https://www.archdaily.com/777709/housingdevelopment-rasu-namai-paleko-arch-studija-plus-plazma>





- Use of recessive materials
- Designed around and nestled within existing mature landscaping

Woodland House, Pyatshaw, Lauder

TAP Architects

<https://www.taparchitects.co.uk/work/project/pyatshaw-burn>



- Development integrated with existing landscape /trees
- Less traditional built form that nevertheless responds to the scale and form of buildings on site
- Recessive, natural materials
- Green roofs

Design for Dementia Care Centre, Lowood

JM Architects

8.5.4 Site-wide Strategy

Whilst individual development zones will appropriately come forward separately with their own response to character, a consistent site-wide design approach should be established for key elements of infrastructure and public realm to ensure integration of the development zones at a neighbourhood level. Distinction between development phases of individual zones should not be made for these aspects of design. This should provide a consistent approach and character response to:

- Road design
- Public realm material palettes
- Street furniture
- Lighting

Some aspects of development design will fall outside the boundary of individual development zones and also require consideration holistically in terms of design, ownership and ongoing management and maintenance. These include:

- Landscape, woodland and tree management
- Compensatory planting
- Biodiversity
- Sustainable Urban Drainage
- Circulation and wayfinding
- Play

Guidance on a number of issues relevant to all development zones or that fall outside specific development zones is set out below.

8.5.5 Road Design

A hierarchy of public space and street types should be established, enabling a clear distinction between key public spaces, primary roads, secondary routes and cycle/pedestrian routes and should facilitate legible wayfinding. Their

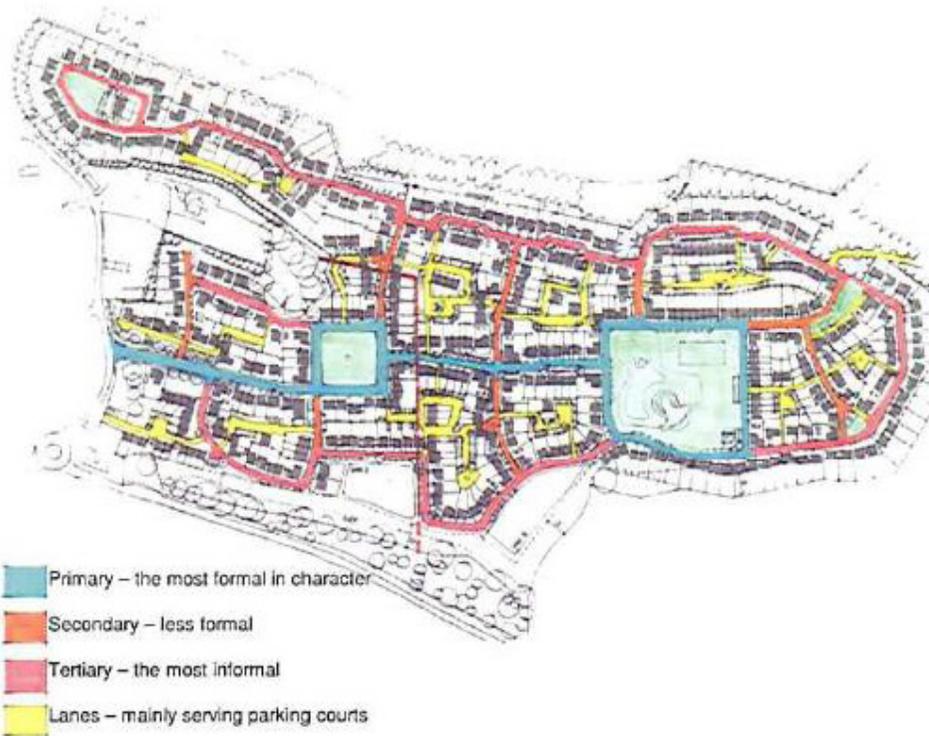
underlying design, detailing and material palette for each street type should be consistent across the site.

- Safe pedestrian and cycle routes should be incorporated into new primary access points, roads and the new road link. To reflect a parkland character, these could be separated from the road by a grass verge.
- The character of new roads should draw upon the local vernacular and respond to elements of hard and soft landscape character, including surface materials, edge treatments, boundary treatments and associated landscaping. High quality, traditional materials should be used to define key public spaces, gateways and the neighbourhood centre. However, heavily engineered infrastructure and extensive hard surfaces should be avoided in preference for using nature based solutions to create high quality amenity and civic spaces.
- Road width should be kept to a minimum and/or varied to reflect the site's character and to naturally reduce traffic speed. Within the open parkland and more open areas generally, road kerbing and road widths should be kept to a minimum to reflect the estate driveway character.
- Shared surfaces could be employed where appropriate to minimise the need for formal pavements. Where required, pavements could be denoted by changes in material or can be integrated into soft landscaping with planted/grassed verges used to separate pedestrians and cyclists from road traffic.
- The character of historic routes should be retained and enhanced, and missing or disintegrating historic routes should be re-established wherever possible.

Healthy and attractive movement corridors should use a landscape-led approach to design and incorporate green infrastructure and SUDs. New streets should be tree lined and existing trees retained wherever possible. Planting should screen pedestrians and cyclists from noise and air pollution and aid management of surface water run-off. Permeable surfaces should be deployed wherever possible. Mammal tunnels should be incorporated where required to preserve key habitat connections.

