

RESPONDING TO CLIMATE CHANGE

Introduction

Grosvenor Britain and Ireland (Grosvenor) is pleased to commit to delivering on the four main thematic ambitions of the Draft Greater Cambridge Local Plan, through the promotion of an expanded railway village at Whittlesford.

Responding to climate change, delivering net biodiversity gains, designing for well-being and social inclusion are all aspects that contribute towards the creation of quality and sustainable places. The following proposals set out Grosvenor's vision for the Whittlesford Railway Village.

Locating development in the right place is the smartest and most effective way to achieve this

Historically, growth around Cambridge has been located within, or on the edge of the City where it provides housing in sustainable locations close to employment opportunities and public transport.

On the south of the City, this continues to make sense where development remains in close proximity to expanding employment hubs and research parks. However the greatest opportunity of the combined Greater Cambridge Local Plan, will be to address the emerging imbalance that has seen more recent strategic housing allocations weighted to the north and west, whereas investment in life science and research based employment parks has been directed towards the south and east of the district.

The area surrounding Whittlesford in particular, contains some of the most important industries and research bodies in the Country with many of the companies located in the area having experienced significant recent growth and with continued aspirations for further growth into the future.

Critically, the emerging disconnect between new communities and employment growth has resulted in increasingly long commutes by car, low levels of sustainable travel for even short journeys and employees being priced away from the area surrounding their immediate place of work. Locating new housing growth at Whittlesford, creating a housing hub at the epicentre of employment centres provides an opportunity to radically address this disconnect (See Figures 1 to 4).

Furthermore, Whittlesford as a location has actually suffered from the disjointed relationship of the settlement with the parkway station. Shops and pubs closing on the High Street, and poor links to the station have created a less accessible centre and fewer facilities for residents, who instead have had to bear the inconvenience of being seen as a location for free parking and access into the City without capturing local spend or community benefits.

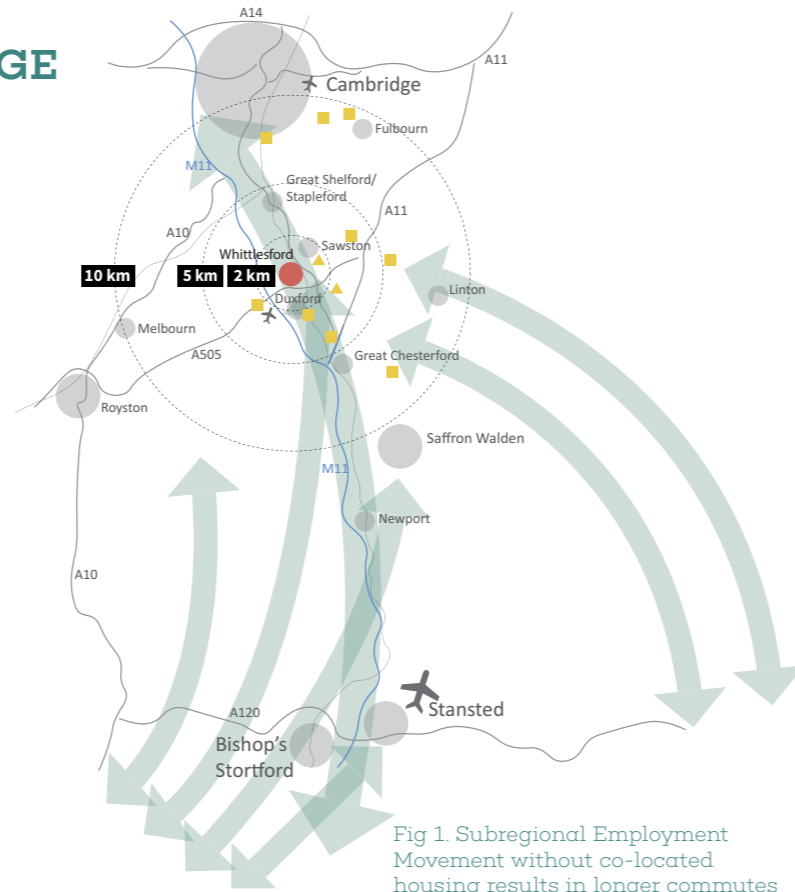


Fig 1. Subregional Employment Movement without co-located housing results in longer commutes



Fig 2. Subregional Employment Movement with growth at Whittlesford reduces longer commutes

