



TUNBRIDGE WELLS

**Strategic Sites Masterplanning
and Infrastructure Study**

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01 INTRODUCTION

Overview of the Commission

- 1.1 Tunbridge Wells Borough Council (TWBC) is in the process of producing a new local plan for the period extending to 2038. The Draft Local Plan (DLP), which was subject to public consultation in Autumn 2019 under Regulation 18 of the Town & Country Planning (Local Planning) (England) Regulations 2012, identified potential sites for strategic housing growth in the form of a new settlement at Tudeley Village and as an expansion to the town of Paddock Wood in an easterly direction and westwards into Capel parish. Land at Tudeley and east Capel lies within the Metropolitan Green Belt.
- 1.2 The proposed strategic sites are being promoted by a number of separate land-owners and national housebuilders including the Hadlow Estate, Crest Nicholson, Dandara, Redrow and Persimmon. TWBC has stated that any expansion and development at Paddock Wood should be planned and delivered according to garden community principles. In addition, TWBC requires a comprehensive approach to development to ensure that appropriate levels of physical and community infrastructure are planned and delivered in a manner which supports the growth of community and mitigates the impact of such large scale growth.
- 1.3 As part of the planned growth of the town, a number of sites are being promoted within and around Paddock Wood which are potentially suitable for employment growth, recreation and town centre uses. Development of these sites would promote a balance between homes, jobs and local services, thus achieving a more sustainable settlement.
- 1.4 To inform the Draft Submission Local Plan, which will be subject to Regulation 19 consultation in Spring 2021, TWBC commissioned three related studies:
 - A Strategic Sites Infrastructure Framework for Tudeley Village, and and Paddock Wood and east Capel;
 - A Paddock Wood including Land at east Capel (hereafter referred to as Paddock Wood and east Capel) Structure Report and Plan; and
 - High level parcel master plans for areas to be allocated within Paddock Wood and east Capel, including the town centre.
- 1.5 TWBC commissioned David Lock Associates, supported by Stantec, SQW and JBA Consulting to progress these three studies. Work to assess the viability of a draft Strategic Sites Infrastructure Framework and Paddock Wood and east Capel Structure Plan was undertaken by DLA and Dixon Searle.

- 1.6 This report explains the work undertaken to deliver the studies, including consultation, and sets out the key findings and recommendations. For clarity, the report is not intended to make any recommendations about whether the study sites should be allocated in the Local Plan. The purpose of the commission is to gather evidence on whether specified scales of development at the locations identified in the DLP are deliverable from a masterplanning, infrastructure and viability perspective. The report will form part of TWBC's evidence base for the Local Plan. Gathering this evidence is undertaken without prejudice to future decision making and does not indicate any pre-determination of the issue.

Green Belt

- 1.7 It should be noted that the Green Belt is an important policy constraint which TWBC will need to have regard to when determining the growth strategy for the Borough. National policy is clear that alterations to the boundary of the Green Belt can only be made in exceptional circumstances. This study does not consider whether exceptional circumstances exist with regard to Green Belt. TWBC has commissioned Land Use Consultants to provide independent advice on the impact on the purposes of the Green Belt.

Covid-19 Pandemic

- 1.8 This study was undertaken during the Covid-19 pandemic which therefore influenced the engagement with stakeholders and the community. All engagement was undertaken using virtual platforms such as Microsoft Team and Zoom due to the restrictions but this did not impact on the quality of the engagement or the outputs. The trends emerging from Covid-19 in relation to viability, masterplanning and urban design have been taken into account where possible during the study.

Study Brief & Scope

- 1.9 The project brief sets out the following study objectives.
- 1.10 Prepare a Strategic Sites Infrastructure Framework, including:
- Identify the infrastructure capacity requirements to meet the DLP policy requirements for the scenarios of i) both Tudeley Village and Paddock Wood and east Capel, ii) just Paddock Wood and east Capel, and iii) just Tudeley Village, having regard to relevant planned/permitted growth elsewhere in the Borough or in adjacent Boroughs.
 - Ensure that the infrastructure requirements for Paddock Wood and east Capel reflect, and influence, the work undertaken on the Paddock Wood and east Capel Structure Report and Plan.

- Examine the different options to deliver this capacity for scenarios i), ii) and iii) having regard to the policy requirements in the DLP (and subsequent consideration of representations received during the Regulation 18 consultation) including an assessment of environmental impacts, economic cost and deliverability constraints of the different options, and other matters (e.g. societal) considered relevant.

1.11 Prepare a Paddock Wood and east Capel Structure Report and Plan, including:

- Identify, at a high level, the capacity of the settlement in terms of number of dwellings and level of non-residential floorspace and the location and provision of key infrastructure within the settlement.
- Identify and assess the different options available to test and deliver the policy requirements of the DLP (and subsequent consideration of representations received during the Regulation 18 consultation) in the form of a framework, including:
 - o An assessment of the environmental impacts, economic cost and deliverability constraints of the different options, and other matters (e.g. societal) considered relevant.

- o An understanding of the implications for developers and promoters of different parcels of land of the different options, including terms of equalization agreements or similar between two or more parties.
- o An examination of whether additional land is required, including for matters such as flood mitigation.
- o A review of the evidence base used to prepare the DLP and the information submitted by the promoters of the sites to provide a professional view of the suitability of these documents to underpin the evolution of the plans, and to identify further work to address any issues identified.
- Ensure the work relates to the Strategic Sites Infrastructure Framework.

1.12 A summary of the findings of the above work is contained within this report. It is prepared to test the policy within the Draft Local Plan, to inform policy and decision making as TWBC moves forward to a Pre-Submission Local Plan.

Role and Structure of this Report

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|---|--|
| <p>1.13 The brief also requires preparation of High Level Master Plans for the preferred Structure Plan option, including:</p> <ul style="list-style-type: none"> • Preparation of a high-level master plan for each parcel at Paddock Wood and east Capel. • Identification of land uses and indicative locations, movement and drainage strategies. | <p>1.16 This report sets out the response to the Brief. It provides a summary of the information used to inform the study, as a basis for preparing the Structure Plan and the Infrastructure Framework. It explains the nature of the consultation, and how the outputs of consultation exercises have informed the study findings. It provides a record of the options arising during the study process, for both the Strategic Sites Infrastructure Framework and Structure Plan for Paddock Wood and east Capel, and indicates the environmental, economic and other factors that have influenced the recommended options.</p> |
| <p>1.14 The High Level Masterplans are presented in Appendix X. Together with the findings of this report, they can form the basis for a Supplementary Planning Document, should it be required.</p> | <p>1.17 Section 2 explains the broad ethos and appropriateness of the comprehensive approach adopted for the study, whilst the study methodology is explained in Section 3. Section 4 provides a summary of the baseline and site information.</p> |
| <p>1.15 Consultation with stakeholders for each stage of the study, including technical stakeholders and community representatives.</p> | <p>1.18 Recommendations for the Structure Plan for Paddock Wood and east Capel are set out in Section 5. Section 6 presents the Strategic Sites Infrastructure Framework. Section 7 sets out recommendations in respect of the approach to equalisation and delivery. Section 8 sets out the conclusions of the study.</p> |
| | <p>1.19 Appendices to the report provide a fuller account of the technical assessments and analysis undertaken by the DLA team to inform the study.</p> |

02 PLANNING GARDEN COMMUNITIES: A COMPREHENSIVE APPROACH

- 2.1 Garden communities lie at the heart of the Government's plan to boost housing delivery within England. Set out in MHCLG's 2018 Garden Communities Prospectus, such new communities are "large scale new developments that will create well-planned, sustainable places for people to live." The programme renews the ambition for vibrant, mixed-use communities as originally articulated by the Garden Cities movement at the turn of the 20th Century, and sets out a template for expectations on the quality of development that should be delivered.
- 2.2 The prospectus sets out a range of key qualities of new garden communities, but does not impose strict principles. Instead, it sets out a vision for locally-led, holistically-planned and self-sustaining places. Local communities should put together the principles and placemaking attributes that best suit their context and needs.





- 2.3 The Town & Country Planning Association (TCPA), as custodians of the garden city movement of the early 20th Century, describe garden city principles as follows:

“The Garden City Principles are a distillation of the key elements that have made the Garden City model of development so successful, articulated for a 21st century context.

A Garden City is a holistically planned new settlement which enhances the natural environment and offers high-quality affordable housing and locally accessible work in beautiful, healthy and sociable communities. The Garden City Principles are an indivisible and interlocking framework for their delivery, and include:

- ***Land value capture for the benefit of the community.***
- ***Strong vision, leadership and community engagement.***
- ***Community ownership of land and long-term stewardship of assets.***
- ***Mixed-tenure homes and housing types that are genuinely affordable.***
- ***A wide range of local jobs in the Garden City within easy commuting distance of homes.***
- ***Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food.***
- ***Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience.***
- ***Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.***
- ***Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport.”***

- 2.4 Although the TCPA principles are not a part of the Garden Communities Prospectus, they are strongly related and their work underpins the qualities that MHCLG wishes to see in new garden communities. As such, they form a strong basis from which to work and understand how development might be undertaken successfully.
- 2.5 The TCPA emphasises a holistic approach to settlement planning and the interconnected nature of the elements that go into making a successful and sustainable place. This is particularly relevant to planning at a strategic scale, which demands a different approach to normal property development. Advance infrastructure has to be laid out and utilities and services supplied from scratch. Green infrastructure and community facilities must be created from the start. Transport services have to be established, and effort put into growing community, which, by definition, will initially be comprised of strangers. The realisation of the opportunity to grow demands a longer-term perspective because it is capital intensive in the early stages, particularly when new highways, schools and environmental mitigation are needed. In formulating a Strategic Sites Infrastructure Plan and a Structure Plan for Paddock Wood and east Capel, TWBC is proactively planning for well-considered and coordinated growth.
- 2.6 It should be noted however, that each location benefits from different constraints, assets and opportunities. In applying the garden city principles, due regard should be had to how those principles can best be realised in the specific circumstances of the growth area.
- 2.7 Furthermore, the TCPA notes that “the garden cities were amongst the first manifestations of attempts at sustainable development”. In the case of Tudeley Village and Capel / Paddock Wood, there are inherent opportunities to establish and grow settlements where natural environment is a key driver of the master plan, and where the need to travel is reduced because a great many of the jobs and services needed by residents are provided in close proximity to their homes.
- 2.8 For this reason, the Structure Plan for Paddock Wood and east Capel is informed by a view of ‘whole settlement planning’ in which the constraints and opportunities of the existing town are considered alongside growth opportunities in order to arrive at a plan for the town as a whole. Key examples of the benefits of this approach include opportunities for flood betterment within existing Paddock Wood, improvements to the town centre so that it can offer a vibrant and resilient service centre for the enlarged community, enhanced sports and recreation facilities for all residents, improvements to the network of active travel routes and to bus services, and new sites for employment use to increase economic activity.



2.9 Overlaid onto these considerations is a responsibility to understand the community and cultural identity of the area. In modern history, Paddock Wood is a small Victorian railway town which grew to support hop growing activity, and which was extended throughout the post-war period to form a suburban settlement centred around a compact town centre, and surrounded by open fields and orchards. In contrast, Capel Parish is a rural parish comprised of small villages and

hamlets where the community comes together through shared facilities such as schools. The potential expansion of the town of Paddock Wood into Capel Parish (i.e. in a westerly direction) prompts a need to consider how the separate identities of each area might manifest in a Structure Plan for Paddock Wood and east Capel.

2.10 Recommendations in respect of all of these factors are set out in Sections 5 and 6.

03

METHOD

Design-Based Approach

- 3.1 There are two core studies detailed in this report:
- Strategic Sites Infrastructure Framework for Tudeley Village, and Paddock Wood and east Capel
 - Structure Plan for Paddock Wood and east Capel.
- 3.2 The interlinked nature of these studies requires an integrated methodology. A combined programme of work stages has been followed to create robust evidence to support the Pre-Submission Local Plan, with both studies proceeding in parallel and sharing information-gathering resources.
- 3.3 At the heart of the approach is a design-based methodology. After the gathering of constraints, opportunities and local views, masterplanning for growth based on strong garden community principles and other good urban design and placemaking practice forms the basis of site capacity and necessary interventions to support such growth. These interventions, phasing considerations and other supporting infrastructure are identified and form the basis for an integrated infrastructure framework.
- 3.4 This approach ensures good placemaking outcomes for growth areas, with infrastructure improvements that line up with masterplanning. By operating on an ownership-blind basis, infrastructure and spatial requirements that cut across boundaries are identified, forming the basis for comprehensive policy that can deliver sustainable growth.
- 3.5 An overview of the methodology stages, inputs and outputs is shown below.

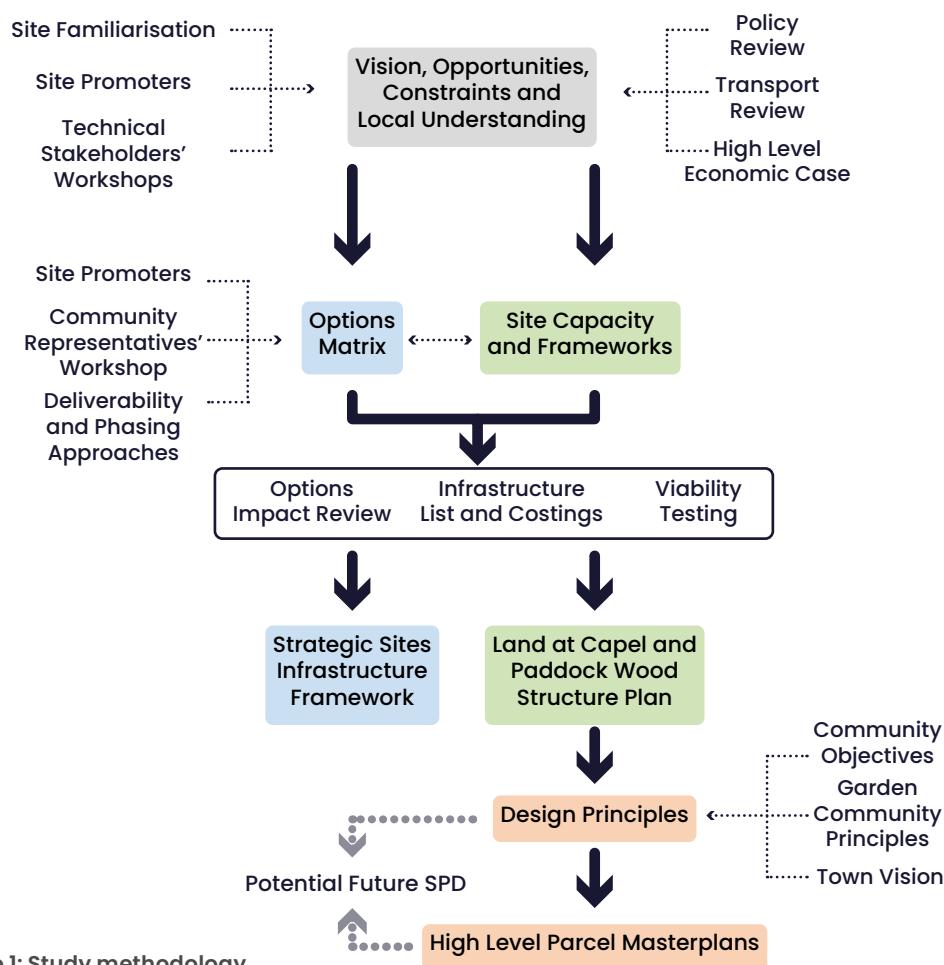


Figure 1: Study methodology

Stage 1: Baseline Assessment

3.6 The first stage of the methodology collects an array of information from stakeholders, public information sources, and other studies, to form a comprehensive understanding of constraints, opportunities, existing proposals, policy basis and other background.