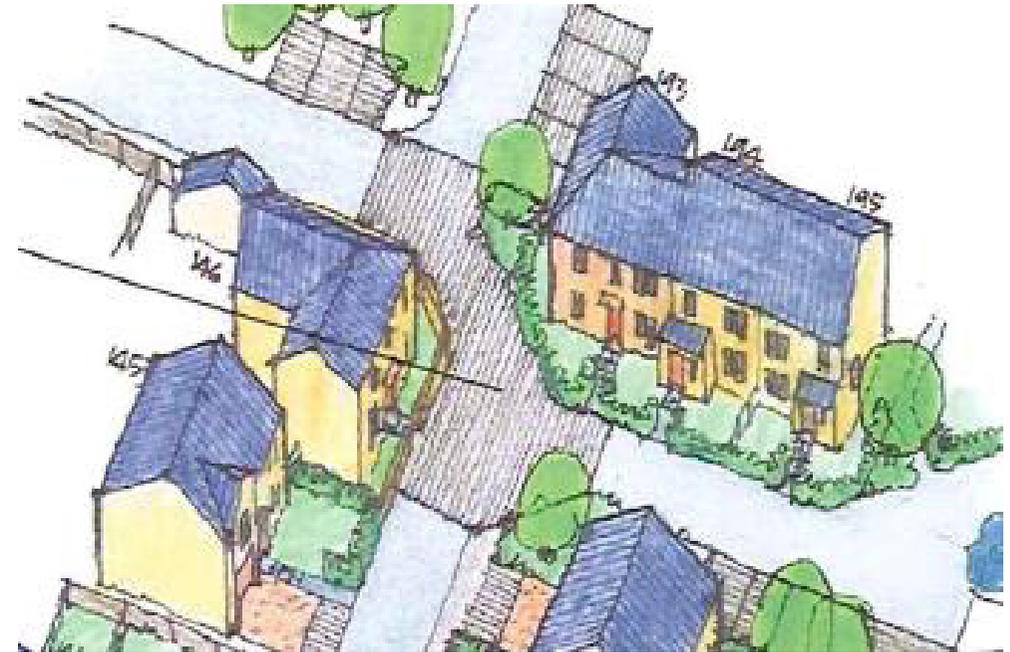
Precedents

The following images are considered to be good practice examples:



- Clear hierarchy of streets, defined by their design to help facilitate wayfinding

Easter Langlee Masterplan
Alan Swan Architects



- Natural traffic calming through road design:
 - Restricted road width
 - Changing road geometries
 - Offset junctions and carefully placed frontages

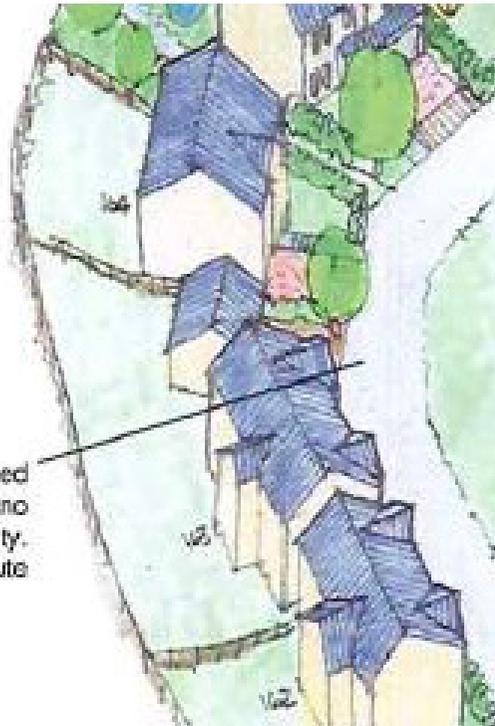
Easter Langlee Masterplan
Alan Swan Architects



- Subtle kerb and contrasting materials to denote function of space / pedestrian areas

**Wyndhead Steading, Lauder
WYG**

The street is designed in a shared surface format with no footpath and no upstand kerbs for maximum informality. Rather than a cul de sac, a circular route round the Green is provided.



- Informal road design
- No footpaths and no upstand kerbs
- Soft verges

Easter Langlee Masterplan
Alan Swan Architects

8.5.6 Lighting

- Lighting should be sensitive to the landscape and heritage character of the site and be designed to take this into account, i.e. design, materials and location should be appropriate, using 'soft' solutions where relevant. Innovative approaches to lighting should be considered as well as possibilities to site lighting at different levels to add to or reflect character.
- Minimum lighting should be deployed on open parkland areas to reflect character of the estate and to minimise and avoid disturbance to ecological receptors within and adjacent to the site including bats, otter and the River Tweed corridor.
- The approach to street lighting should be consistent across the site and should not be distinguishable between development zones.

8.5.7 Historic Driveway and New Road Link

- The experience of travelling along the historic driveway and new road link should be considered along their full lengths. This will require a consistency in approach to route design, and to development fronting the routes in Zones 4, 5 and Business Zones 1 and 2. The experience of travelling along the historic driveway and new road link should be considered along their full lengths. This will require a consistency in approach to route design, and to development fronting the routes in Zones 4, 5 and Business Zones 1 and 2.
- The historic driveway was designed to provide a sense of spaciousness, connections to the landscape and a series of unfolding and sequentially revealed views (for example, the pond, the river and the House) as part of a carefully curated experience. There are also clear views of the Eildons when travelling away from Lowood House. Development should be designed to preserve and enhance this experience and the key views along the driveway. Testing should be undertaken along the length of the driveway.
- The new road link provides a key new route through the historic parkland. The road and development alongside it should be designed following the principles of the historic driveway, to promote a similar sense of spaciousness, landscape connection and views. Similar testing along the length of the road link should be undertaken.

8.5.8 Development

- Development should be designed to establish a clear wayfinding, including through its layout, activation along key routes, and through variation in density.
- Building footprints and heights should generally reflect the established character of buildings on the site, being predominantly 1-2 storeys with small footprints. Building heights should be set below the top of tree canopy and integrate with key landscape features to reduce visual impact from the Eildon Hills and Melrose Road and to integrate development with the landscape. An exception to this might be occasional high quality 'accent' buildings used to enhance identity and wayfinding at key focal points and along primary roads and will be dependant on visual assessments.
- Building height and form should vary, to reflect the estate character. Exact designs or repeated forms of building should not be replicated in close proximity as this will promote a suburban character to the site.
- Where buildings with larger footprints are required (for example in the business zones), the perceived scale of the building should be reduced through design, for example through using a series of inter-connected smaller forms to break down the overall scale.
- Development should respond to the topography of the site and avoid excessive need for retaining walls, under-building etc. Please see the Placemaking and Design SPG for further information.
- Siting should be carefully considered in relation to amenity and environmental factors such as noise.
- Public spaces should be designed for multi-functional use including community activity, to overcome wildlife, habitat and biodiversity loss; for greening of spaces, contact with nature, health and wellbeing.
- Each housing zone should include a mix of building densities and tenures. Different forms of tenure must be fully integrated into the site to ensure tenure neutrality.
- Each planning application for the development of each zone must be accompanied by a mini planning brief which identifies the salient issues identified within the SPG and Design Guide.
- All properties should include adaptability to enable working from home and must comply with disabled access requirements.