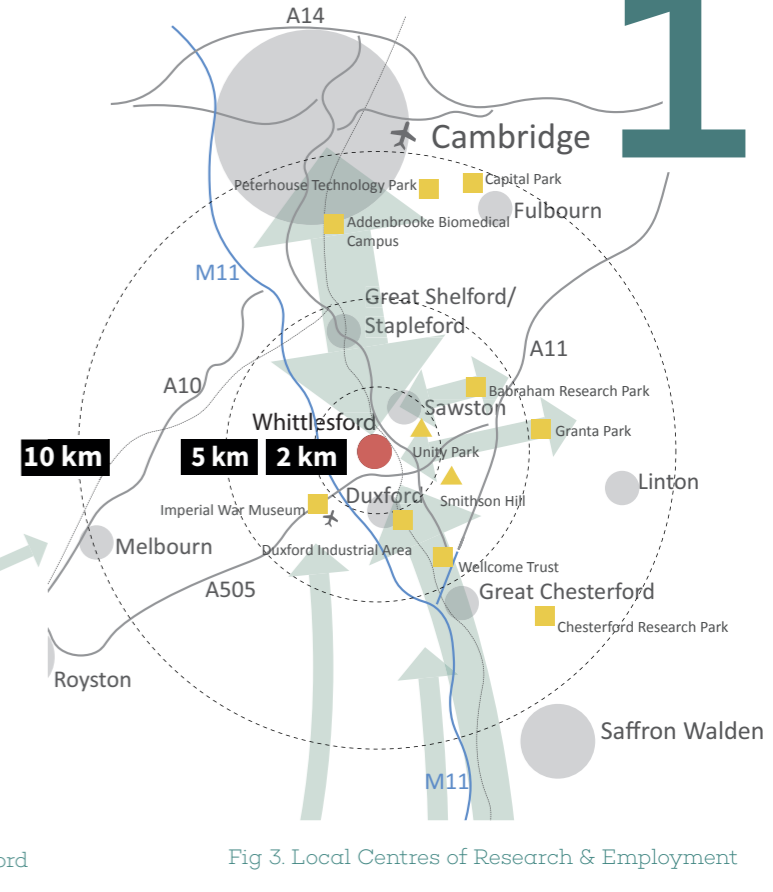


Fig 3. Local Centres of Research & Employment

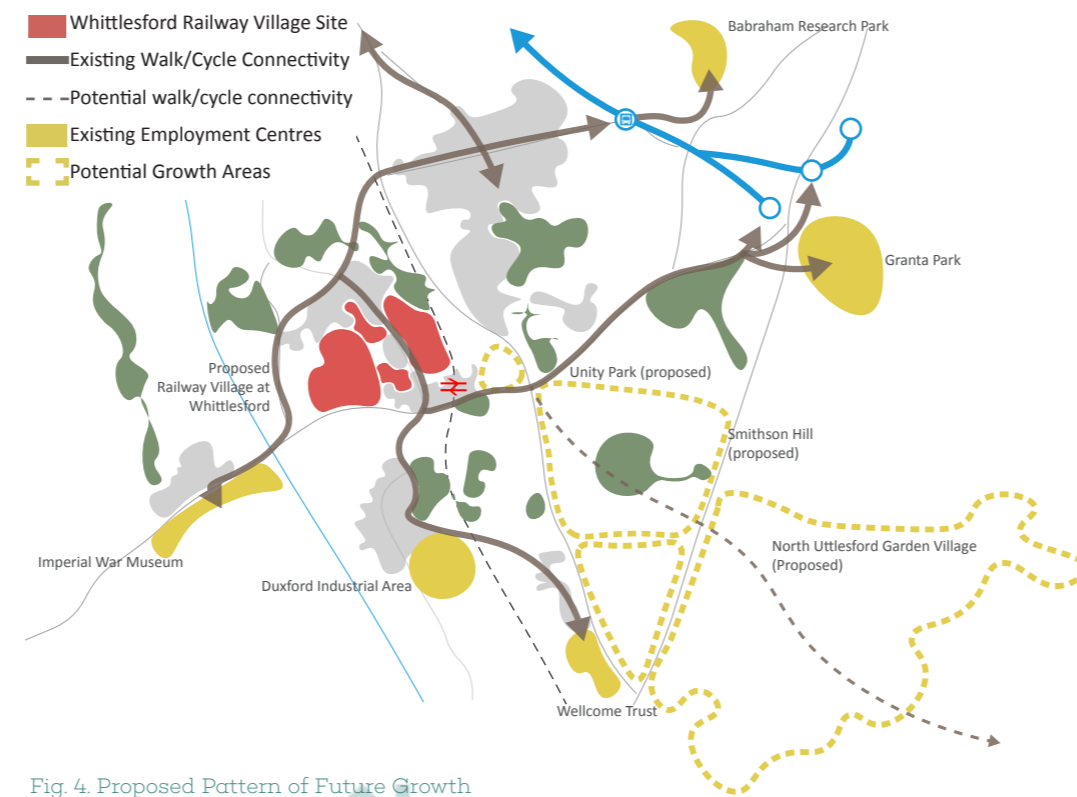


Fig 4. Proposed Pattern of Future Growth



Cycle Priority Streets



PassivHaus Principles



Walkable Neighbourhoods



Rainwater Gardens



Community Energy

New growth at Whittlesford will provide an opportunity to repair the disjointedness between the station and the village, creating more meaningful with potential for new school, village green and range of new facilities.