3.7 Baseline assessment was undertaken through:

- Site visits
- Document review of policy, proposals and other background information
- Review of promoter technical studies and proposals
- GIS constraint mapping
- Landowner and promoter meetings

- Technical stakeholder workshops, three themed half-day sessions bringing together a wide variety of agencies and technical understanding to share their knowledge about the sites and local area. These were conducted using Microsoft Teams.
- One-to-one follow-up meetings with other TWBC-appointed consultants such as PJA (developing active travel options), or key stakeholder such as Southern Water, to discuss particular issues in more detail

3.8 Following this process, issue and opportunity matrices and mapping collated together baseline understanding of the site and local area.

Stage 2: Generating Options and Masterplanning

- 3.9 The second stage of the combined studies iteratively developed masterplanning and infrastructure options in response to the baseline review and policy requirements.
- 3.10 To inform the work, community involvement was essential. As part of this stage, a Community Representatives' Workshop was held via Zoom, involving a range of elected representatives from parish, town and district level. The workshop explored local understanding, aspirations and objectives towards potential growth and development. Specifically there were three sessions:
- Understanding the local area: an opportunity to share concerns, understanding and objectives for growth masterplanning and infrastructure provision in the area to consider.
 - Developing design principles: based on the National Design Guide, MHCLG's Garden Communities Prospectus and the TCPA's Garden City principles, what principles and priorities should growth in the local area take forward, and what form could they take?
 - Exploring the potential: using CHLOE (Conceptual Hexagonal Landuse Overlay Engine, a digital masterplanning tool developed by DLA), participants were able to interactively masterplan the land at Paddock Wood and east Capel, making spatial decisions about growth, facilities, open space and other land uses. The discussions generated fruitful understanding of local community aspirations and preferences should development come forward.
- 3.11 From this combined understanding (technical considerations and community objectives), a range of options have been produced for the Structure Plan and Infrastructure Framework. Options were analysed on a range of measures, including environmental impact, viability and deliverability implications, policy, social impact and others. In each case a core option has been identified with discussion around potential alternatives presented.
- 3.12 The iterative nature of masterplanning and infrastructure analysis involved further information gathering and engagement with stakeholders to clarify preferred or feasible solutions to issues that arose through the process of design.

Future Stages: High Level Masterplanning and Design Principles

- | | | | |
|------|--|------|--|
| 3.13 | An infrastructure schedule and potential capacity of sites was compiled, and tested for viability against benchmark residual land values. Further refinement of costs, infrastructure provision and policy requirements for sites were then undertaken to understand how sites could be delivered viably and the implications of this. | 3.16 | The masterplanning work that underpins the Structure Plan will be taken forward to create high-level masterplans for individual parcels on the allocations surrounding Paddock Wood, including proposed employment area expansion. This future stage will also outline implications for the town centre and potential opportunities arising. |
| 3.14 | This report presents the results of this work, presenting a Structure Plan for Paddock Wood and east Capel, and a Strategic Sites Infrastructure Framework for Tudeley Village and Paddock Wood and east Capel, along with analysis of potential options for both development and infrastructure. | 3.17 | Design principles for future growth will also be outlined, enabling future proposals to be objectively tested against the proposals in this report and to understand their ability to deliver on planning policy objectives. |
| 3.15 | The results of this combined study is a tightly-integrated understanding of infrastructure requirements, tied to a Structure Plan that can deliver sustainable growth at Paddock Wood and east Capel. | 3.18 | Community engagement will be undertaken as part of the production of a supplementary planning document that will incorporate the masterplans and design principles. |

04 BASELINE REVIEW

Introduction

4.1 The study is informed by a review of existing evidence and background information, enhanced by discussions with a range of technical stakeholders. This predominantly covered:

- the Draft Local Plan and the relevant policies and evidence base;
- the land ownership/promotion and permitted growth in the Paddock Wood area;
- technical workshops undertaken with stakeholders on green/blue infrastructure, transport and social/community infrastructure;
- site visit to make observations, aide understanding and develop an appreciation of context.

4.2 The findings are summarised in topic format:

- Draft Local Plan
- Land ownership and control
- Permitted growth in Paddock Wood
- Air quality and noise
- Blue infrastructure
- Community hall
- Ecology
- Education
- Green infrastructure
- Health infrastructure
- Housing
- Employment

- Paddock Wood Town Centre
- Heritage
- Landscape
- Minerals
- Sport and recreation
- Sustainability
- Transport and Access
- Utilities
- Viability and market commentary

Draft Local Plan

4.3 Tunbridge Wells Borough Council is currently preparing a new Local Plan which will guide future development in the borough up to 2038. The Council published its most recent version (regulation 18) Draft Local Plan September 2019. Whilst the Draft Local Plan covers the period 2016 to 2036, the Local Plan period has been extended to 2038.

4.4 The Draft Local Plan aims to meet a housing need of 678 dwellings per year, which is more than double the current target of 300 dwellings per year. To meet this housing need, substantial land is proposed for development at Paddock Wood and east Capel, and Tudeley Village.

The Strategic Policies and Proposed Allocations

4.5 The relevant strategic and site-specific policies in the Regulation 18 Draft Local Plan are:

- ALFcr/CA1 Tudeley Village
- AL/CA2 Land to east of Tonbridge/ west of site for Tudeley Village
- AL/CA3 Land at Capel and Paddock Wood (duplicate of AL/PW1)
- AL/PW1 Land at Capel and Paddock Wood (duplicate of AL/CA3)
- AL/PW2 Town Centre
- AL/PW4 Land at the Memorial Field

AL/CA1 Tudeley Village

4.6 The development requirements for Tudeley Village include:

- Approximately 2,500–2,800 new dwellings, with approximately 1,900 to be delivered in the plan period.
- The level and tenure mix of affordable housing is to be determined through the Local Plan and CIL Stage 2 Viability Assessment. This figure will be confirmed in the Regulation 19 Pre-submission version of the Local Plan;
- The provision of appropriate employment within the settlement;
- A range of local services and facilities appropriate to the scale and function of the settlement;

- The provision of appropriate open space, leisure, and recreational areas, including informal and formal space, children's and youth play space, sports pitches and allotments/food growing areas.

AL/CA2 Land to east of Tonbridge/ west of site for Tudeley Village

4.7 This site is allocated for a six form of entry secondary school.

AL/CA3 & AL/PW1 Land at Capel and Paddock Wood

4.8 The development requirements from the policies relating to Land at Capel/ Paddock Wood include:

- 4,000 new dwellings including affordable housing
- 3 pitch Gypsy and Traveller site
- Expansion of key employment areas
- Enlarged Mascalls secondary school and additional primary schools
- New medical centre
- The provision of open space, youth and children's play and sports facilities (including a swimming pool and new outdoor sports hub) and recreational facilities
- Areas of natural and semi-natural green space and allotments/food growing areas

- 4.9 The masterplanning of the site needs to embed the garden village principles (reflecting those in the Garden Communities Prospectus) and consider the following according to the draft policy:

POLICY REQUIREMENTS
<ul style="list-style-type: none"> • Development to provide for the regeneration and re-vitalisation of the town centre • Development should recognise the role of railway heritage and hop and fruit picking to the area, and any non-designated heritage assets contributing to local distinctiveness • Development should be of high quality design, including in terms of the public realm, ensuring excellent pedestrian and cycling connectivity through it and to other parts of the town • No net loss of car parking, with provision made for additional public car parking
<ul style="list-style-type: none"> • Flood storage/attenuation/mitigation areas to reduce the flood risk to particular existing residential areas in Paddock Wood, and potentially at Five Oak Green • Land shall, if identified as necessary for this plan period or beyond, be safeguarded for the future expansion of the waste water treatment works at Paddock Wood
<ul style="list-style-type: none"> • Avoid built development on slopes to the south to Paddock Wood • Opportunities to provide a higher density of development around the settlement centre, as part of the approach to revitalise and regenerate the town centre, and other key points within the development should be maximised, • Structural landscaping and buffers around perimeters of the site • High quality layout and design, particularly in terms of permeability and low levels of private car use within the settlement
<ul style="list-style-type: none"> • Provision of natural and semi natural green space, a range of formal and informal open space, children's and youth play space, sports pitches and allotments/food growing areas • Strong green infrastructure must be provided to tie in new development with the surrounding landscape • Multi-functional green infrastructure (green wedges) to be integrated with drainage and flood defence measures
<ul style="list-style-type: none"> • Strategic transport links shall be provided between Tonbridge, Tudeley Village, the A228, Five Oak Green, Royal Tunbridge Wells/Southborough, and Paddock Wood and east Capel and Paddock Wood Town Centre. This should include the provision of an offline A228 strategic link • Improvements to the local road network, and new roads in association with new development • To provide for improved permeability, including to land to the north of the railway line (particularly in the eastern part of Paddock Wood) • Determine the most appropriate route to link to the road network to the west, to minimise the impact on the existing highway network through Five Oak Green, and reduce traffic levels through this settlement
<ul style="list-style-type: none"> • Have regard to Kent County Council minerals allocations in the vicinity and sensitive receptors • Design to facilitate provision of bus routes within allocated sites, linking into wider bus network • The provision of longer distance cycle links to Five Oak Green, Tudeley Village, Tonbridge, Royal Tunbridge Wells/ Southborough and villages surrounding Paddock Wood (leisure and utility) • Improvements to pedestrian/cycle links across the railway to be sought, subject to viability issues • Development to be structured around direct walking and cycling routes, linking new development with existing community facilities (e.g. primary school), public transport, employment, and commercial centres • Provision of improved vehicle and cycle parking at Paddock Wood station
<ul style="list-style-type: none"> • Additional employment provision, including expansion of Key Employment Areas (B1/B2/B8 uses). • The make up of this employment provision will look to supplement, broaden and significantly increase the employment provision for Paddock Wood and the surrounding area
<ul style="list-style-type: none"> • Particular attention will be given to the grade of agricultural land and agricultural activities to minimise the effects on the rural economy and agricultural functionality • Key landscape characteristics, views and the setting of heritage assets and the setting of the High Weald AONB • Existing habitats and species and opportunities for landscape scale improvements for biodiversity to ensure a net gain for biodiversity focused on key locally important habitats and species • Compensatory improvements to the environmental quality and accessibility of remaining Green Belt shall be made, to be agreed and secured through the masterplanning approach
<ul style="list-style-type: none"> • Land is required for the expansion of Mascalls and the provision of new and potentially expanded primary schools

TOPIC		
Town Centre		
Drainage / Sewerage	4.10	Land at Church Farm has outline planning permission for 300 dwellings and is included in this policy as it has potential to link with the land to the west to provide active travel and public transport connections. It also has potential for approximately 60 additional dwellings, which would be required to contribute to the delivery of new infrastructure to meet the needs of the expanded community.
Development Form		
Green Infrastructure		
Highways		
Minerals		
Sustainable transport	4.11	<p>The town centre is allocated for:</p> <ul style="list-style-type: none"> the provision of approximately 400-700 sqm of comparison retail floorspace, one medium sized foodstore and the retention of, and provision of additional, professional services (A2), food and drink (A3) and drinking establishments (A4), hot food and takeaways (A5), office (B1), appropriate leisure (D2), and suitable sui generis uses; Residential development will be permitted at floors above first floor no net loss of car parking, with provision made for additional public car parking
Employment		
Landscape		
Education		
		<p>AL/PW4 Land at the Memorial Field</p> <p>4.12 This site, as defined on the Paddock Wood draft Policies Map, is allocated for the provision of a community hub.</p> <p>4.13 This site includes an area of playing field, part of which could be lost should development take place, and this will need to be replaced by equivalent or better in terms of quantity and quality in a suitable location. The remainder of the site is to be retained as playing fields, green space, parks, recreation ground, children's play space and youth play space in accordance with the open space standards in Policy OSSR 2.</p> <p>STR 5 Essential Infrastructure and Connectivity</p> <p>4.14 This policy requires that all new development will be supported by the provision of the necessary infrastructure, services, and facilities that have been identified to serve the needs arising from new development. It includes strategic priorities for infrastructure:</p> <ul style="list-style-type: none"> Transport Education Health Water Digital infrastructure and utilities Green, grey and blue infrastructure Cultural infrastructure