8.5.9 Boundaries

- New development should be integrated into the landscape through soft and varied boundaries of hedgerows and tree planting, connecting visually and physically with the woodland edges, framing development and creating green corridors for wildlife and biodiversity. Please see Placemaking and Design SPG for further guidance.
- Existing boundaries that contribute positively to the character of the site should be retained.
- Hard boundaries within residential areas may be used to frame the streetscape and reflect the character of the existing Lowood 'village' in appropriate locations.
- Elsewhere, the open character of parkland should be retained through the use of soft verges and open front gardens. Estate railings and hedges can be used where enclosure is required.
- Timber fencing should be avoided throughout the development and particularly on the street edge or where visible in the public realm.
- Subdivision and 'domestication' of courtyard spaces should be avoided, e.g. bin storage.

Examples of boundaries



8.5.10 Play

- It is envisaged a single large-scale play area/amenity space provision for the neighbourhood and visitors will be provided within a central part of the site, possibly in the vicinity of Lowood House, in addition to more localised amenity features such as incidental play spaces and 'village greens' elsewhere. The exact location and timescale for implementation will be determined at the planning application stage as phasing is confirmed.
- The play area should be attractive as a destination play area to encourage visitors. It should be designed with nature in mind, not reliant on catalogue equipment and should have an imaginative approach to design. It should be clearly different from other play areas locally and be unique to Tweedbank.
- Features such as 'village greens' and incidental natural play spaces are encouraged and should be connected by green infrastructure and pedestrian/cycle routes to other open spaces within and outwith the development.
- Play should be provided to cater for all age ranges and levels of accessibility in an inclusive manner.
- Play spaces should be carefully integrated into their landscape setting, making use of topography, existing trees, new tree planting and SUDs features. This can include working with the levels across a site, choice of surface materials and equipment materiality. Play spaces should be as sustainable as possible and designed to enhance biodiversity.
- There is an opportunity for play equipment to be designed to respond to the site's context, including potential to incorporate built or natural heritage interpretation.
- Play trails could be considered, possibly in association with active travel routes.

Examples



- A new cycling and walking route is integrated through existing mature trees. Incidental play is interspersed along the route. Links are made between the play locations creating a framework of play across the site.
- Natural materials used are sensitive to the location and integrate with their surroundings.

Cane Hill, Coulsdon, London

HTA Design LLP

<https://www.hta.co.uk/project/cane-hill-public-realm>



The specific heritage theme and scale of the project are not applicable to Tweedbank, the concept of incorporating learning and heritage into play equipment is appropriate.

Drumpellier Play Area – Crannog Jupiter Play

<https://www.hawthornheights.co.uk/403/drumpellier-play-area/>



Further good examples of play space and equipment

- Use of landform
- Nature based solutions, SuDs
- Incidental play

Kinnear Landscape Architects

<https://kland.co.uk/practice/selected-projects>



- Imaginative design, unique to site
- Site specific, relates to mature landscape structure
- Interesting landform for imaginative play
- Suitable across age ranges

Kinnear Landscape Architects

<https://kland.co.uk/practice/selected-projects>



This play area:

- Is designed to be sensitive and 'blend in' to the landscape setting
- Is developed and designed to avoid impact to tree roots
- Uses height within the equipment to respond to woodland setting

Buckden House Low Ropes

Jupiter Play

https://jupiterplay.co.uk/case_study/buckden-house-low-ropesbradford/

8.5.11 Parking

- Parking should be integrated into development zones in a sensitive and discreet manner. Parking should be designed to integrate with the wider landscape and not detract nor dominate the character of the area.
- Large areas of hardstanding should be avoided. Where possible, 'soft' or 'green' surfaces should be used. This is particularly important where large areas of parking may be required, for example in the neighbourhood centre or business zones.
- Parking courts to the rear of properties or garages designed in accordance with ancillary estate buildings should be considered.
- All parking must incorporate sustainable drainage measures such as permeable surfacing, to allow drainage and to prevent flooding.

Examples



- Parking court accessed via pends and lanes, to form an area that is integrated with the street network but not dominant in the streetscape
- Strong use of landscaping, including trees and soft verges/planted areas, throughout parking court softens and integrates the area

Easter Langlee Masterplan
Alan Swan Architects



- Parking incorporated into buildings that reflect the historic service buildings on site
- Secondary courtyard spaces also reflect the historic estate character of the neighbourhood centre

Wyndhead Steading, Lauder
WYG

9 Guidance for Development Zones

Guidance for Development Zones

The previous chapter has identified good practice responsive placemaking and design principles to help guide the development of the site. This final chapter lays down specific guidance for the implementation of these principles relative to the development zones which are identified within the map in para 3.2 (page 5).

9.1 Neighbourhood Zone

The Neighbourhood Zone comprises the historic heart of the site, containing the principal former residence Lowood House and its surrounding ornamental gardens, associated service buildings, cottages, and the yards and walled gardens that form their immediate setting. The site also includes Lowood Nursery, which although a modern addition complements the productive garden character of the area.

Use

The proposed uses for the neighbourhood zone have been kept flexible at this stage. These will need to be defined as part of any planning application, in conjunction for specific design proposals for the area.

The proposed uses should ensure the area is effective as a focal point for the neighbourhood. As such, it should include uses that provide basic services for the area and uses that enable community interaction. These could include:

- Local shop
- Play space
- Community centre
- Café
- Restaurant
- Nursery
- Church
- Flexible workspaces

There is also an opportunity for the neighbourhood centre to build on its proximity to the river, proximity to cycling and walking routes (local and long-distance), and its historic character to incorporate recreational and/or cultural uses. This would attract visitors and tourists to this area, as well as cementing the community function of the neighbourhood centre. These uses could include:

- Art / creative / cultural uses, including either galleries or workshops.
- Interpretation on the Lowood Estate and River Tweed
- Cycle hire / repair
- Accommodation
- Local food production (craft beer, distillery, coffee...)
- Local growing agendas, emphasising current and historic links such as the plant nursery, orchards and walled garden.

Parking should be provided within the neighbourhood centre to cater for the businesses and for visitors.

Conservation of Existing Heritage

The historic buildings and spaces in the area contribute greatly to the character and identity of Lowood. The key buildings and spaces should be conserved and enhanced as part of the development, including contributions made by their settings. Proposals for the area should be based on a proportionate understanding of their special interest and character. Areas of less significance should be identified, where development proposals can come forward that reveal and enhance the character of the area.