The ambition is to transform Whittlesford into a new generation of walkable and cyclable settlement, retaining the unique vernacular and tradition of the village yet responding to the climate change agenda, maximising the co-location of homes, employment and existing transport infrastructure.

Beyond seeking growth in sustainable locations and delivering community benefits, Grosvenor is committed to leading by example when it comes to responding to the climate change agenda.

Grosvenor's Climate Change Commitments

At Whittlesford this means committing to the following:

- Ensuring all new homes achieve net Zero carbon* with embodied carbon and operational carbon over development lifetime considered in the design process *in accordance with and as defined by the UK Green Building Council
- Designing and building with PassivHaus principles in mind, adopting rooftop renewables and smart home solutions
- Providing for a form of development that is primarily walkable, and cyclable
- Adopting design and development layouts that encourage low or car free areas, removing cars from the street and creating safer streets
- Designing for net positive or neutral water and waste consumption
- Employing connected systems including blue/grey infrastructure and energy grids - e.g. communal rainwater harvesting balanced with SUDs.

BIODIVERSITY AND GREEN SPACES

Whittlesford belongs to a finite selection of settlements within South Cambridgeshire that feature a unique combination of existing public transport infrastructure, strategic land within the control of only one or two land owners, and space to expand into an area of low ecological value.

Ecological analysis of the Cambridge Green Belt (Fig. 5) suggests that land at Whittlesford under the control of Grosvenor and partners, is the primary site that features both the above mentioned attributes, and which sits centrally within the South Cambridge cluster of life-science research institutions.

Furthermore, the edge of Green Belt location of land at Whittlesford, not only maintains the integrity of this resource, it provides a unique opportunity to repair two halves of a disjointed settlement, and significantly increase local biodiversity simultaneously.

Considering development in this location, it has been possible to perform a predictive biodiversity assessment (Fig. 6), that indicates how new development could exceed emerging environmental legislation requiring net biodiversity gains from new developments, by as much as 25% above target.

The site currently forms part of an intensively managed agricultural landscape of low ecological value (Fig. 7), providing significant opportunity to provide long term enhancements for biodiversity, new habitat creation and platform for community stewardship of the environment

These will be achieved through adherence to the mitigation hierarchy, to avoid, mitigate, and (as a last resort) compensate any impacts to existing biodiversity, and through the creation of a range of new ecological habitats to benefit local wildlife, including:

- Species-rich wild-flower grassland to create new pollen- and nectar-rich foraging grounds for insects, butterflies and bees, in a re-wilded landscape, extending into residential neighbourhoods and gardens
- Native tree planting within the development parcels and areas of Public Open Space to create new nesting habitats for breeding birds, community orchards and a valuable carbon offsetting resource
- Enhancement of existing woodland and hedgerows with new planting and management for biodiversity, foraging habitat and shelter
- Wide scale inclusion of new bird and bat boxes including homes and gardens, to provide nesting and roosting opportunities
- The provision of hedgehog highways throughout the development; and
- The opportunity to create new Green Belt boundaries with new woodland