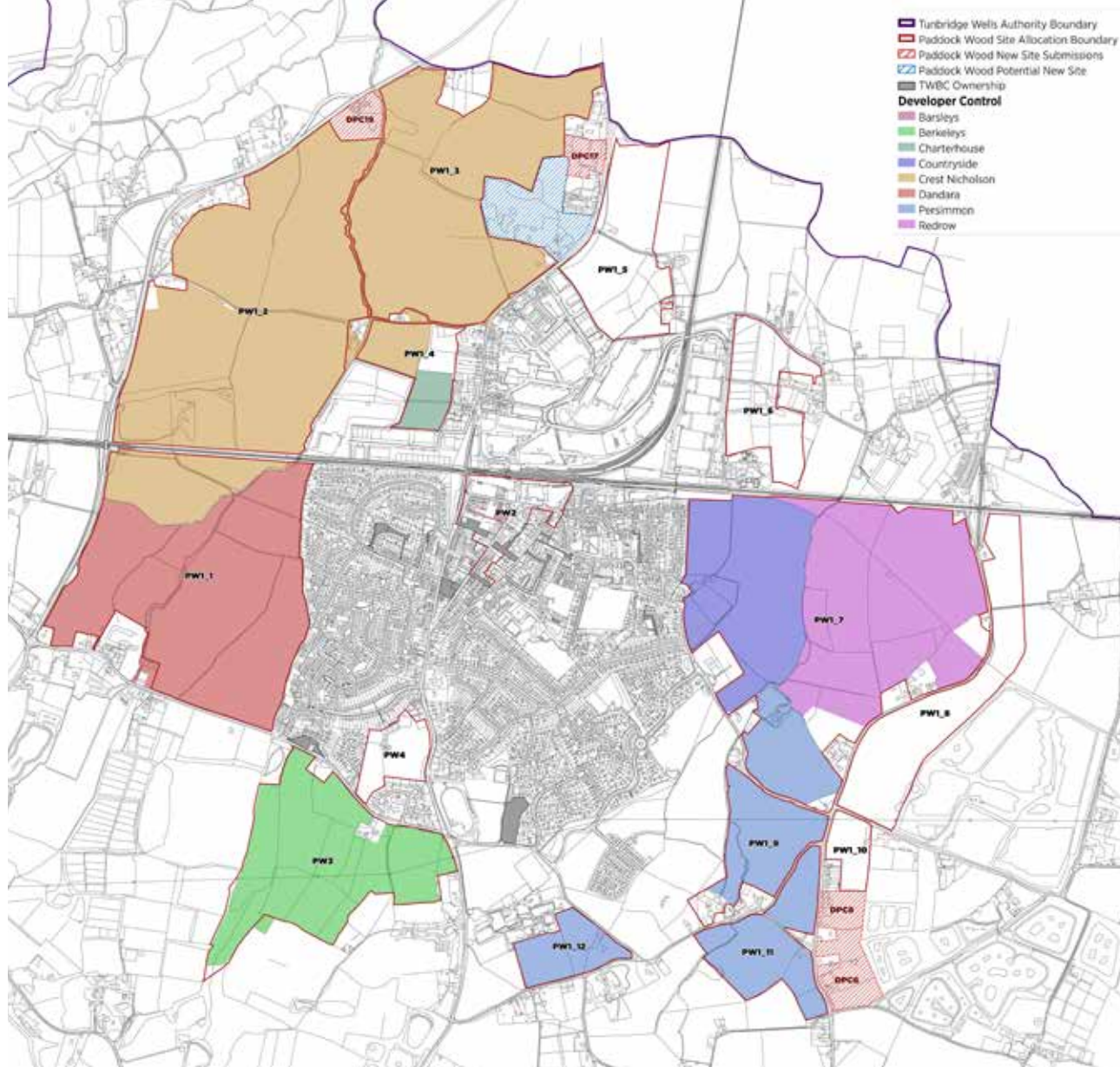


Figure 2: Draft allocations at Paddock Wood and east Capel showing landownership

Land Ownership and Proposals

4.15 The draft allocations in the Draft Local Plan for Capel and Paddock Wood are being promoted by several developers:

- PW1_2 and PW1_3 is being promoted by Crest Nicholson for 1,400 dwellings including a primary school, local centre, and sports facilities
- PW1_4 is being promoted by Charterhouse but there are no confirmed proposals
- PW1_1 is being promoted by Dandara for up to 500 dwellings, a primary school and community park. Initial promotion proposals for up to 700 dwellings were revised down following feasibility work
- DPC6 and DPC8 are not part of the

Structure Plan for Paddock Wood and east Capel

- DPC14 is the Barth Haas site and is being promoted on behalf of the owners for residential redevelopment
- DPC17 is the Paddock Wood Garden Centre which is being promoted for a new retail/employment development on the existing grounds
- DPC19 is Tudeley Brook Farm which is being promoted by KIW but there are no confirmed proposals
- PW1_5: more southerly part is being promoted for employment use by Gallagher Group, and the northern part by Lambert & Foster
- PW1_6 is being promoted for

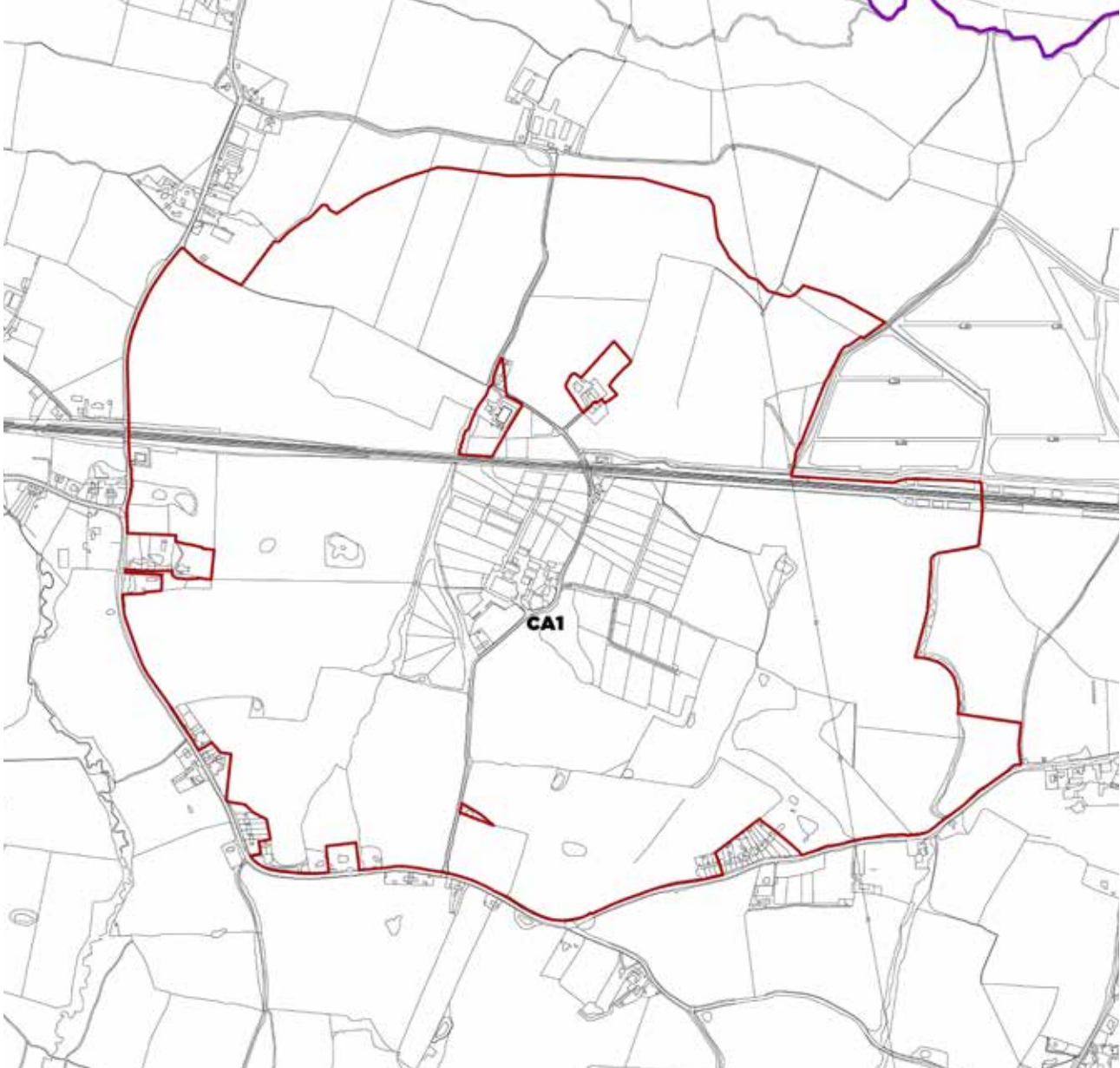


Figure 3: Draft allocation at Tudeley Village

- employment use by DHA
- PW1_7, PW1_9 and PW1_11 are being promoted jointly by Redrow and Persimmon for residential, primary school and retail uses
- PW1_10 is sports pitches owned by Paddock Wood Town Council
- PW1_12 is for the expansion of Mascalls Secondary School
- PW_2 is the town centre and there are proposals for sites within the centre:
 - o Land to the rear of 7-9 Station Road for community and residential uses
 - o Land Rear Of 24-38 Commercial Road for retail units and retirement flats

4.16 Although not required to be masterplanned through this commission, the infrastructure requirements for Tudeley Village need to be assessed. It is being promoted by Turnberry Consulting on behalf of the Hadlow Estate. The proposals are for 2,800 dwellings (2,100 over the plan period) with supporting retail, schools, open space and commercial uses.

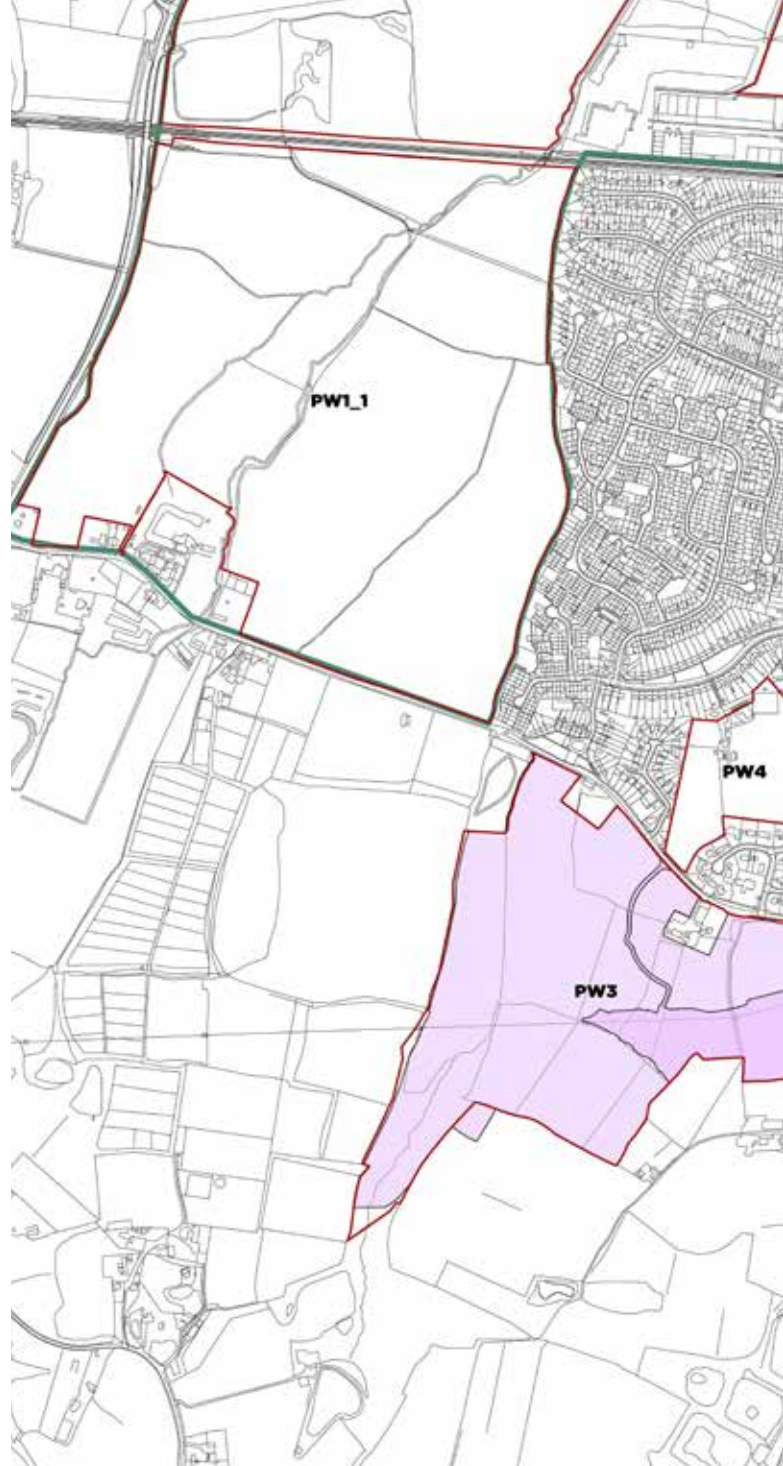
4.17 Information such as layout plans and technical studies have been provided from some of the promoters and these have been considered as part of the baseline review.

Review of Planned/Permitted Growth

- 4.18 There are recently permitted developments to the south and south-east of Paddock Wood which are relevant to the masterplanning.

Church Farm

- 4.19 Church Farm is being developed by Countryside. Outline planning permission (14/504140/HYBRID) was approved for residential development of up to 300 dwellings including 105 affordable dwellings (comprising 36 x 1-bed flats, 26 x 2-bed flats, 68 x 2-bed houses, 75 x 3-bed houses, 80 x 4-bed houses and 15 x 5-bed houses) and associated highways, landscaping, allotments, flood mitigation works including attenuation basins and open space.
- 4.20 Reserved matters on appearance, landscaping, layout and scale were approved in 2020 (19/0365/REM).
- 4.21 There is potential for a further 60 dwellings at this site.



Mascalls Farm

- 4.22 Mascalls Farm is being developed by Berkeley Homes. Phase 1 was granted under planning permission 17/03480/FULL (309 homes including provision of affordable homes (35%) together with access, parking, landscaping and areas of open space), later amended by planning permission 19/02533/FULL (313 homes). A further application, 19/03349/FULL, for additional development of up to 100 homes is awaiting a decision.