The hierarchy of buildings and associated spaces in the area should be retained, with Lowood House retaining primacy, and the service buildings and cottages retaining their relative subservience.

Historic service buildings should be sensitively repaired and converted in a manner that retains the character of their original use. This relates to their overall form and materials, but also their relationship to the road and other buildings, surviving features, and any surviving evidence of use that contributes to their overall character and/or patina.

Landscape Features

Existing trees and soft landscaping that contribute to the character of the site should be incorporated and reinforced through the design proposals.

The walled garden is a particularly important feature that should retain its character. Any historic walled garden structures should be repaired and retained where possible. There is the opportunity to use the walled garden character in this area as a start point for development in terms of both design and use.

The gardens around Lowood House are part of the primary setting to the house and should remain primarily open. They should retain the character of designed ornamental gardens.

Public Realm

The boundary walls (particularly the tall stone walls) are important to the character of the neighbourhood zone, as well as the narrow and organic nature of routes and spaces defined by the walls and buildings.

The public realm should retain its estate character, incorporating hard surfaced public realm of varying geometries to form public routes and yards.

Parking should be discreetly located and sensitively designed so that it does not dominate or detract from the historic character of the area. Landscaping and surface treatments should be carefully considered as part of the design in order for parking to integrate with its wider setting.

The design and material palette of the public realm should denote the area's position as a neighbourhood centre.

Views

Unfolding views along key routes into and within the site, and the sense of arrival to the neighbourhood centre will be a key consideration. Similarly, the attractive views and sense of arrival along the driveway to the main house should be conserved and integrated into the designs.

The relationship between the neighbourhood centre and the river should be enhanced, through both physical and visual connections.

Infill Development

Any infill development should remain secondary to Lowood House and the historic estate buildings, through scale and design. The design of infill development should be a contemporary reinterpretation of the historic estate buildings, which both:

- Responds directly to the estate character of the existing buildings
- Remains clearly distinct from the historic fabric so that the different phases of development remain legible.

Precedents



Infill development sensitively designed and located to remain secondary to the historic farm buildings, but clearly legible from them.

Uses

- Cultural Uses
- Café,
- Shop

Ditchling Museum, East Sussex

Adam Richards Architects

<https://www.ditchlingmuseumartcraft.org.uk/>

<http://adamrichards.co.uk/projects/ditchling-museum-of-art-andcraft>

<https://www.architectsjournal.co.uk/archive/ditchling-museumwins-cash-and-planning-consent>



Infill development sensitively designed to link existing historic buildings, remaining subservient through height and design.

Uses

- Museum
- Café,
- Shop

Kilmartin Museum, Mid Argyll

Reiach and Hall

<https://www.reiachandhall.co.uk/work-re-useconservation/kilmartin-museum-mid-argyll>



- Use of conjoined traditional roof forms to break down scale
- New build subservient in scale and massing to historic buildings.

**Park View, Dundee
Page Park**

www.pagepark.co.uk/project/architecture/parkview



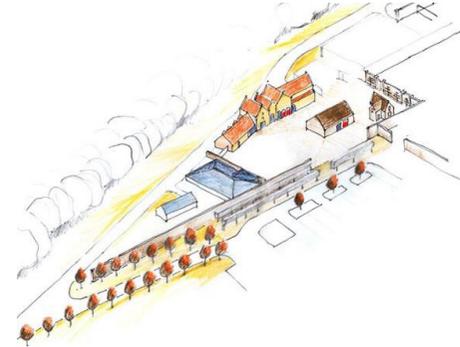
Conversion of historic buildings + modern, including infill development which relates to the character of the site through its courtyard form, pitched roof and materiality. It is somewhat overscaled in comparison to its historic neighbours, and there appear to be opportunities for better integration.

Uses

- Shop
- Deli
- Bar & Brasserie
- Self-catering accommodation

**Mains of Taymouth Courtyard,
Perthshire**

<https://www.taymouthcourtyard.com/>



Very different architecture, but still relevant in terms of sensitive conversion of historic buildings, yard character and discreetly designed modern architecture within an estate setting.

Uses

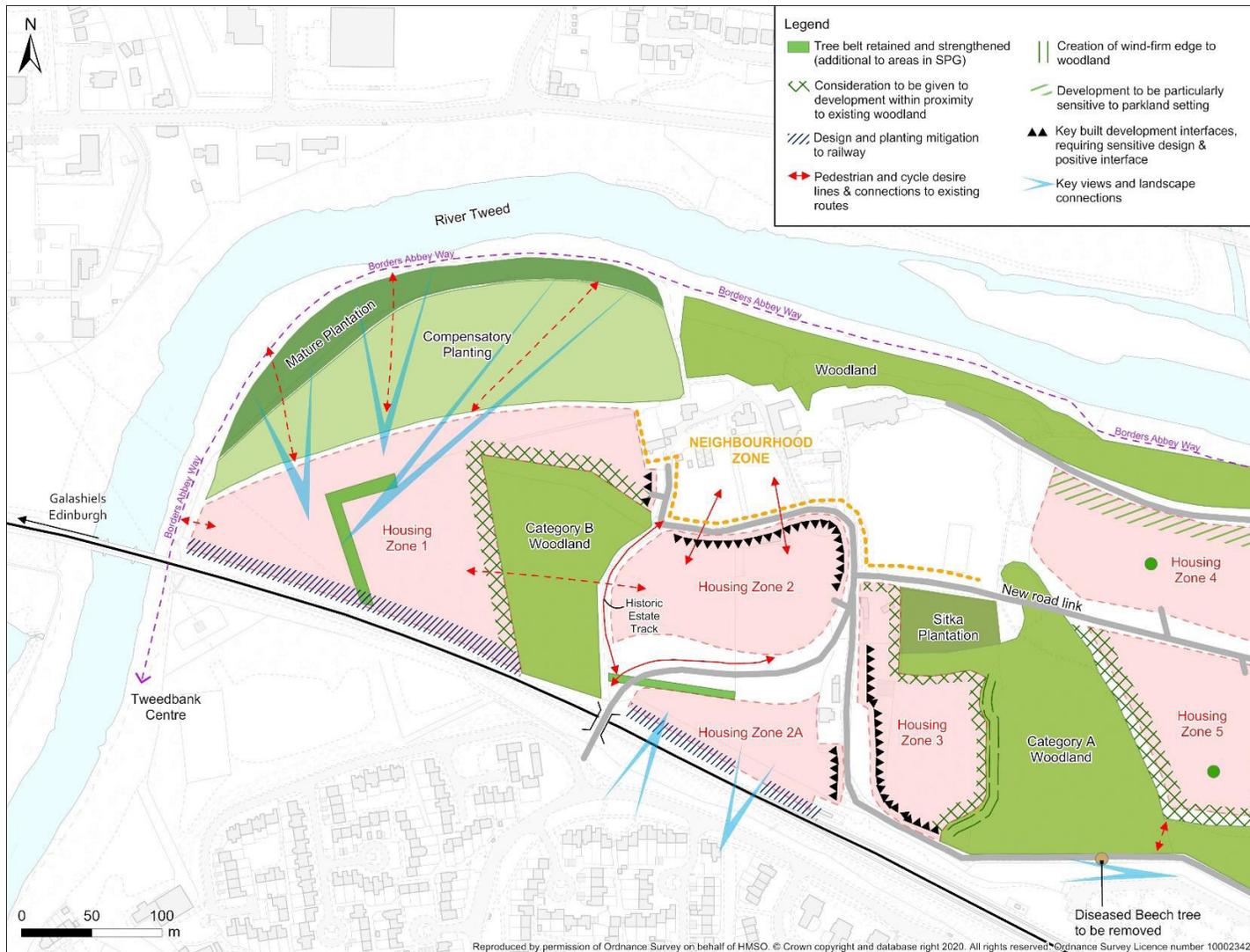
- Farm shop
- Café
- Gallery
- Workshop/studio space
- Brewery
- Artisan food school
- Garden centre
- Art trail
- Estate walks