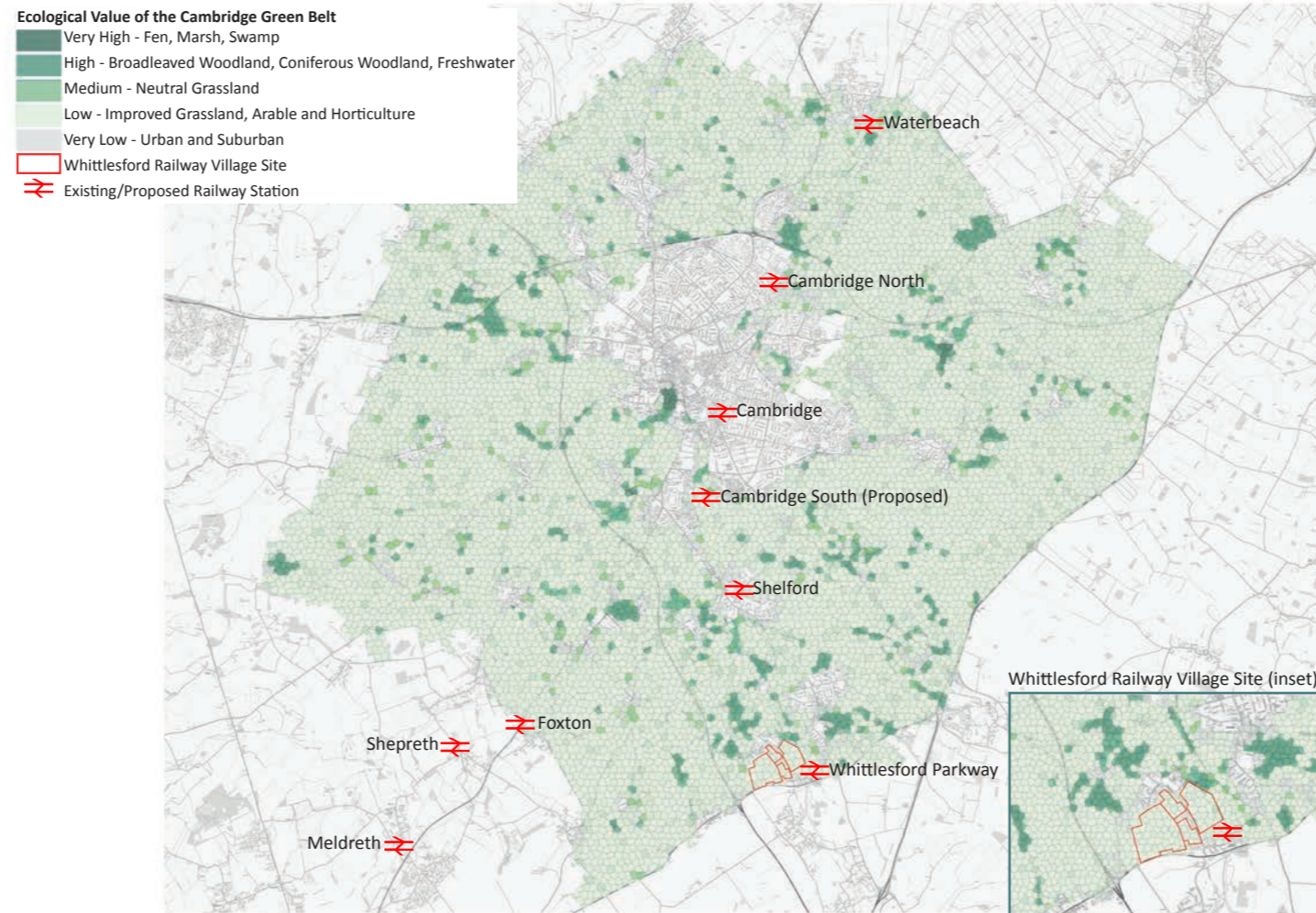


Fig. 5. Green Belt Ecological Value and Accessibility



Fig. 7. Existing Site Photo looking North West

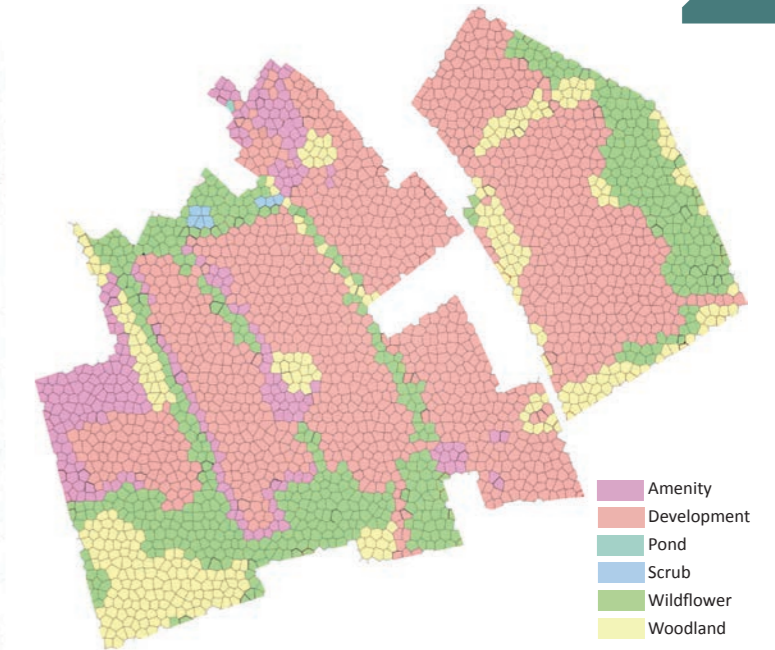


Fig. 6. Site Biodiversity Assessment (Post Development)



12.5% NET BIODIVERSITY GAIN

WHITTLESFORD RAILWAY VILLAGE

It's not buildings, but people, and the social interactions between them make a place a community. Historically, developments that have been designed with cars and vehicles in mind, have proven to be less humane places to live.