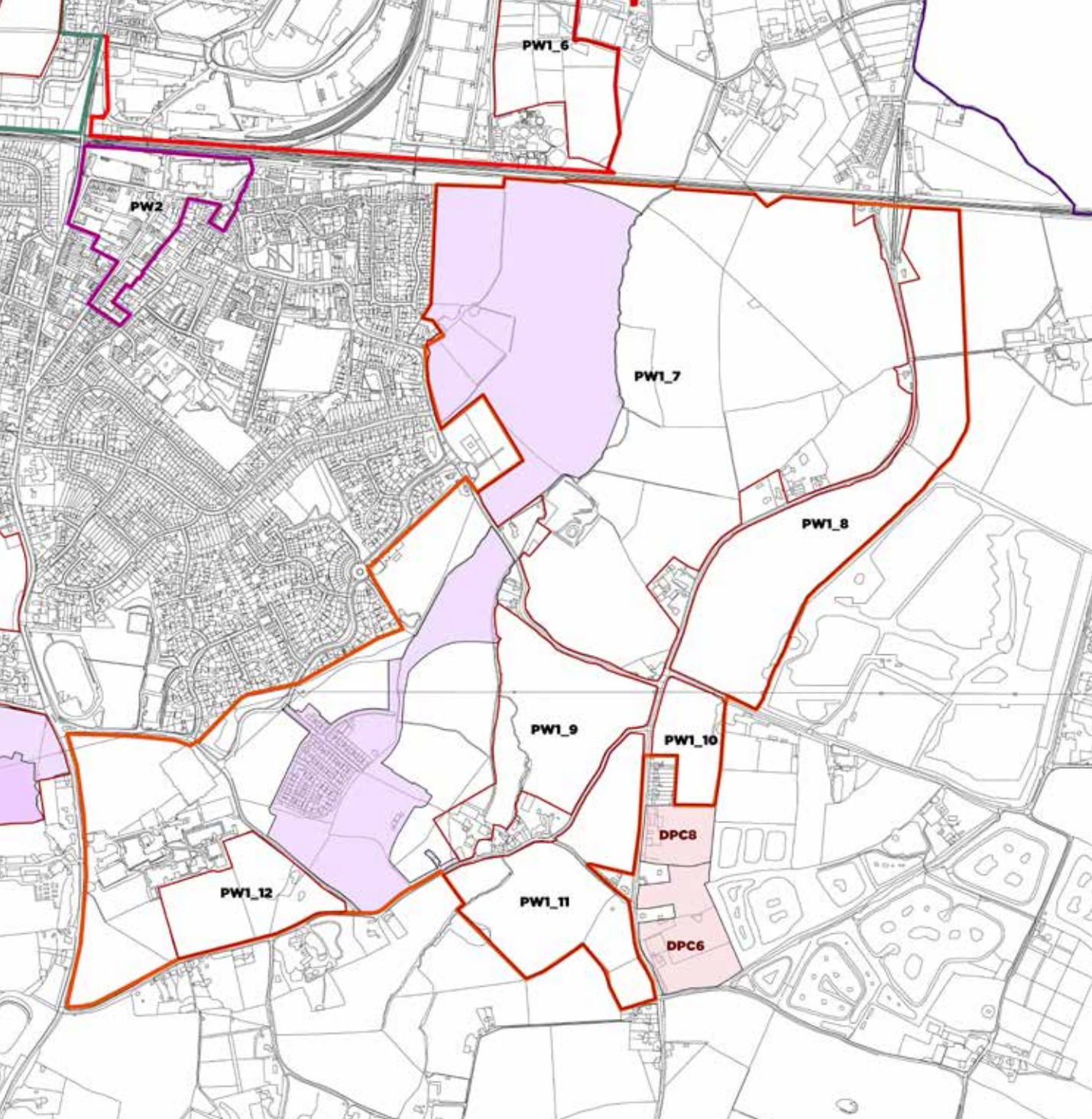


Figure 4: Permitted Development

Mascalls Court Farm

4.23 Mascalls Court Farm is being developed by Persimmon. A hybrid application for up to 375 dwellings was granted (14/506766/HYBRID):

- Phase 1 comprising of 175 dwellings and associated access, highways, foot and cycle paths, landscape, drainage and open space proposals.
- Phase 2 comprising of up to 200 dwellings, highways, foot and cycle paths, open space, allotments and primary school, with matters relating to layout, scale, appearance and landscaping to be reserved. An application for the reserved matters for this phase has been submitted in December 2020 (20/03582/REM).

HOUSING GROWTH & EMPLOYMENT

Housing

Planning Policy/Evidence Base

- 4.24 The draft policy (AL/CA3 & AL/PW1) requires the delivery of approximately 4,000 dwellings including affordable housing for Paddock Wood and east Capel.
- 4.25 Policy H 3 (Housing Mix) requires housing mix to provide the balanced development of the area unless an alternative mix is set out in a different policy such as a site allocation. Housing mix is required to be informed by an analysis of the site in question.
- 4.26 Policy H 4 (Housing Density) requires development to be high density with regard to context (landscape, topography, built form).
- 4.27 Policy H 5 (Affordable Housing) has split requirements depending on whether the site is brownfield or greenfield. Greenfield sites delivering more than nine dwellings should include a minimum of 40% as on-site affordable. Brownfield sites delivering more than nine dwellings should include a minimum of 30% affordable housing on-site. The timing of on-site affordable provision should be a minimum of 50% completed and transferred to a registered provider prior to occupation and a maximum 50% of the open market units to be provided on site. The split should be 60% is provided as social rent and 40% as intermediate tenures.

Summary

- 4.28 The Structure Plan will need to balance the aim to provide 4,000 dwellings with all other uses, policy requirements, and the constraints of the site, particularly due to the flooding issues. Varying densities may be one of ways to help reach the target and could lead to the consideration of different options.
- 4.29 Affordable housing and housing mix will be important parts of the viability of Tudeley Village and Paddock Wood and east Capel, specifically in relation to the infrastructure framework. Testing different options for the affordable and mix may be necessary to meet all other infrastructure requirements.

Employment

Planning Policy/Evidence Base

- 4.30 The Draft Local Plan makes reference to the proposed safeguarding and expansion of the existing Key Employment Areas in Paddock Wood to provide additional B1/B2/B8 floorspace, with the precise quantity to be determined through the masterplanning process and informed by the market. The strategic policy for Paddock Wood makes no reference to any specific requirements in terms of mix or quantity of this proposed additional employment floorspace. However, the Employment Needs Study for the borough identifies a likely reduction in the need for B1c/B2 land across the life of the plan.
- 4.31 The site allocation AL/PW 1 includes three potential sites allocated for employment use:
- PW 1_4, which is earmarked potentially for either residential or employment use, and could lead to the extension of the Paddock Wood Eldon Way and West of Maidstone Road Key Employment Area
 - PW1_5 and PW1_6, which are both earmarked for proposed employment uses and would lead to the expansion of the Paddock Wood Transfesa Road East and West Key Employment Area to the north and east, respectively

- 4.32 A further draft allocation is DPC17 (the Paddock Wood Garden Centre) which is being promoted for a new retail/employment development on the existing grounds.

Site Context

- 4.33 Paddock Wood's principal employment areas include Commercial Road, Eldon Way Industrial Estate and Transfesa Industrial Estate. The latter two estates are located to the west and east of Maidstone Road respectively and are both well occupied. Eldon Way is the smaller of the two estates and has around 50 units. The Transfesa estate has a spine road which provides access to most of its units; occupiers include Warburtons and Mack Fruit. The estates link to the town centre along Maidstone Road, and the Transfesa estate has access to the north entrance of the train station.
- 4.34 The proposed allocations are located to the north, north-east and east of the Transfesa estate. Lucks Lane, which connects with Maidstone Road, provides access between the two draft allocations. Most of this land is in Flood Zone 3.



4.35 The Paddock Wood Economic Opportunities report by SQW makes the following comments in relation to the socio-economic profile of the town and the local commercial property market:

- Paddock Wood's population has been reducing and getting older in contrast to Tunbridge Wells' population.
- The skills-base of the resident population is significantly lower qualified overall than compared with nearby Tunbridge Wells.
- The number of people employed in Paddock Wood has been reducing over time.
- Key sectors, including manufacturing, have reduced in size.
- The wholesale sector is the most important employer in Paddock Wood, supporting over 35% of the town's employment; it has grown significantly in size in recent years.
- The retail, construction and motor trades sectors are all important to Paddock Wood providing consistent levels of employment for a significant number of residents.
- The existing office stock of Paddock Wood is negligible in size but the professional, technical and services sector is growing.

- The proportion of small and medium enterprises is notably higher in Paddock Wood compared with Tunbridge Wells, or Kent more widely, albeit with fewer micro-businesses present.
- As of 2011, approximately 30% of residents live and work in Paddock Wood; the rest commute to Tunbridge Wells, Tonbridge and Malling and Maidstone; a further 10% commute to London.
- The industrial commercial property market is well-established, and Paddock Wood has a diverse and generally good quality range of stock.

Technical Workshops

4.36 The following key issues came out of the workshop:

- There is limited small unit B1/B2 light industrial space for smaller companies in Paddock Wood
- There has been a recent reduction in the availability of jobs in Paddock Wood
- Paddock Wood has a lower-skilled employment base than Tunbridge Wells or the national average
- There is a Kent ambition to support Modern Methods of Construction (MMC) and Paddock Wood offers a good location and workforce to support a MMC centre

Summary

- 4.37 There are several positives to be drawn from the evidence for Paddock Wood, such as the growth of the professional, technical and services sector as well as the wholesale sector – Paddock Wood’s largest sector. However, the skills base in the town is low and the population is contracting and getting older, and the number of people employed has been reducing over time.
- 4.38 The Structure Plan will therefore need to identify employment opportunities and consider how smaller units could be accommodated to attract smaller companies. It will also need to facilitate a variety of employment uses and sizes to promote the balanced economic and employment growth of Paddock Wood and avoid the potential continued over-concentration and development of the wholesale/ distribution sectors.



INFRASTRUCTURE

Transport & Access

Planning Policy/Evidence Base

4.39 The Draft Local Plan policy for Paddock Wood and east Capel lists the following highways measures:

- Strategic transport links shall be provided between Tonbridge, Tudeley Village, the A228, Five Oak Green, Royal Tunbridge Wells/Southborough, and Paddock Wood and east Capel and Paddock Wood Town Centre. This should include the provision of an offline A228 strategic link
- Links from Paddock Wood to the west should minimise the impact on the road network in the settlement of Five Oak Green, shall provide for longer distance cycle links
- Improvements to the local road network, and new roads in association with new development
- To provide for improved permeability, including to land to the north of the railway line (particularly in the eastern part of Paddock Wood)
- Determine the most appropriate route to link to the road network to the west, to minimise the impact on the existing highway network through Five Oak Green, and reduce traffic levels through this settlement

4.40 It also includes a number of sustainable transport related requirements:

- Facilitate provision of bus routes within allocated sites, linking into wider bus network
- The provision of longer distance cycle links to Five Oak Green, Tudeley Village, Tonbridge, Royal Tunbridge Wells/Southborough and villages surrounding Paddock Wood (leisure and utility)
- Improvements to pedestrian/cycle links across the railway to be sought, subject to viability issues
- Development to be structured around direct walking and cycling routes, linking new development with existing community facilities (e.g. primary school), public transport, employment, and commercial centres
- Provision of improved vehicle and cycle parking at Paddock Wood station

- 4.41 Policy TP 6 (Safeguarding Roads) provides safeguarding for land for 'offline' A228 strategic link (A228 Colts Hill bypass). This is required to mitigate the impact of development proposed in the Draft Local Plan. There is potential for a link from it to Tudeley Village but various potential routes are being considered. The policy amplification says that there is an expectation that any scheme brought forward should utilise the old (A228) carriageway for active modes of travel and still provides access to existing premises.
- 4.42 The Local Plan Transport Evidence Base (SWECO, 2019) highlight the following relevant points for Paddock Wood and east Capel/Tudeley Village:
- Cycling strategy actions: Pembury to Tunbridge Wells via the A264
 - Modal shift of 11% to base and new development traffic
 - New bypass of Colts Hill A228 link
 - A228 Whetsted Road/B2160 Maidstone Road upgrade;
 - A26 corridor upgrade
 - Additional capacity between A26 and Capel along B2017
 - Link road from Tudeley Village to new Colts Hill bypass
 - A26 Woodgate Way/B2017 Tudeley Village junction upgrade
 - Distributor Road to the east of Paddock Wood
 - B2017/B2160 Maidstone Road/Mascalls Court Road signals
 - Demand Responsive Bus (DRB) serving Paddock Wood
 - Bus Rapid Transit (BRT) between Tudeley Village/Paddock Wood and Royal Tunbridge Wells
 - Cycle route between Paddock Wood and Tonbridge
 - Cycling infrastructure in Paddock Wood
- 4.43 The Draft Infrastructure Delivery Plan – August 2019 raises the following items:
- Junction improvement at Badsell Road/Mascalls Court Road
 - Junction improvements at Colts Hill roundabout
 - New bypass link for Colts Hill reducing congestion at key junctions and increasing link capacity and installation of measures on existing A228 for bus and/or cycle priority use
 - Upgraded roundabout at A228 Whetsted Road/B2160 Maidstone Road to provide additional capacity
 - Distributor road to the east of Paddock Wood: upgrade from single land links around allocated sites to reduce congestion on local links and remove through vehicle trips in Paddock Wood
 - A potential southern bypass of Five Oak Green linking with Colts Hill in the east and Tudeley on the west

- Upgrade junction at B2107 Badsell Road/B2160 Maidstone Road/ Mascalls Court Road with signals to remove delay generated by additional new highway trip demand
- A228 Colts Hill capacity improvements
- A26 – reallocation of road space with smart traffic management to improve journey time reliability and provide infrastructure for sustainable modes (walk, cycle and bus)
- New bypass link for Colts Hill reducing congestion at key junctions and increasing link capacity and installation of measures on existing A228 for bus and/or cycle priority use
- Additional capacity between A26 and Capel on B2017
- New link to Colts Hill bypass (above) from B2017 (to bypass Five Oak Green) or to north towards Paddock Wood
- New roundabout at B2017 Tudeley Road/Hartlake Road to increase junction capacity
- Upgraded roundabout at A26 Woodgate Way/B2017 Tudeley Road to increase capacity at junction
- Upgraded roundabout at A228 Whetsted Road/B2160 Maidstone Road to provide additional capacity
- Highway improvements at A228/ Badsell Road

- 4.44 Finally, the Transport Strategy – 2015–2026 includes the following:
- A228 Colts Hill capacity improvements;
 - Highway improvements at A228/ Badsell Road;
 - Highway Improvements B2160/ Mascalls Court Road/Badsell Road;
 - Highway Improvements Mascalls Court Road/Green Lane;
 - Traffic managements in Paddock Wood Town Centre;
 - Junction improvements at Colts Hill roundabout;
 - A26 – Tonbridge to RTW town centre.

Site Context

- 4.45 Land in east Capel is bounded to the west by the A228, a primary route between Tunbridge Wells and Maidstone. To the south is Badsell Road, the B2017, which is constrained in various places with a more rural character. To the east of the southern part of the site is adjacent to the backs of houses and cul-de-sac ends which offer little opportunity for vehicular connections, but some pedestrian through routes which are of varying quality and overlooking. In the north of the site, the eastern edge has more opportunity to connect to the B2160 Maidstone Road as it leaves the existing built-up area.

- 4.46 The railway line cuts through the land in east Capel, forming a significant point of severance. An unprotected pedestrian level crossing is present to the east of Whetsted Wood, connecting a public right of way.
- 4.47 The eastern site in Paddock Wood has good opportunities to connect into the town centre for cyclists and pedestrians, with discussions to reserve an active travel link through the Countryside site to Church Road, and the presence of a former railway line (the Hop-Pickers Line) that runs to a footpath into town. Vehicular access is more constrained as the majority of movements will be towards the west and south, which requires the use of smaller rural lanes to connect to the strategic network.
- 4.48 Public rights of way, mostly footpaths, run through all sites providing an existing grid of pedestrian connectivity to access the surrounding countryside. There are wider connections for walking to the north and south, with a particular high density of footpaths towards the High Weald AONB. Connections to the Medway and river path are available to the north-west.
- 4.49 All sites are within walking or cycling distance of Paddock Wood railway station, suggesting that development with appropriate connections could help to promote a sustainable settlement.