**Welbeck Estate, Worksop,
Nottinghamshire**

<https://www.welbeck.co.uk/experience/>
<http://www.dominicole.net/project/welbeck/>

9.2 Housing Zones - West Side: Built Estate Character Led Design



9.2.1 Zone 1

Zone 1 occupies a large area to the western part of the site. It is bounded by the railway to the south and proposed compensatory planting on the bluff above the river Tweed to the north. To the west the area connects directly with the riverside and footpaths along the river bank and to Galashiels. To the southeast it is bounded by woodland, with a direct interface with the neighbourhood centre to the northeast. The area currently comprises a mixture of woodland and open parkland. The site slopes from the railway down to the river.

- Development will need to give particular consideration to topography, ensuring the layout and building design respond to land levels and the need for excavation, retaining walls or other artificial mechanisms are minimised.
- The topography of the site also allows opportunities for views to and from the riverside walk to the north and west, and to surrounding hills and features in the wider landscape beyond. Views should be integrated into the development and adjacent compensatory planting to promote a greater sense of place and connection to the wider landscape.
- The distinct change in height from the river bluff should be utilised to maximise views, and may form a suitable front edge for housing.
- The compensatory planting should be of lowland mixed deciduous varieties. Inclusion of areas of open parkland within the area would help to integrate with the wider landscape, whilst allowing views to be retained. Amenity use of the area should be promoted, and physical connections to the riverside path included.
- The woodland identified as Category C and proposed to be removed for development should be assessed to identify any individual trees or tree belts of greater amenity value. It is considered likely that this applies to the tree belt along the north and west boundary of the woodland, forming structural planting contributing to the existing designed landscape. Trees and tree belts of amenity value should be retained and incorporated into the development.
- To the east, an appropriate buffer informed by a tree survey should be provided between development and the neighbouring woodland to ensure its future management and to minimise impacts of shading on amenity.
- A new route may be possible through the woodland to connect Residential Zones 1 and 2, but would need to minimise impact on the existing woodland. The necessary requirements for root protection would need to be fully considered as well as the interface with the historic track to the east (see Zone 2/2a below). A pedestrian/cycle route may be a more viable and sensitive option.
- The railway line creates a strong southern boundary to the development zone. Its close proximity also creates potential impacts for the amenity of future occupiers. The design should seek to mitigate for this through appropriate landscaping and design mechanisms. Additional planting along the boundary could include compensatory planting.
- Within the scope of an overall unified character, sense of place and high quality design, there is potential for greater design flexibility in this area. Landscape or built estate character-led approaches could both be applied, although it is considered a higher density can more successfully be achieved through a built estate character approach.
- The primary entry point into the development zone will be from the north east. This location is directly adjacent to the neighbourhood centre and requires a sensitive response that respects the historic character and primacy of the neighbourhood zone. Additional density at this entry point is therefore unlikely to be appropriate; legibility and wayfinding should be provided through alternative design mechanisms.

9.2.2 Zones 2 and 2a

Zones 2 and 2a are located to the centre of the site and to the south of the neighbourhood centre. They are separated by a steep river terrace, with a line of mature beech trees following the top edge of the slope. To the east the zones are bounded by an estate track, along which two historic buildings survive. The railway forms a strong boundary to the south, with visibility to the railway and development in Tweedbank beyond. The zones occupy a prominent location in the proposed development, adjacent to a key access point, with a primary route through the area and direct boundary with the neighbourhood centre.

- Zones 2 and 2a are located at a key gateway to the site and have a direct interface with the neighbourhood centre. Given this prominent location, the zones will play an important role in establishing a strong sense of place and site character through their architectural, spatial and public realm design. This should respond directly to the existing built estate character.
- The proposed new bridge/access point and key route through the site should be designed to promote walking and cycling as well as providing easy vehicular access. The design should incorporate pedestrian and cycle users, who could be accommodated in a separate cycle/pedestrian route adjacent to the road.
- Density can be focussed at new access points from the new road link and other key wayfinding points.
- The proposed bridge is approximately in the location of an historic bridge, from where an historic route continued north alongside the surviving woodland to connect with the neighbourhood centre. Evidence of this route survives, including revetment walls and mature trees marking its boundaries. Due to the survival of these elements and its gradient, it is not possible for a road to be formed following the historic route. The historic route should instead be retained and upgraded to form a pedestrian and cycle route along this key desire line connecting Tweedbank to the neighbourhood centre. Its character as a historic route should be promoted through its design and materiality.
- As per Zone 1 above, a new route may be possible through the woodland to connect Residential Zones 1 and 2, but would need to minimise impact on the existing woodland. The change in level of surviving remnants of the historic estate track alongside the woodland mean provision of a vehicular route would be difficult. A pedestrian/cycle route may be a more viable option and would connect in with the proposed cycle/pedestrian route along the historic estate track.
- The central position of the zone means permeability of the area is important throughout, with strong pedestrian connections enabled between the zones and neighbourhood centre.
- The line of Beech Trees at the top of the river terrace are a key landscape feature which should be retained and strengthened. It should be noted that the location of these is incorrect in the tree survey.
- Change in levels and adjacencies to the neighbourhood centre and Tweedbank respectively mean Zones 2 and Zone 2a should be designed separately to respond to their particular setting.