With the existing Parkway station, and two halves of Whittlesford linked only by a typical vehicular street (Duxford Road) the opportunity for social interaction and community cohesion is reduced. This is in notable contrast to the old High Street in the heart of the village to the north where a sense of proximity and 'walkableness' pervades.

It's this sense of human scale and identity that Grosvenor is looking to expand across the wider settlement at Whittlesford. Creating a truly unified village, with renewed focus on assets of community value and the support networks needed to encourage and attract a truly diverse demographic.

The whole development has been designed to reflect a non-car based community, where stopping to chat and say "Hi" is the norm. Cars will be permitted, but they will be designed out so as not to dominate the streets.

A network of cycle priority streets are proposed that mean its possible to drive to the front doors of individual properties, but parking outside the front door is the preserve of cycles only. All other traffic is permitted on a 'guest' basis only and should move safely (and slowly) to defined parking areas leaving the place for the people.

This strategy encourages play throughout the public realm, en-route to destinations and as part of the experience place.

A central community hub will become a combined focus for healthcare, conversation, work and learning, as well as community meetings, worship and a supporting ear.

The notion that biophillic design (harmony of nature in design) can have a positive effect on mental wellbeing is reflected through: the enhanced wilding of the place, encouraging grazing on the community green, activities for health and fitness (such as bee-keeping, green gym and callisthenics) and a network of connected SuDs that feed pollinating gardens at every front door.

However, such an idyllic vision should not be the preserve of the few. Grosvenor's vision for Whittlesford Railway Village is that of a fully inclusive society, with a wide range of homes, both large and small, for families, sharers or individuals and across a broad spectrum of genuine affordability.

Bungalows will sit along co-housing schemes, next to custom built family housing. All residents at Whittlesford should have the opportunity to personalise both their home and the public realm, which is why a Community Development Trust (and possibly a Community Land Trust) will hold public space in perpetuity, with an endowment to manage spaces for biodiversity and wellness gain, and recycle receipts from the community hub and other facility back into the village purse.

These funds will be egalitarian, i.e. new facilities, community growth and infrastructure will benefit the village as a whole, investing in roads, schools and local facilities to the advantage of existing residents as well as those moving here but working locally, and therefore sensibly contributing to more sustainable travel patterns.



Fig. 8. Illustrative Profile of Social Inclusion and Wellbeing through the Site



DELIVERING QUALITY PLACES

Fig. 10. Illustrative Layout of Phase 1 - Circa 350 New Homes



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| 1. Connection to existing village of Whittlesford | 12. Primary access street |
| 2. New Village Green | 13. Traditional field boundaries enhanced to bed development into landscape |
| 3. Riverside Park | 14. Existing public right of way |
| 4. New woodland to reinforce edge to railway line | 15. Local character feature of fragmented landscape edge to settlement |
| 5. Wooded character to northern areas of village applied to Duxford Road | 16. Proposed school |
| 6. New woodland to reinforce wooded nature of Whittlesford | 17. Potential location of shared sports facilities |
| 7. Potential connection to Whittlesford Parkway Station | 18. Potential bridleway extension |
| 8. Area for potential future development | 19. Village Square and Local Centre |
| 9. Whittlesford Parkway Station | 20. Linear village common acting as sensitive linking landscape edge to existing village |
| 10. Retained copse and archaeology | |
| 11. Access from A505 | |

Fig. 9. Concept Masterplan for circa 1,200 New Homes

Low Car Layout

Cycle Route and Development Edge onto Green

Whittlesford is already an attractive village, close to excellent transport links, rolling countryside and world-class employment and research facilities.

The satellite Parkway station (renamed in 2007) is however poorly connected to the village to the north. Land control secured through Grosvenor and its partners can now facilitate the completion of these two settlements halves, providing a mix of circa 1,200 excellently located homes in a sustainable setting designed around principles of walkable neighbourhoods, wellbeing and social inclusion.

The first phase of some 350 of so homes will function as a physical design code, implemented by Grosvenor and its partners to set new standards in design and construction, using the best aspects of local vernacular, as well as building research to create a template settlement designed to respond to climate change and future lifestyle choices.