Technical Workshop

- 4.50 The following key issues came out of the workshop:
- The need for pedestrian and public realm improvements at Paddock Wood stations, particularly the need for new pedestrian walkways at the south and north exits of the station.
 - Improving sustainable transport access to Paddock Wood station. For example, maximising onward/return bus services as well as aligning bus and train timetables as much as possible for mode transfer.
 - The potential for an improved railway crossing between Dandara and Crest Nicholson land. The use of a pedestrian footbridge over the railway would be a safer option but would need to be agreed between Network Rail and adjacent landowners.
 - How best to provide a bus service for Paddock Wood's new growth. There are options to consider such as DRT (demand responsive travel), incentivising bus use through the design of the new housing areas, consider fast-track services.
 - The need for the Colts Hill Bypass to support the new growth at Tudeley Village and Paddock Wood. There is a potential interim solution to provide a new road between Tudeley Village and Maidstone Road before the bypass is implemented, or an on-line



route. Much depends on the housing delivery and its phasing.

- The order of mitigation/highway improvements needs to be considered carefully so that they do not prematurely improve conditions and flood downstream junctions.
- Mitigation may need to be explored to offset adverse traffic effects in relation to the A21/A26 and A228 junctions. These are already being considered as part of the Transport Assessment for the Local Plan.
- The potential for a south / east orbital route in Paddock Wood. This could be a local distributor class road utilising Church Road, Mascalls Court Road and Badsel Road. Development land for its delivery will need to be identified and tested.
- Long-distance bike routes to Royal Tunbridge Wells and Tonbridge face design constraints on most direct routes as well as topography towards Royal Tunbridge Wells. Solutions could include alternative routes along PRoWs or in private ownership on Hadlow Estate, or taking advantage of the network of quiet lanes present with some missing links.
- Most bike journeys are quite short, so there is a need to ensure bikes are easy to grab and go and park. Design and guidance could help to factor this issue into new development.



- Paddock Wood is very permeable to traffic. The solution could be to require new development to change the existing road network to reduce traffic. A new route across Crest Nicholson land could reduce need for north-south traffic to use bridge in centre of town to access northern employment areas.
- The route connecting Paddock Wood – Tudeley – Tonbridge is very hostile to bicycles and with little design scope to add online facilities but there could be potential for a route across Hadlow land.
- Other long-distance bike routes for leisure and commuting have not been explored to date, but the extension of Medway Towpath towards Tonbridge with branch to Paddock Wood could be considered.
- Location of existing and proposed secondary schools somewhat distant from most neighbourhoods, which could lead to high car use. There is potential for a quiet lane route through Whetsted to Five Oak Green if speed limit is reduced.
- Tudeley lacks a rail station and will need good bike link to Paddock Wood or Tonbridge stations to promote sustainable travel. There is potential for a route across Hadlow land to provide a sustainable travel link.

Summary

- 4.51 The above information shows that there are several issues and requirements that the Structure Plan must consider particularly in relation to highways improvements, sustainable transport provision and access.
- 4.52 There will be a need to consider how each of the landowners connect with each other; for example, the connection between Dandara and Crest Nicholson over the railway line. In addition, it will be important to consider how existing permitted developments will connect with new growth in Paddock Wood such as the Countryside development to the east of Paddock Wood, as well as how transport and access is considered between Paddock Wood and Tudeley Village for vehicular and cycle users. Active travel will be a further important consideration.
- 4.53 Engagement will need to be undertaken with Network Rail to improve the railway crossing.
- 4.54 The infrastructure items have been tested through the Structure Plan and Infrastructure Framework, and refined through the viability assessment.

Blue Infrastructure

Planning Policy/Evidence Base

- 4.55 The Strategic Flood Risk Assessment (SFRA) was published in 2019. It includes the following:
- Up to date information and guidance on flood risk
 - the variations in risk from all sources of flooding
 - the requirements for site-specific flood risk assessments
 - the acceptability of flood risk in relation to emergency planning capability
 - opportunities to reduce flood risk to existing communities and developments
- 4.56 The development and flood risk management measures assessments prepared within the SFRA are indicative – they only sought to identify and test the principles of development/flood management, rather than present detailed conclusions or identify the scope of specific measures and development concepts. In addition, the flood risk modelling and mapping prepared for the SFRA was strategic in nature, and therefore this would be expected to be refined as more detailed site-specific assessments are brought forward.

Site Context

- 4.57 A range of constraints relating to water exist on the sites, once again with a different emphasis in both east and west.
- 4.58 Fluvial flood risk is a considerable factor affecting residential development on the western side of Paddock Wood, and within the town centre. The site includes large areas of Flood Zone 3 from the Tudeley Brook and runoff from the High Weald, as well as Flood Zone 2. Water from the Tudeley Brook flows under the railway line, but due to limited flow capacity excessive flows move eastwards along the railway line embankment and into existing built-up areas and the town centre.
- 4.59 The SFRA tested scenarios for flood alleviation for the whole of Paddock Wood in conjunction with development on the land to the west. These scenarios tested raised development parcels covering around 50% of the site area, to understand the betterment possible with the following approaches:
- Off-site floodwater storage to the south, further upstream
 - On-site floodwater storage with flood defences
 - Improved conveyancing and small targeted flood defences

- 4.60 The areas promoted for employment are also covered by Flood Zone 2 and 3, from the Upper Medway flood plain.
- 4.61 Sites to the east are less affected by fluvial flooding, although some flood risk is present due to the brook running to the western boundary of the Redrow/Persimmon site.
- 4.62 Groundwater levels are high in the northern part of the western site due to the proximity of the Upper Medway flood plain. This limits the ability for flood storage to be dug deeper into the ground at this point to provide greater volume capacity in a more limited land take. It is considered unlikely that across much of the site more than 0.5m depth could be obtained.
- 4.63 Surface water flooding risk is not considered particularly elevated, although it is understood that the local network of urban surface water drains and foul water drains has flooded in recent rainfall events. Design for surface water management to maintain or better green-field runoff rates from development should be included. More detail is contained in the Utilities section later in this chapter.

Technical Workshop

- 4.64 The following key issues came out of the technical workshop:
- Flood mitigation measures at one site may influence flood risk at another site or third-party receptors; for example, flood mitigation adopted on the Dandara site (to provide betterment to existing development in Paddock Wood) could impact Crest land. Therefore Dandara and Crest should discuss anticipated changes in the flow of water, and development of a joint mitigation strategy to help ensure that Dandara does not negatively impact Crest, or proposed development at the Crest site is resilient to the changes in flows.
 - There are existing drainage issues in the town and TWBC requires some betterment to existing flood risk within Paddock Wood as part of the masterplanning, but the scale of the betterment required is to be determined as well as how the cost burden can be shared fairly.
 - For development in flood zones, a sequential approach to development vulnerability in the different flood zones should be considered – i.e. prioritise Flood Zone 1 first, followed by lower risk zones only if necessary. If development is placed in higher risk zones then

evidence will be required to support the decision and why reasonable alternatives are not available.

- There should also be no SuDS attenuation within flood zones, and the consideration of how infrastructure would cross flood zones is important in the masterplanning.
- Integrating surface water drainage with green infrastructure is important. For example, multifunctional spaces and sports pitches can allow flooding to occur for short periods, and the use of flood zone/drains as blue-green corridors/public open space.

Summary

- 4.65 In summary, these are the issues to be addressed and considered in the Structure Plan:
- Fluvial flood management on the west of Paddock Wood
 - Mitigation measures in relation to the flows between Dandara and Crest Nicholson land on the west of Paddock Wood
 - Ensuring a sequential approach to development and flood risk and considering options in balancing development needs and flood risk/mitigation
 - Consideration of multi-functional spaces for managing flood risk and providing sports/recreation uses

Green Infrastructure

Planning Policy/Evidence Base

- 4.66 The draft policy for Paddock Wood and east Capel requires for the following to be considered:
- Provision of natural and semi natural green space, a range of formal and informal open space, children's and youth play space, sports pitches and allotments/food growing areas
 - Strong green infrastructure must be provided to tie in new development with the surrounding landscape
 - Multi-functional green infrastructure (green wedges) to be integrated with drainage and flood defence measures
- 4.67 Policy STR 8 requires for opportunities and locations for biodiversity enhancements will be identified and pursued by the creation, protection, enhancement, extension, and management of green corridors and through the development of green infrastructure networks in urban and rural areas to improve connectivity between habitats.
- 4.68 The Green Infrastructure Framework for the Draft Local Plan finds that Paddock Wood is poorly served with regard to access to a 20ha and 100ha site for natural greenspace. It also proposes the continuation of work on the Hop Pickers Line along the former Paddock Wood to Hawkhurst railway line and to

improve surface water management within Paddock Wood and reduce surface water flood risk. The Framework also highlights the importance of masterplanning to assist in the provision of long term stewardship.

Site Context

- 4.69 Ancient woodland is present within the allocation on the western side of Paddock Wood, surrounding the railway line to north and south. The woodland is connected to tree belts north and south, and the Tudeley Brook watercourse.
- 4.70 The sites benefit from existing Public Rights of Way which provide access within the sites and to the urban area of Paddock Wood.

Technical Workshop

- 4.71 The following key issues came out of the workshop:
- The masterplanning should identify opportunities for productive landscapes such as traditional grazing or orchards with sufficient land as well as wet meadows which integrate with blue infrastructure.
 - The policies for Paddock Wood need to reflect the vision and strategic objectives for green infrastructure. The masterplanning should aim

to identify a strategic objective for green infrastructure (e.g. habitat links or a flagship species).

- Paddock Wood has generally poor green infrastructure and ecology provision. The Structure Plan should improve this for residents to access as well as access to surrounding landscapes (Medway and High Weald areas).

Summary

- 4.72 The masterplanning provides for opportunities to meet the deficit in natural green space standards which can also contribute to landscape character and biodiversity objectives. The masterplanning will need to take the lead from the Paddock Wood and east Capel draft policy and ensure that the development ties in with the landscape and provides multi functional green wedges to integrate with flood mitigation measures. Productive landscapes should also be considered. In addition, to support the development of the draft policy, opportunities for a locally distinctive green infrastructure proposal that takes advantages of the site's existing features should be identified. Opportunities for improving Green Infrastructure within the town should also be considered.

Utilities

- 4.73 Based on available information no capacity issues have been identified on the electricity, potable water and broadband networks. Detailed consultation with SGN would be required to determine the capacity of the Gas infrastructure.
- 4.74 Sewage capacity and the existing network's propensity to flood during storm events is a known concern within Paddock Wood. Following consultation with Southern Water, there is likely to be a need to upgrade the sewage works capacity at Paddock Wood to accommodate planned growth. The scope of these works is as yet unknown but could include additional land requirements taken from PW1-6. Existing upgrades are programmed for the Southern Water foul water network, but this is only to accommodate currently permitted growth. TWBC are liaising closely with Southern Water over the growth planned to seek to ensure the requisite infrastructure investment is included within their business plans moving forward



- 4.75 There are no known gas pipelines that run through the site and would cause easement issues for development. An overhead electricity pylon runs through the southern part of the eastern site, which is part of the local distribution network. Depending on costs this cable could be placed underground if considered financially feasible to recover lost development land or sales value.



Viability and Market Commentary

4.76 An analysis of the residential and commercial markets was undertaken to gain an insight into the local property market dynamics, local demand and supply. This included a review of the Local Plan Viability Assessment (LPVA) by Dixon Searle. A Stage 1 report was issued in 2018 with a subsequent update provided in August 2019.

Residential Market

4.77 Dixon Searle conducted the residential market review in September 2018 followed by a subsequent update in February 2019. This comprised desktop-based research and analysis of both sold and asking prices for resale and new-build property across the Borough. The data was collected via

the Land Registry price paid dataset, from the latest available point, over the previous two years for new-build property and over the previous five months for resales. The full dataset is categorised into settlements. The summary analysis for the Paddock Wood area which includes Capel, is presented below for ease of reference.

- | | | | |
|------|---|------|--|
| 4.78 | The updated research for resale housing carried out by Dixon Searle in February 2019 (presented in Table below) showed average results broadly in line with the original research carried out in September 2018. | 4.81 | In addition to the analysis of sales data, Dixon Searle also undertook rental market analysis for the purposes of establishing revenue assumptions for the affordable housing elements of the viability assessments. |
| 4.79 | No sales of new build property in TN12 6 (Paddock Wood area) postcode are recorded for either the 2018 work or the February 2019 review. The nearest evidence is from Horsmonden where one new build property is reported as having sold for £488,899, equivalent to £4,527 per m2. | 4.82 | Local Reference Rents are used to help determine Local Housing Allowance (LHA) rates employed to calculate housing benefit for tenants renting from private landlords. LHA rates are based on private market rents being paid by tenants in the broad rental market area (BRMA). Dixon Searle have adopted the local LHA rates in their assumptions for affordable housing values. |
| 4.80 | An analysis of current asking prices at the Charles Church, Mascalls Grange, development in Paddock Wood shows a range of values depending on house size (estimated from dimensions in sales particulars) from circa £4,000 m2 to £4,800m2. Some plots are reported as 'sold' but no Land Registry details are available since sales will be delayed until completion of the units. | 4.83 | The following tables are reproduced from Appendix I – TWBC – Development Appraisal Assumptions of the Dixon Searle Stage 1 LPVA work. |
| | | 4.84 | The LHA rents for the High Weald BRMA as at September 2020 (see table below) have increased from those shown above and therefore some adjustments will need to be made to the Affordable Housing values in any viability assessments undertaken as part of the masterplanning work. |
| | | 4.85 | In order to understand the commercial market activity and values in the Tunbridge Wells area, Dixon Searle refers to data from the commercial property resource 'CoStar' and |

Table 1 Land Registry Sold Prices Review Analysis – Tunbridge Wells BC Resales – Updated Average Price per m2 for Paddock Wood (September to November 2018) Source: Dixon Searle	Location	Sample Size	Updated values in line with UK HPI (£)	Updated values in line with UK HPI (£/m2)
	Paddock Wood	39	£337,153	£4,073

Table 2 Affordable Housing Revenue Assumptions	Unit	Affordable Rent High Weald"		Social Rent**	*covers majority of the Borough **based on information provided by TWBC
		LHA Cap			
	1BF	£135.36	£98.50		
	2BF	£176.56	£122.00		
	2BH	£176.56	£122.00		
	3BH	£223.19	£130.00		
	4BH	£336.82	£189.00		
	Unit	Market Size	Affordable Rent	Social Rent	
			Average AH Transfer Price (LHA Cap)	Average AH Transfer Price	
	1BF	50	£110,890	£80,694	
	2BF	70	£144,643	£99,946	
	2BH	79	£144,643	£99,946	
	3BH	100	£182,845	£106,499	
	4BH	130	£275,928	£154,834	

*covers majority of the Borough
**based on information provided by TWBC

Table 3 Weekly LHA Rate for September 2020 Source: http://lha-direct.voa.gov.uk/ (Commercial Market)	High Weald BRMA	
	Shared Accommodation Rate	£100.11 per week
	One Bedroom Rate	£159.95 per week
	Two Bedrooms Rate	£207.12 per week
	Three Bedrooms Rate	£260.05 per week
	Four Bedrooms Rate	£345.21 per week

Type	Tunbridge Wells Borough Council – £/sq ft					
	Sample Size	£/sq ft Minimum Average Rental Indications	£/sq ft 1st Quartile Rental Indications	£/sq ft Median Rental Indications	£/sq ft 3rd Quartile Rental Indications	£/sq ft Maximum Average Rental Indications
Retail	57	£3.17	£19.29	£25.60	£38.24	£94.20
Offices	62	£3.58	£12.97	£17.56	£22.56	£31.70
Industrial	25	£4.68	£6.31	£9.61	£10.97	£15.38

Table 4 CoStar Summary Analysis – Tunbridge Wells Borough. Source: Dixon Searle

Type	£/m² Minimum Average Rental Indications	£/m² 1st Quartile Rental Indications	£/m² Median Rental Indications	£/m² 3rd Quartile Rental Indications	£/m² Maximum Average Rental Indications
Offices	£11.36	£101.15	£124.80	£133.85	£603.49
Industrial	£15.86	£48.22	£58.90	£75.38	£128.55
Retail Warehousing	£38.89	£141.62	£264.80	£296.38	£488.61
Supermarkets	£184.68	£202.64	£243.25	£279.37	£283.83
Shops	£19.85	£112.13	£164.40	£222.87	£956
Convenience Stores	£56.32	£70.76	£85.20	£115.11	£145.02

Table 5 VOA Data Summary – Shops, Offices, Retail Warehousing, Industrial, Supermarkets and Convenience Stores – Tunbridge Wells Borough. Source: Dixon Searle

information from the Valuation Office Agency (VOA) data. The summary reporting analysis for both lease and sales comparables from Appendix III is reproduced below.