Zone 2a:

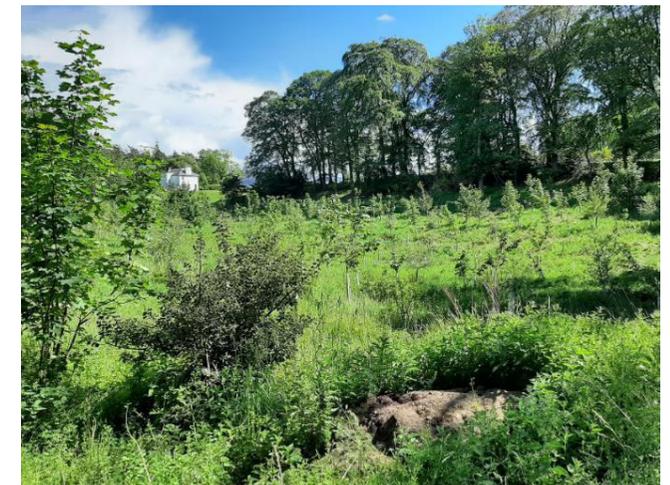
- The railway line creates a strong southern boundary to Zone 2a. Its close proximity also creates potential impacts for the amenity of future occupiers. The design should seek to mitigate for this through appropriate landscaping and design mechanisms.
- There is however also opportunity to ensure visual connections are maintained between the Zone 2a and Tweedbank across the railway to facilitate greater cohesion and legibility. Planting along the railway and development (scale and appearance) in this location should be designed to facilitate this.
- The frontage along the east section of zone 2a will also be prominent in views from the railway station and along the pedestrian / cycle route and therefore perform as a key wayfinding marker. These views should be tested during design development. It is likely a direct relationship between development and the route would be appropriate in this location to provide a positive site response, greater activation and passive surveillance. This will also enable a positive relationship between this frontage and zone 3, opposite.
- Historic buildings along the estate track to the east of the zones should be retained and new development should ensure a sensitive relationship to them.

Zone 2:

- The interface between Zone 2 and the neighbourhood centre will require particularly careful consideration to provide a balanced streetscape.
- Historic stone walls bounding Zone 2 should be retained and their character strengthened.
- The area is shown on historic maps as previously containing an orchard and/or market gardens. This character could inform design development and/or the choice of trees incorporated into the development.



View across Zone 2a from south east



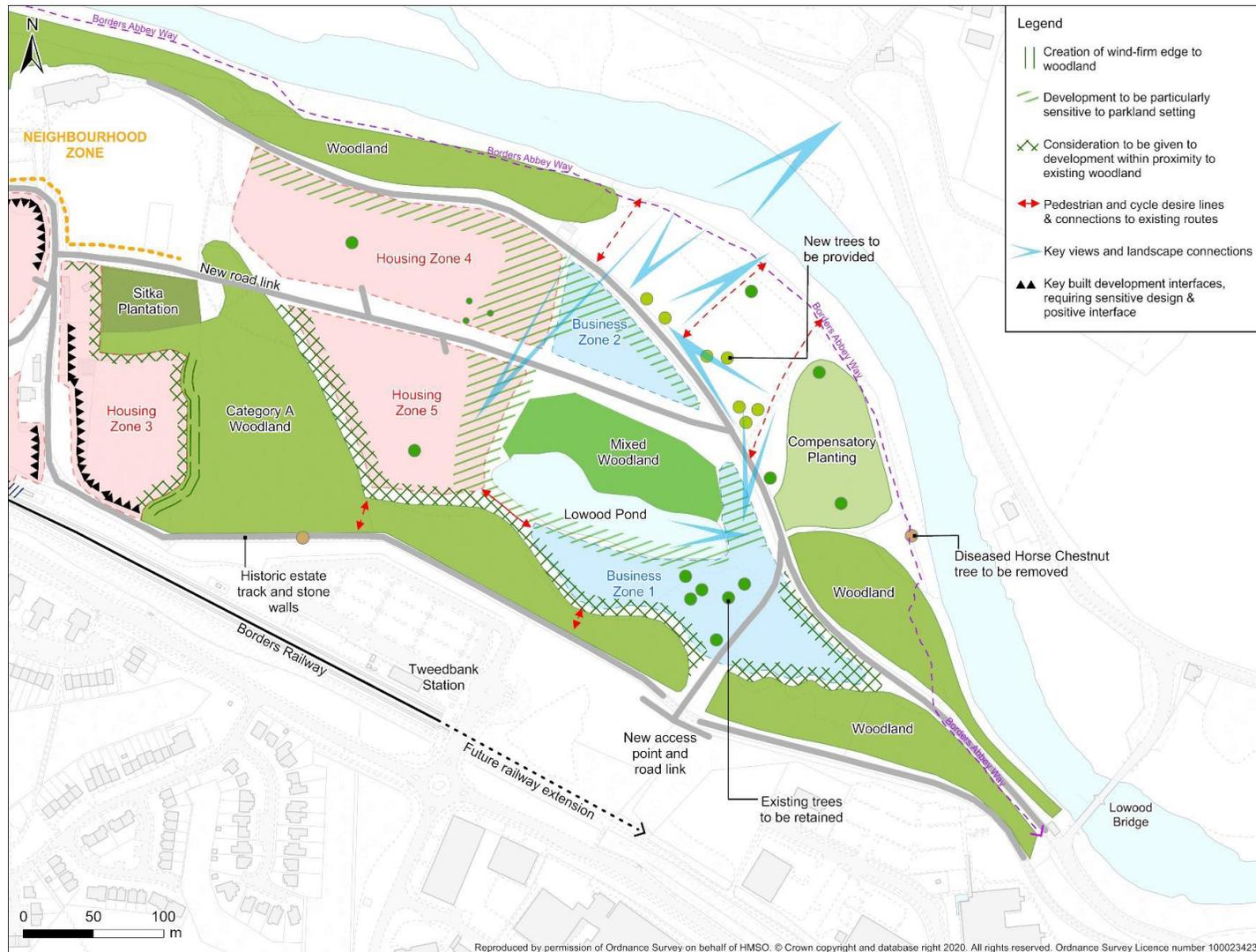
View into Zone 2 from north west

9.2.3 Zone 3

Zone 3 is located towards the centre of the site. It is bounded by an estate track with sections of tall stone walls to the west and south, the proposed new road to the north (with the gardens to Lowood House beyond) and woodland to the east. The site incorporates open land and woodland that has suffered from wind throw to the south and an ancillary yard and structures on the site of a former well, pump and tank to the north. The site is relatively flat to the south but incorporates a significant drop in level to the north.

- Zone 3 is not prominent in long views, being partly-enclosed by woodland, and has minimal interface with the neighbourhood centre. For these reasons, it has capacity for higher density development relative to other zones.
- The boundary to the Category A woodland to the north and east require careful design. An appropriate buffer informed by a tree survey should be provided to facilitate woodland management and avoid impacts from shading. Additional planting should also be introduced to create a wind-firm edge.
- Mature trees to the west boundary should be retained, with development excluded from the root protection areas.
- The development should be designed to respond to its woodland setting, developing a relationship to, and transition into, the wider natural landscape.
- A historic route lined with trees is shown on historic maps to the north of the site in the approximate location of the new road link. This feature should be investigated to inform the character of the road and its interface with the site. Any significant trees or avenues should be retained. If evidence of a historic avenue survives, it would be appropriate for this designed landscape feature to be reinstated.
- Tall walls survive along sections of the site's western boundary (to the existing lane). These are particularly integral to the character of the site. The walls should be retained and their character reinforced. Historic maps show a well, pump and tank within zone 3; remnants of buildings associated with these appear to survive. Any significant surviving elements of these structures should be retained and integrated into the development.
- Given the potential additional massing of higher density development, a built estate character as opposed to a landscape-led design approach will likely be more appropriate. The design will need to be of high quality and designed to reduce the perceived density through their siting, breaking down building forms and rooflines.
- The western and southern frontages to the estate track should be carefully treated to integrate development into the wider estate landscape and to create a balanced streetscape with Zone 2.
- The southernmost area of the site will be prominent in views from Tweedbank Railway Station and along the estate track, and therefore should perform as a key wayfinding marker. These views should be tested during design development. It is likely a direct relationship between development and the route would be appropriate in this location to provide a positive site response, greater activation and passive surveillance.
- The railway to the south has a minimal interface with Zone 3, but nevertheless requires the development to be designed to mitigate impacts.
- There is potential to ensure a positive visual relationship between the site and development across the railway line in Tweedbank.

East Side: Landscape-Led Design



9.2.4 Zone 4

The site is located to the east of Lowood House and its gardens, and is bounded by the historic driveway to the House to the north, with woodland along the banks of the Tweed beyond. The proposed new road link is located to the south with commercial development proposed to the east. The site slopes gently toward the river to the north. It is currently high quality parkland. Forming the setting and approach to Lowood House, and in close proximity to riverside walks, the area is highly visible and particularly sensitive to its landscape setting.

- Given the site's landscape sensitivity and prominence, a lower density of development is proposed in this location. Density should be avoided toward the river (north and particularly northeast where development will be visible from the riverside footpath, B6374 and beyond) and along the historic driveway.
- The development should be landscape-led and respond to the landscape character of the site over and above the built estate character of the site. It should allow for integration of wide sections of landscape and the retention and/or provision of individual parkland specimen trees.
- The walnut trees on the site should be retained and their character strengthened.
- Physical and visual connections should be retained through the site to connect with neighbouring landscape elements. Views should be retained to the river and to the Eildons. Development including public realm, as well as areas of retained parkland, should be designed and located to enable these views and connections to the wider landscape.
- Development should be designed to work with landform and tree resource to integrate with the landscape, minimise visual impact and avoid excessive excavation, retaining walls etc.
- The northeast of the Zone is particularly visible from the river, B6374 and beyond. Views should be tested and the height, form and location of development designed to minimise impact and avoid visible urban coalescence.
- Connections between retained parkland, the pond and woodland in Zone 5 (see below) should be extended to provide a connection through Zone 4/ Business Zone 2 to the river.
- The interface between Zone 4 and Business Zone 2 requires careful consideration. Retention of an open parkland connection to the river in this location would assist with the success of this interface and used for public open space/ communal amenity. It may be appropriate to incorporate SuDs in this location also.
- Development should ensure pedestrian and cycle connections to the historic driveway and onward pedestrian connections to the river beyond.
- Development affecting the historic driveway should preserve and enhance its character and the experience of the approach to Lowood House, as per site-wide guidance above. These should be resolved in a consistent manner across Housing Zone 4 and Business Zones 1 and 2.
- Development alongside the new road link should enable a historic driveway character, as per site-wide guidance above. This should be applied consistently across Housing Zones 4 and 5 and Business Zones 1 and 2.



Zone 4 as viewed from north east

9.2.5 Zone 5

Zone 5 is located to the central eastern section of the site. It is bounded by the proposed new road link to the north, by Category A woodland to the west and south, and further woodland and Lowood Pond to the east. The area currently forms part of the high quality parkland of the designed approach to Lowood House. The site includes significant changes in level, sloping primarily down toward Lowood Pond.