Emerging Covid-19 property market trends

- 4.86 The built environment is being reshaped in response to the impacts on the wider economy of the Coronavirus pandemic. The pandemic has led to a focus on:
- An increased awareness of the need for green space in our town and city centres,
 - The importance of a safe and healthy outdoor environment,
 - The need for adaptable multifunctional spaces,
 - Changing patterns of work with increased home working for many,
 - The fragility of our public transport systems when exposed to health risk,
 - A more local emphasis on accessing services and facilities and an

- increase in online activity,
- Expected changes in demand for different parts of the property sector and
- Challenges for development viability going forward.

- 4.87 Property market performance has often been seen as a barometer for the wider economy, but already different sectors/locations are being impacted in different ways. This will have implications on the development of a land use budget for the Paddock Wood town centre sites and the outlying Structure Plan sites in Paddock Wood and east Capel.

Summary

- 4.88 The above baseline review shows that a large amount of information has been reviewed and considered. This information will form the basis of the work on the masterplanning and infrastructure framework, as set out in the following chapters.



COMMUNITY INFRASTRUCTURE

Health Infrastructure

Planning Policy/Evidence Base

4.89 There is an existing health centre in Paddock Wood (Woodlands Health Centre) but this does not have capacity to accommodate the growth at Tudeley Village, and Capel and Paddock Wood. Therefore the Draft Local Plan policy includes a requirement for a new medical centre, and the IDP states that this would take up to 0.5 hectares of land.

Technical Workshop

4.90 At the technical workshop, discussion centred on ensuring that land was safeguarded for a health centre for the time being as the CCG (Clinical Commissioning Group) would not deliver the health centre. There was also discussion about the need for community health care, such as physiotherapy and extra care, and how these could be best planned, whether as part of and hub health centre or dispersed throughout the settlement. However, it is preferred to manage all services within one place from a CCG perspective.

4.91 The Hadlow Estate representative said that the Tudeley Village proposals would wish to provide a health centre to align with its own masterplanning principles.

Summary

4.92 The masterplanning will need to identify a suitable location for the health centre in Paddock Wood. Given that the infrastructure framework needs to test three scenarios consideration will need to be given to how the cost is split between Tudeley Village and Paddock Wood.

Education

Planning Policy/Evidence Base

- 4.93 The Draft Local Plan policy requires an enlarged Mascalls Academy secondary school and additional primary schools. The IDP (based on the proposals in the Draft Local Plan) sets this out as a requirement for
- a 2 FE (form entry) expansion of Mascalls Academy and a 6 FE new secondary school.
 - four 2 FE primary schools at Paddock Wood. Subsequent discussions with Kent County Council Education throughout the development of this study has reduced this requirement to two 2 FE primary schools, with the potential for one additional form entry.
 - one 3 FE primary school and 1 FE expansion of the existing Capel Primary School at Five Oak Green), or two 2 FE primary schools in Tudeley Village.

Site Context

- 4.94 The Mascalls Academy is located to the south of Paddock Wood. It has land already allocated in the Draft Local Plan for its expansion. The Draft Local Plan identified a location for the new secondary school to the west of Tudeley Village.

Technical Workshop

- 4.95 The following key issues came out of the workshop:
- How best to provide the primary schools in Paddock Wood: 4 x 2FE primary schools or 2 x 3FE / 1 x 2FE primary schools. The masterplanning should consider this in light of the need for schools to be accessible.
 - The current secondary school location in the Draft Local Plan and finding a better location. Hadlow Estate is considering the most appropriate location on the eastern side of Tudeley Village.
 - The potential change to the primary and secondary school requirements following capacity testing through the masterplanning of Paddock Wood. The secondary school needs to provide a minimum of 6FE to be viable.

Summary

- 4.96 The location of the secondary school is to be further explored by the Hadlow Estate. Options will need to be considered on how the costs will be split for the infrastructure framework given the need to test infrastructure for three scenarios. For primary schools, the Structure Plan for Paddock Wood and east Capel will need to consider the options as to whether providing two or three primary schools is appropriate and the location of these in accessible places.



Community Hall

Planning Policy/Evidence Base

- 4.97 The Draft Local Plan includes a policy allocation for a community building at the Memorial Field. The Infrastructure Delivery Plan says that the community hall is to be delivered by Paddock Wood Town Council. Any loss of open space at the Memorial Field should be replaced elsewhere in a similar quantity and quality.

Technical Workshop

- 4.98 The workshop discussion focussed on the best location for a community building in Paddock Wood. The Memorial Field is allocated within the Regulation 18 Draft Local Plan publication for a community building but there is political and in-community difference about whether this is the right place for it. Careful consideration needs to be given to defining the use of the community facility to support its longevity.
- 4.99 For Tudeley, a community building has already been earmarked at the current stables site.

Summary

- 4.100 In summary, there is an allocation for a community building but there is political and in-community difference about whether the allocated site is the best place for it. The Structure Plan can identify options for community uses in Paddock Wood, but the decision about where to locate these will be made through local plan policy.

Sport and Recreation

Planning Policy/Evidence Base

4.101 The Draft Local Plan policy for Land at Capel/Paddock Wood includes the following to be provided for sport and recreation:

- The provision of open space, youth and children's play and sports facilities (including a swimming pool and new outdoor sports hub) and recreational facilities.
- Areas of natural and semi-natural green space and allotments/food growing areas.

4.102 The requirements for Tudeley Village are similar but do not include a swimming pool or outdoor sports hub.

4.103 The IDP sets out a list of items (indoor and outdoor) that are needed for the expansion of Paddock Wood:

- Open space and youth provision at Fuggles Close could be upgraded/improved.
- Potential for Maidstone Road or Cogate Road to accommodate children's play space.
- Outdoor sports hub, or if not progressed, a priority pitch for improvement (drainage issues) is Elm Tree playing fields, as well as possible additional pitches (one adult, two junior and two mini soccer pitches) and ancillary

facilities (changing rooms); also improvements required at Green Lane recreation ground.

- Support for PW Juniors as a juniors club
- Possible reuse of lapsed cricket ground at the Memorial Ground to come back into use.
- Drainage improvements at East Peckham and PW rugby club at Putlands.
- One adult men's team and junior team pitch.
- Improvements to Putlands Leisure Centre.
- New public swimming pool
- Expansion of athletics track from four to six lanes.

4.104 In addition, the Draft Local Plan includes Policy OSSR 2 (The provision of publicly accessible open space and recreation) which requires open space and sports provision to be provided in accordance with the following minimum standards. The policy states that if open space, sports, and recreation provision cannot be provided in full on development sites due to site constraints or location, or other site specific factors, then provision should be provided off site where it is within the distance from the development site identified in the accessibility standard.



Technical Workshop

- 4.105 The following key issues came out of the workshop:
- Shared use of school playing fields. KCC is unable to provide public access at handover to the school provider. Open space requirements will need to be considered separately from open space provision within school sites in the masterplanning. Access arrangements could be separated so that the public can access them without interfering with the school in the off-peak.
 - Co-location of sports facilities, such as providing one pitch for cricket and football which are shared depending on the seasons.

Summary

- 4.106 The Structure Plan will need to consider appropriate locations to meet the IDP and policy requirements. Given the long list and the need to meet the open space standards in the Draft Local Plan there will likely be the need to consider options for this provision in various ways. The cost of this infrastructure will also need to be considered carefully in the viability and infrastructure framework.



Draft strategic site east of Paddock Wood (looking north)

BUILT ENVIRONMENT

Heritage

Planning Policy/Evidence Base

- 4.107 Policy EN 6 requires that proposals for development will be required to reflect the local distinctiveness, condition (state of repair), and sensitivity to change of the historic environment.
- 4.108 The Historic Environment Review notes the high concentration of oast houses in the Low Weald around Paddock Wood. It also makes reference to the importance of the Paddock Wood to Hawkhurst former railway line's heritage.

Site Context

- 4.109 Except for a single building within the town centre allocation, no listed buildings lie within the draft allocations.
- 4.110 There are clusters of listed buildings adjacent to the site boundaries at:
- Badsell Manor Farm
 - Whetsted village
 - Mascalls Court
 - South of Church Farm
- 4.111 The settings of these heritage buildings form an important part of the heritage of the town. They are predominantly related to the agricultural and productive land history of the town, featuring some examples of oast houses (for drying of hops), and traditional farmsteads. These traditional farmsteads and

agricultural built form patterns have been identified in TWBC's Farmsteads Assessment Guidance SPD. This SPD identifies farmsteads as a distinctive feature of the High Weald AONB, but they are also a part of the Low Weald character area and the guidance relates to the whole borough.

- 4.112 In addition to the Farmsteads SPD, the Historic Landscape Characterisation Study (2017), a part of the Landscape Character Assessment SPD, sets out key characteristics of the historic landscape in the borough. The findings of these studies should be considered as part of the masterplanning principles to ensure development reflects local character and identity.
- 4.113 The eastern side has two areas of potential archaeological interest, one along the former Hop Pickers Railway Line, and one surrounding the woodland with the remains of a former moat within.

Summary

- 4.114 The Structure Plan should take into account the historic legacy of orchards, hedgerows, field patterns and agricultural management. Also, the setting of the heritage buildings listed above will need to be considered carefully alongside opportunities to create views towards these historic landmarks.

Air Quality and Noise

Site Context

- 4.115 No designated air quality management areas exist on or near the sites. Development at Paddock Wood may exacerbate air quality issues on the wider strategic road network, although no AQMAs are declared on key routes that would be impacted.
- 4.116 Noise on the site is associated with the railway line (intermittent noise), and the major roads, in particular the A228 bypass (constant noise). Some noise issues may occur due to proximity to large format employment uses such as distribution warehouses or loud industrial processes, although these are likely to be confined to working hours.

Summary

- 4.117 The masterplanning will need to consider the following:
- Set back distances/mitigation between the surrounding roads and new residential and schools to ensure air quality and noise and vibration levels are acceptable
 - Sustainable and active travel (including providing walking, cycling and public transport links to enable access to Paddock Wood railway station from the site) and the use of low emissions vehicles (e.g. incorporating electric charging infrastructure) to improve air quality
 - A setback from the railway line will need to be incorporated for noise sensitive uses (e.g. residential). Less sensitive noise uses such as employment uses could be located closer to the railway and this would provide shielding for other more distant parts of the site.



Draft strategic site in East Capel (looking south)

NATURAL ENVIRONMENT

Landscape

Planning Policy/Evidence Base

4.118 TWBC has commissioned an AONB Setting Analysis Report. This provides an analysis of potential strategic sites outside the High Weald Area of Outstanding Natural Beauty (AONB) and any larger sites or group of sites that might give rise to concerns over the setting of the AONB. The report notes that development within the parcels to the north/west (PW1_1 through to PW1_6) are unlikely to have an adverse impact on the setting of the AONB. However, the land to the east is more sensitive in AONB terms.

4.119 The report recommends the following mitigation design measures that would reduce the predicted effects on the setting to the AONB including:

- Avoidance of development within parcels PW1_8, PW1_10 and PW1_11 in line with the draft policy AL/PW1.
- Avoidance of development within the floodplain to the north-east of parcel PW1_7

- Promote a landscape led approach to masterplanning that creates a structure to contain the allocation sites which is consistent with the character of the adjacent High Weald. It would be beneficial to include structural planting along Queen Street, Church Road and Mascalls Court Road. All structural planting should be consistent with existing landscape character.
- Test the visibility of proposed development from the 'Millenium Viewing Point', a critical viewpoint location, using wireframes or photomontages in order to fully assess the potential effects on the setting to the AONB. Any LVIA work associated with the proposed development to the east of Paddock Wood, should include this viewpoint location as part of the assessment.
- Any Structure Plan should adhere to relevant guidance including the National Design Guide and should take inspiration from the High Weald Design Guide and Management Plan.
- Give careful consideration to the views and rural setting of listed buildings and historic farmstead, which are visible within the landscape from the High Weald AONB.

Site Context

- 4.120 TWBC's Landscape Character Assessment SPD sets out high level landscape characteristics and strategies for development in those areas to mitigate harm and contribute to the identity and distinctiveness of the landscape.
- 4.121 Sites at Paddock Wood and east Capel fall within LCA 13 – Paddock Wood/Five Oak Green Low Weald Farmland. To the north sits LCA 17 – Medway Valley River Valleys, and to the south LCA 1 – Matfield/Brenchley Fruit Belt, part of the High Weald.
- 4.122 The Paddock Wood / Five Oak Green Low Weald Farmland character area identifies the following key characteristics:
- Flat or gently undulating land at the footslopes, backed by the adjacent ridge of the High Weald plateau
 - A mixed farmed landscape with extensive open arable fields, dwarf fruit orchards and pockets of pasture
 - Remnant alder or poplar windbreaks, as well as individual trees and hedges provide vertical elements in this open flat landscape

- Crossed by a connecting network of rural lanes characterised by broad grass verges and ditches, hedges or trees
- Large, arable fields drained by a network of ditches
- Very mixed settlement pattern with extensive suburban development at Paddock Wood and on a smaller scale at Five Oak Green, with the remainder of settlement characterised by dispersed farmsteads and small hamlets
- A variety of building styles ranging from groups of oasts, which are highly visible, to more modern suburban houses and bungalows
- Open views across this intensively farmed landscape are frequently punctuated by the cowls of clustered groups of oast houses and extensive farm building complexes. The Greensand Ridge to the north provides a distinctive skyline, whilst the High Weald to the south provides wooded enclosure

4.123 The SPD suggests the following local landscape strategies that should be considered by masterplanning:

"The Local Character Area should be considered in the context of the High Weald AONB, particularly the role the character area plays in the setting of the AONB. The valued features and qualities of the landscape should be conserved and enhanced.