- Given the site's landscape sensitivity and prominence, a lower density of development is proposed in this location. Development should be avoided directly adjacent to the pond. More of the area's development density should instead be concentrated to the west along the new road link and at key access points from the road into the development site.
 - The development should be landscape-led and respond to the landscape character of the site over and above the built estate character of the site. It should allow for integration of wide sections of landscape and the retention and/or provision of individual parkland specimen trees.
 - Physical and visual connections should be retained through the site to connect with neighbouring landscape elements. Views should be retained to the river. Development including public realm as well as areas of retained parkland should be designed and located to enable these views and connections to the wider landscape.
 - The most important landscape connections are between the pond, road link and woodland. The area between the road link, pond and woodland to the south should be retained as parkland, to provide connections between these landscape features and a natural boundary to the pond. The area should be designed for use as amenity. It would be appropriate for this retained amenity parkland to extend through Zone 4/Business Zone 2 to allow connections with the river.
- The view from the new road link (at this point following the route of the historic driveway), across Lowood Pond is also particularly significant. The appearance of development from this location should be tested.
 - Given the topography of this area, spatial layout and roofscape design offer notable potential for a lively and contextual roofscape design in views across the site and particularly from the view across the pond.
 - Margin planting should be strengthened to the pond to secure positive biodiversity benefits.
 - Development alongside the new road link should enable a historic driveway character, as per site-wide guidance above. This should be applied consistently across Housing Zones 4 and 5 and Business Zones 1 and 2.
 - An appropriate buffer informed by a tree survey should be provided along the edge of the Category A woodland to the south and west to allow for woodland management and avoid impacts of shading, as per site-wide guidance above.
 - Development should incorporate pedestrian and cycle desire lines to Tweedbank railway station (via the historic estate track to the south) at locations that limit impact on the woodland. A pedestrian connection to Business Zone 1 should also be included.



Zone 5 as viewed from north east



Undulating and sweeping landform of Zone 5 as viewed from north east

9.2.6 Business Zone 1

Located to the southeast of the site, Business Zone 1 is bounded to the south by woodland and a proposed key access point to the site. To the northwest it is adjacent to Lowood Pond whilst to the northeast it is bounded by the historic driveway, part of which will be connected to the proposed new road link that runs through Business Zone 1 from the proposed new access point. The area currently forms high quality parkland along the designed approach to Lowood House and incorporates a number of specimen trees. The area slopes steeply down toward Lowood Pond.

- Given the proposed key access point and road link running through Business Zone 1, the area will play an important role in establishing a sense of arrival into a place of strong character.
 - The new road link and development alongside it should enable a historic driveway character, as per site-wide guidance above. This should be applied consistently across Housing Zones 4 and 5 and Business Zones 1 and 2. It is however of particular importance to achieve this successfully within Business Zone 1, given its position at gateway to the site and that the route in part here follows that of the historic driveway itself.
 - The development should respond to the landscape character of the site. It should allow for integration of wide sections of landscape and the retention and/or provision of individual parkland specimen trees.
- Physical and visual connections should be retained through the site to connect with neighbouring landscape elements. Development including associated public realm as well as areas of retained parkland should be designed and located to enable these views and connections to the wider landscape. The most important of these is the connection between the historic driveway/new road link and Lowood Pond. It would be appropriate for connections to continue between this area and the parkland/compensatory planting to the river. This should include a mammal tunnel under the proposed road to connect habitat areas including the pond and river.
 - Views along the driveway/new link road to the Eildons should be conserved.
 - The boundary to the pond requires careful consideration and design. It should retain a soft, natural edge. Marginal planting should be strengthened to the pond to secure positive biodiversity benefits.
 - Areas of required parking should be permeable, soft and where possible green in character to retain a parkland character.
 - Pedestrian routes between Business Zone 1 and Tweedbank Railway Station/Business Zones to the south should be enabled to allow for greater integration of the sites and for likely desire lines. An onward pedestrian connection to Housing Zone 5 should also be included.



Preferred access point into Business Zone 1 from north east



Business Zone 1 with views across into Zone 5



Pond located to north west of Business Zone 1



View across pond from Business Zone 1



Business Zone 1 viewed from existing estate access to east



View into Business Zone 1 from south west

9.2.7 Business Zone 2

Business Zone 2 is located to the northeast of the site. To the south the site is bounded by the new road link, to the west by Residential Zone 4 and to the east is the historic driveway with retained parkland and views to the river beyond. The site comprises open parkland forming part of the designed approach to Lowood House.

- Business Zone 2 occupies a prominent location along the historic driveway and new link road but also in close proximity and highly visible from the riverside and beyond and therefore requires sensitive consideration.
- The development should respond to the landscape character of the site. It should allow for integration of wide sections of landscape and the retention and/or provision of individual parkland specimen trees.
- Physical and visual connections should be retained through the site to connect with neighbouring landscape elements. Development including associated public realm as well as areas of retained parkland should be designed and located to enable these connections to the wider landscape.
- Development within the northern section of the site where it will be most prominent in views from the river and beyond must be carefully considered in terms of scale and massing.
- Development should be designed to work with landform and tree resource to integrate with the landscape, minimise visual impact and avoid excessive excavation, retaining walls etc.
- The northeast of the Zone is particularly visible from the river, B6374 and beyond. Views should be tested and the height, form and location of development designed to minimise impact and avoid visible urban coalescence.
- The interface between Zone 4 and Business Zone 2 requires careful consideration. Retention of an open parkland connection to the river in this location would assist with the success of this interface and used for public open space/communal amenity.
- Development should respond to views to the Eildons.
- Connections between retained parkland, the pond and woodland in Zone 5 should be extended to provide a connection through Zone 4/Business Zone 2 to the river.
- Areas of required parking should be permeable, soft and where possible green in character to retain a parkland character.

9.3 PRECEDENTS - 'Landscape character' business areas

Buildings - Form

Good example for how to break down scale of larger buildings through inter-connected smaller forms.



Stauning Whisky Distillery, Denmark

Buildings - Scale

Larger building designed to be recessive to landscape



Great Glen House, Scottish Natural Heritage

SUDS

Sympathetic accommodation of SUDS:



Strathclyde Business Park

Relationship between business development and ponds

Good example of what seems to be a direct but light touch impact on the pond margin. Building sits well below tree canopy, second to landscape. Note also the orientation of building to maximise relationship to pond:



Ephemeral Edge, Austerlitz, New York, USA Dean-Wolf Architects

Pond/Water Body – Edge Treatment

Good example of natural margins / marginal planting to water bodies – with some amenity integration:



Antwerp



Centennial Parklands, Sydney, New South Wales

Pond/Water Body – Amenity

Example of way of providing amenity / interaction between building and pond, but without creating an artificial edge or impacting too greatly on the pond ecology:



Adelaide Botanic Gardens Wetland, South Australia

Soft/Green Character Parking

Example of green parking area:



Copenhagen Green City, Green Parking

Appendices

A.1 The Building with Nature Standards



A.1 The Building with Nature Standards