- 1) *Respect the vulnerability of the slopes rising up to the south to new developments/land use change. New developments can be highly visible over a wide area on these slopes and detract from the essential countryside character.*
- 2) *Consider the vulnerability of this open lowland landscape to built development which is likely to be very visible in views. Pylons which cross east to west, at the foot of the High Weald slope, are a significant visual detractor within this flat, open landscape.*
- 3) *Ensure that any urban/suburban edges are tied into the local landscape through planting (e.g. hedges, shelter belts, small woodland copses and orchards) as well as ensuring an appropriate graduation in scale of built development to create an appropriate setting and sympathetic transition from urban to rural."*

4.124 This wider context for landscape indicates that Paddock Wood is a transition point between several local and valued landscape characters. To the north, the wide open flood plain of the Upper Medway valley is flat and drained, relatively unwooded. To the south rises the slopes and valleys of the High Weald AONB, with significant woodland. East and west is the Low Weald, with farm fields, orchards, hedgerows, tree belts and small hamlets present.

- 4.125 Looking at a more detailed level, and based on site visit observations, there are several distinct landscape characters within the draft allocations at Paddock Wood and east Capel:
- South west: enclosed fields with strong tree belts and drainage channels
 - North west and north: moving towards the north, this landscape becomes increasingly flat and open with views out across the Medway valley
 - East: the site rises slightly to a plateau with large open fields and views towards the south and east, and thin tree belts if present.
 - South: similar to the landscape in the east but with stronger tree belts and vegetation enclosing fields

- 4.126 All landscapes present are marked by a strong human influence, primarily agricultural.
- 4.127 The impact of development on the setting of the High Weald AONB and on views from vantage points within the AONB will be major factors in deciding the location, densities and built form of development parcels.
- 4.128 The sites to the west of Paddock Wood are mostly within the Metropolitan Green Belt designation, with the edge defined as the existing urban area.
- 4.129 In this location the Green Belt has been assessed by LUC, in their Green Belt Stage 2 report, to be primarily providing protection against urban coalescence (Purpose 2) and safeguarding the countryside from encroachment (Purpose 3).
- 4.130 Release from the Green Belt will thus require amelioration of these issues, by ensuring any new edge to the Green Belt has a strong and defensible edge, and development on the western side of Paddock Wood does not contribute to perceived coalescence between settlements. Use of the strong tree belts and concentration of denser development to the east will be an important design principle.

Technical Workshop

- 4.131 The following key issues came out of the workshop:
- Development on the west of Paddock Wood should form a new green belt boundary. The masterplanning needs to consider locating greenspace/woodland planting along the western edge of sites PW1-1 and PW1-2.
 - There are sensitive views from locations in the AONB (Brenchley) and closer to the sites. The masterplanning should reduce development or heights in sensitive areas and consider the role of mosaic of tree planting and tree belts.

Summary

- 4.132 The following will need to be addressed in the masterplanning:
- Consider development density, building height and landscape planting carefully with regard to the AONB and its sensitive views
 - AONB response to the east of Paddock Wood and the consideration of lower density development (with higher densities elsewhere) or having no development at southern end of the eastern site (PW1-11 and associated)
 - The need for a strong edge to the revised Green Belt boundary
 - The need for a strong landscape framework of hedgerows and woodlands

Ecology

Planning Policy/Evidence Base

- 4.133 The Biodiversity Evidence Base sets out the baseline biodiversity information for the Tunbridge Wells authority area in relation to habitats and species.
- 4.134 The site is >15km from European designated sites and the New Local Plan HRA concludes that site allocation (including this site) will not adversely impact the integrity of Ashdown Forest SPA/ SAC in relation to atmospheric pollution and recreational pressure. The site sits outside the 7km buffer for financial contribution to the Strategic Mitigation Strategy for the Ashdown Forest SAC/SPA and provision of Suitable Alternative Natural Greenspace (SANG) to address recreational pressure.
- 4.135 Policy EN 11 of the Draft Local Plan requires that development should result in a measurable long term net gain for biodiversity.

Site Context

- 4.136 Considering the agricultural setting of the site, it is expected to support a range of valuable habitats and protected species. A Preliminary Ecological Appraisal of the allocation sites would identify ecological risks, the need for further surveys and identify suitable mitigation and enhancement measures which can be incorporated into a masterplan at an early stage.
- 4.137 No SSSIs are present within 2km of the allocation site, and the nature of the allocation (housing/ mixed use) is unlikely to trigger impacts on local SSSIs as listed on Natural England development types for the Impact Risk Zone which overlaps the allocation sites.

Summary

- 4.138 The Structure Plan should identify potential opportunities to create linked green/ blue infrastructure, retain and restore valuable habitat areas with suitable buffers and create further natural habitat/ green space areas in order to achieve Biodiversity Net Gain (min 10%). Consideration should be given to supporting or aligning with strategic biodiversity objectives and the Kent Biodiversity Action Plan. Biodiversity objectives will be closely aligned with green Infrastructure proposals.

Minerals

Planning Policy/Evidence Base

4.139 Kent County Council (KCC) is the responsible waste and minerals planning authority for the area. The Kent Minerals Sites Plan (adopted in September 2020) and the Kent Minerals and Waste Local Plan 2013-30 (as amended by the Early Partial Review in September 2020) identify an area at Moat Farm, Five Oak Green for sharp sand and gravel extraction which is located ~600m west of the site at its closest point (parcels P1_2 and P1_3). An extension to the Stonecastle Farm Quarry for the extraction of sharp sands and gravel is also identified in the plan, which is located >2km west of the site.

4.140 A number of development management criteria have been identified in the Minerals and Waste Local Plan which outline measures that will be required to be put in place to see that potential adverse effects from these extraction developments (e.g. to amenity, transport and water) are appropriately mitigated. It is not anticipated that this would be a significant constraint on the development of the site, however, consideration should be given to masterplanning and phasing of the proposed development to manage potential effects, for example in relation to noise or visual impacts to new residential receptors on site.

4.141 Potential economic mineral deposits on the Tudeley village draft allocation, and sites PW1-1, PW1-2, PW1-7 and PW1-12 are also present, and potential extraction needs to be considered before development proceeds on the ground. Tudeley Village and PW-1 and PW-2 are Tunbridge Wells Sand Formation and KCC accepts there is plentiful supply of these deposits from mining activities in West Sussex. The remaining sites are potentially sites of Sub-Alluvial River Terrace deposits. These allocations do not preclude development coming forward, but exploratory works will need to take place before development is brought forward on these sites to understand if they are economically viable minerals, and if so to extract these prior to development if possible.

Sustainability

Planning Policy/Evidence Base

- 4.142 Policies EN3 (Sustainable Design Standards) and EN 5 (Climate Change Adaptation) seek to reduce the ecological and carbon footprint of development, and promote wellbeing, and should be central to the design of the development.
- 4.143 Policy EN3 strongly encourages Home Quality Mark 4 stars from 2021 onwards for developments over 150 dwellings. For non-residential development between 1,000 and 5,000 sqm BREEAM Very Good must be achieved for the period 2021-2025 and Excellent thereafter; for over 5,000 sqm, BREEAM Excellent must be achieved from 2021.
- 4.144 Policy EN4 strongly supports zero carbon and low emission development and new developments are required to “reduce site-wide, operational CO2 emissions by at least 10% below the Target Emission Rate (TER) as set out in Building Regulations Part L (2013)” and for major development to “reduce site-wide, operational CO2 emissions by 15% using renewable energy generating technology, to be installed on site”.
- 4.145 The Tunbridge Wells Borough Local Plan Water Efficiency Background Paper (2017) identifies that the South East of England is an area which experiences severe water stress which may be exacerbated further by future climate change and housing growth. The proposed development will need to incorporate water efficiency measures such as rainwater harvesting and greywater recycling systems and implement a maximum water consumption rate of 110 litres per person per day in accordance with emerging policy EN 27 Conservation of Water Resources.

Summary

- 4.146 The proposed development will need to be delivered in accordance with the relevant building regulations, and this will need to be considered in relation to building design, energy infrastructure, and appropriate allowance for this within the cost plan. It should also implement sustainable design and construction principles and best practice including in relation to energy and water efficiency, and waste minimisation (e.g. in accordance with EN2: Sustainable Design and Construction of the emerging local plan).



4.147 These policy aims are not directly applicable the Structure Plan for Paddock Wood and east Capel. However, they can be incorporated into any future SPD for any allocated site. The Structure Plan is able to promote other means by which sustainable development can be achieved, including through habitat retention and enhancement, sustainable drainage, sustainable travel and connectivity and the location of facilities and services to reduce the need to travel.

Paddock Wood Town Centre

Planning Policy/Evidence Base

- 4.148 The Draft Local Plan includes an allocation for the town centre (AL/PW2), which is for 400-700 sqm of comparison floorspace, a medium-sized foodstore, additional A-class, B1(a) and D2 uses. It also allows for residential development above first floor and requires no net loss of car parking.
- 4.149 The policy is clear that the town centre requires regenerating and revitalising. These improvements should factor in local distinctiveness and be of high quality. Connectivity by pedestrian and cycling should be excellent as well.
- 4.150 The policy further adds that the Council 'will if necessary, use its Compulsory Purchase Order powers to ensure the delivery of the appropriate masterplanned approach'.
- 4.151 There is an existing allocation in the Site Allocations Plan (2016), which is referenced as AL/PW 1 and covers the area to the south of Station Road and the rear of Commercial Road, and is allocated for a range of retail, leisure, office and residential uses. Part of this site (Land Rear Of 24 - 38 Commercial Road) has recently had two refused applications for two retail units, 34 retirement flats with guest apartment

and associated communal facilities, access, car parking and landscaping. An appeal for the first refused application took place in November 2020 as a hearing, and was allowed by the inspector on 31 December 2020. There is also developer interest for the land to the rear of Station Road for a community and residential development.

- 4.152 Finally, the Barth Haas site, which is outside of the town centre boundary, was submitted for the Draft Local Plan consultation (Regulation 18). Barth Haas proposes to relocate its premises, so the existing site should be considered appropriate for incorporating a range of complementary uses, not just employment focused uses but also including town centre uses (i.e. retail and leisure).

Site Context

- 4.153 The Paddock Wood Economic Opportunities report by SQW makes the following comments in relation to the socio-economic profile of the town and the local commercial property market:
- There is little evening economy uses such as restaurants, bars or cafes: the range of town centre occupiers is largely 'functional': florists, estate agents, DIY and grocery stores, albeit with a strong representation of independent operators.

- The town centre provides a range of convenience and comparison based retail and related professional services (i.e. accountants, solicitors etc), the character of the 'offer' is representative of the need it fulfils: the day-to-day needs of a resident population without providing any significant competition to the surrounding larger towns, notably Tunbridge Wells, in terms of a more comprehensive comparison retail, entertainment or leisure economy offer.
- The existing office market in Paddock Wood is summarised as limited in scale, with a small amount of town centre stock.
- The existing retail property market is limited in size, with relatively few occupancy transactions occurring in recent years, reflecting the observed low vacancy rate. There is also a lack of diversity in available unit sizes.

4.154 Further analysis of the town centre will be detailed in the High Level Masterplanning stage of this study.

Technical Workshops

- 4.155 The following key issues came out of the workshop:
- The need to strengthen the town centre in relation to the changes in role, footfall patterns and customers of local high streets post COVID-19

- There are flooding issues in the town centre (on Zone 3A and 3B) which could limit ability to add residential development.

Summary

- 4.156 The Structure Plan will need to consider the above issues, particularly given the significant level of growth planned for Paddock Wood as well as continuing to support the existing community of the town, and its surrounding rural hinterland.
- 4.157 There is a long-standing aim to bring forward a mixed-use scheme to the rear of Station Road and Commercial Road. This will have to take account of the recent permission on appeal of the Churchill retirement scheme.
- 4.158 There is an opportunity to redevelop the Barth Haas building to the north of the town centre, and this could open up northward town centre opportunities.
- 4.159 To attract more visitors to the town centre, there needs to be greater diversity of its leisure offer and retail units. The changes in relation to the high street and working patterns following the Covid-19 pandemic raises potential opportunities to provide flexible workspace in the town centre to help diversify the economy.

05

STRUCTURE PLAN

Introduction

- 5.1 The issues surrounding growth at Paddock Wood and east Capel are complex and interlinked, and many of the proposed solutions require joined-up action to address them successfully. By masterplanning across the whole of the town, opportunities can be unlocked for existing and new residents that can be more than the sum of many disconnected development proposals, each addressing their own needs.
- 5.2 By sharing infrastructure costs, and developing cross-boundary solutions to issues such as flood alleviation and community infrastructure, it is also clear that better solutions can be found for all parties, both unlocking additional development potential and providing a better outcome for the town as a whole.
- 5.3 This chapter sets out a Structure Plan and accompanying overarching vision and design principles that could guide development in the growth locations surrounding Paddock Wood. A range of options within the Structure Plan respond in different ways to the underlying issues, with discussion in a range of themes to give commentary on their implications.

Key Constraints & Opportunities

- 5.4 Following the baseline review of issues, the key constraints and opportunities within the Paddock Wood and east Capel draft allocations are summarised and shown below.
- Fluvial flood management on the western side of the town
 - Need for a strong edge to the revised Green Belt boundary
 - Opportunity to reinforce views and connections out to the surrounding countryside and the High Weald AONB
 - Maximising pedestrian and cycling connections to the town centre through key linkages
 - Constrained vehicle transport network particularly in the east
 - Railway causes severance, noise and flood flow issues but also forms opportunity for sustainable transport
 - Setting of heritage assets and links to the unique heritage of Paddock Wood
 - The provision of new or improved outdoor and indoor sports facilities
 - The visibility of the town and growth sites from the nearby AONB

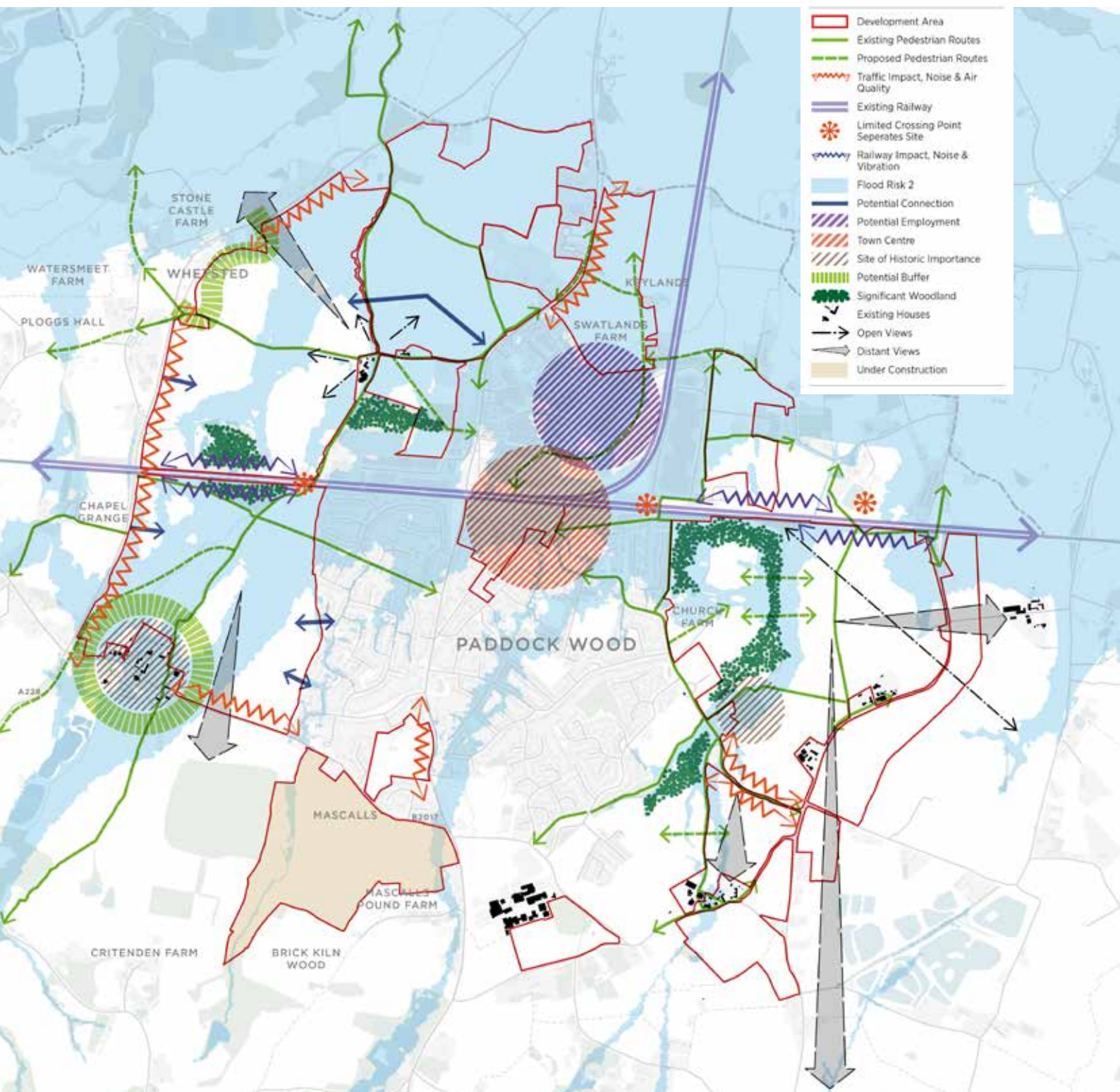


Figure 5: Constraints and design parameters at Paddock Wood and east Capel

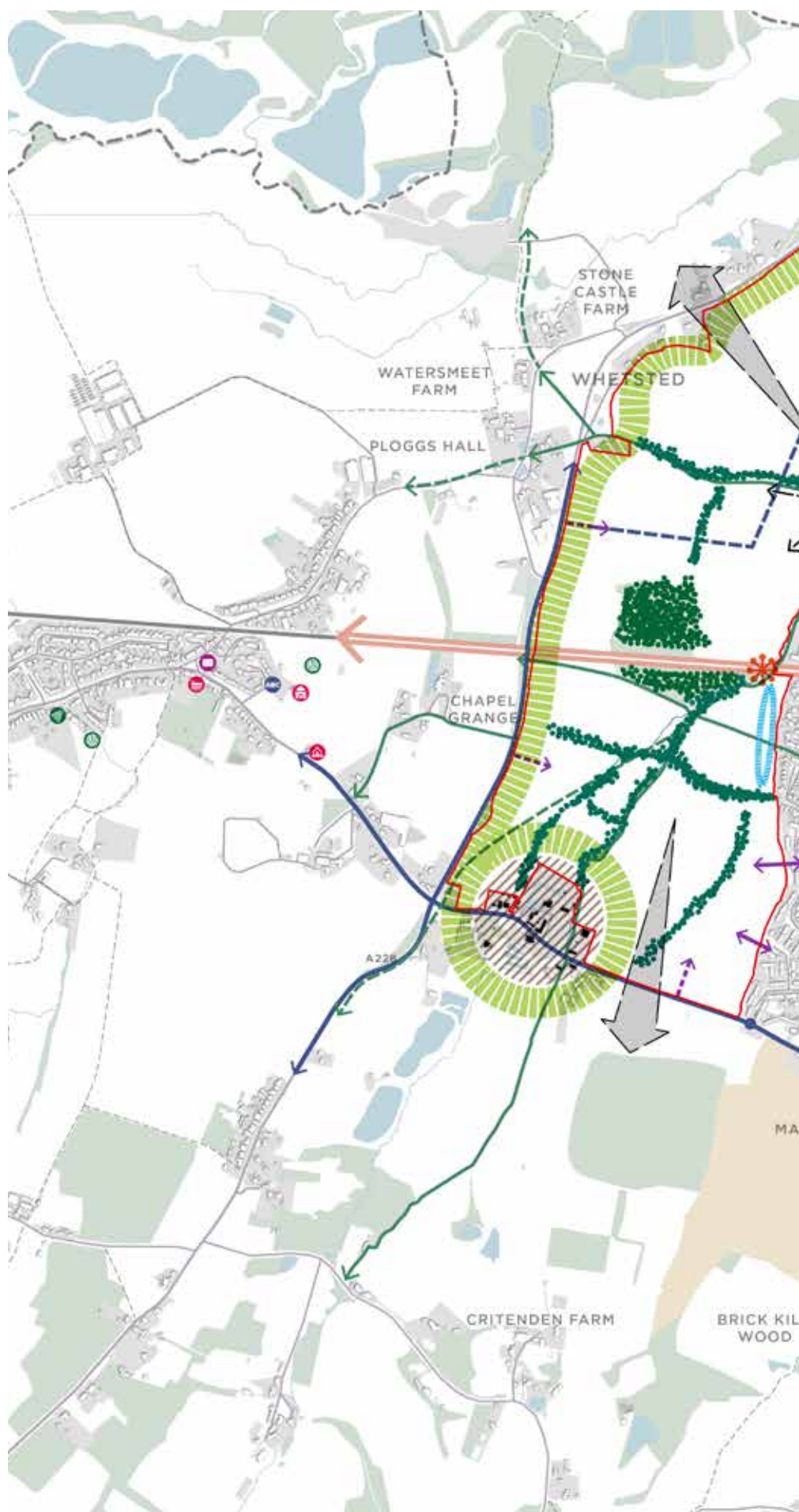
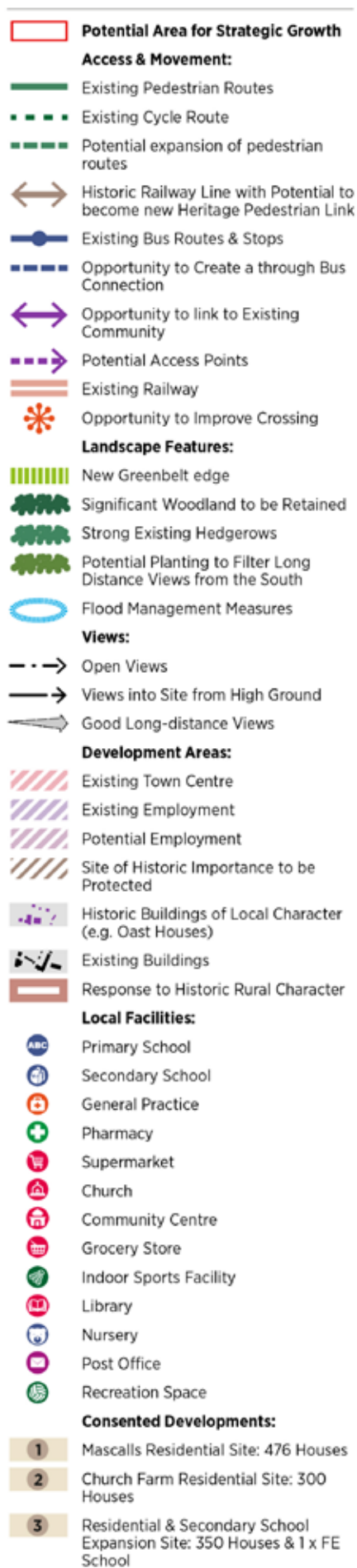
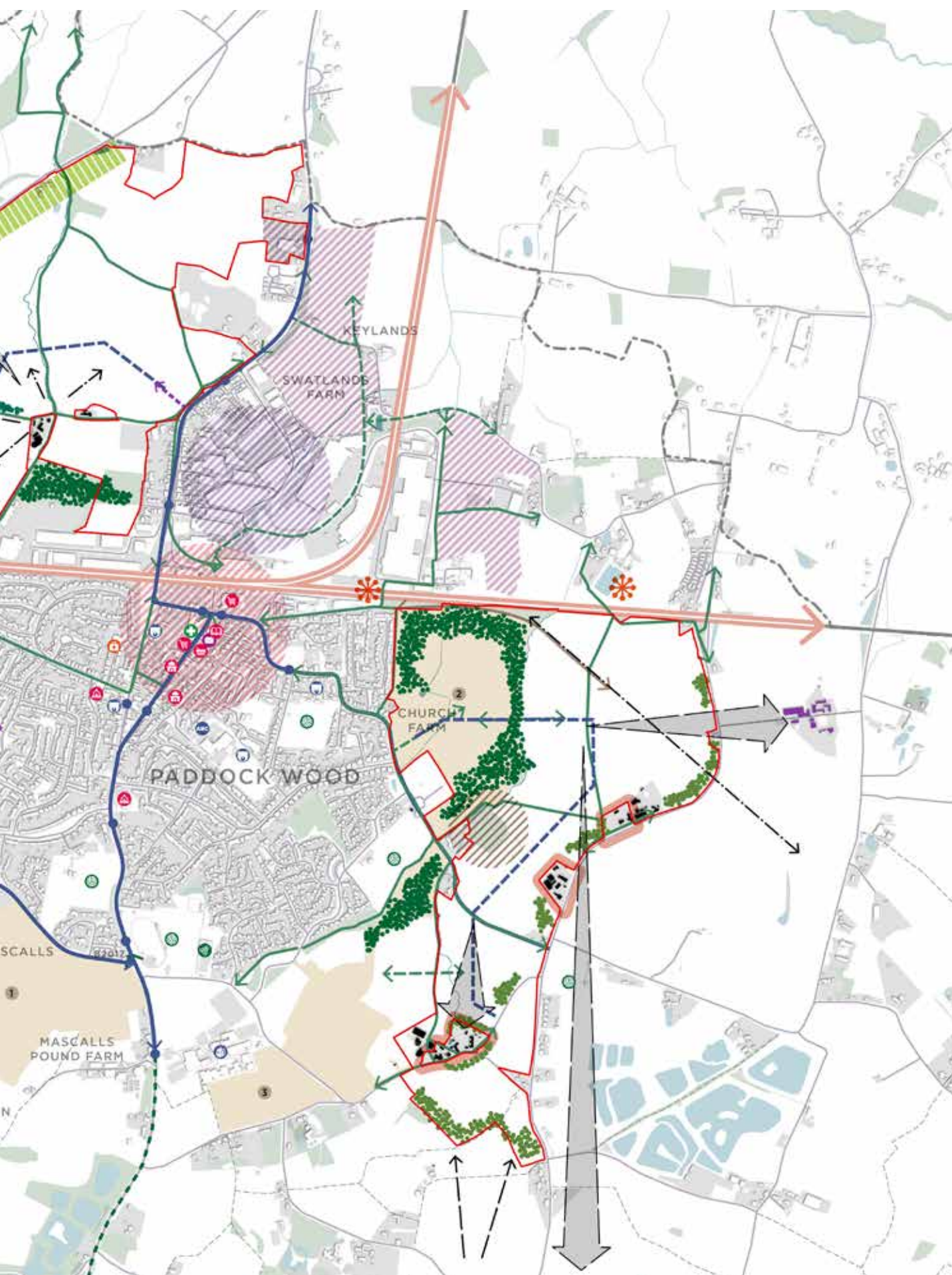


Figure 6: Key Opportunities at Paddock Wood and east Capel



Community Representatives' Workshop

- 5.5 A workshop for community representatives was held on Monday 28th September 2020. Attendees included a range of district, town and parish councillors from TWBC, TMBC, PWTC and Capel Parish Council, as well as representatives from the Save Capel campaign group.
- 5.6 The objective of the workshop was to explore the issues and the opportunities of potential strategic growth in the area, answering the following:
- What are the key issues and constraints in Capel and Paddock Wood?
 - Developing principles for sustainable development: applying national design principles to the sites around Paddock Wood
 - How could the draft allocations be best developed?
- 5.7 It was made clear that the participation in the workshop's activities was undertaken on a without prejudice basis and did not signal agreement with development or the proposed housing numbers. The purpose of the workshop was not to discuss the principle of development, as this is outside of the scope of this study, but to think creatively about how a proactive masterplanning approach could be used to deliver benefits should development go ahead.

- 5.8 In line with the study's scope, the workshop aimed to cover infrastructure issues for both Tudeley Village and Paddock Wood and east Capel, and then examined masterplanning issues for Paddock Wood and east Capel only.
- 5.9 The workshop was delivered online via Zoom, in an evening session, with around 20 participants plus facilitators from DLA and Stantec. Three breakout group sessions were undertaken, each to examine one of the objectives of the workshop:
- Understanding the Local Area
 - Developing Design Principles
 - CHLOE Digital Masterplanning

Understanding the Local Area

- 5.10 Participants were asked, in small breakout groups, to discuss issues and opportunities facing the area, their impressions and a focus on local knowledge of the town and sites. It was an opportunity to map environmental and technical constraints and assets and highlight any other local issues which need to be considered if growth occurs.
- 5.11 Key issues discussed during these sessions included:
- Rural setting, disturbance and the scale of development: representatives, particularly from Capel, expressed concern about a fundamental change to the rural nature of the area.

- Coalescence of settlements: representatives were concerned that without appropriate planning, settlement coalescence would start to occur, or be perceived to occur due to development near to a main route.
- Congestion and overloaded infrastructure: local roads, especially the B2017, are congested in the peak (especially AM), due to a combination of commuting and school trips.
- Flooding issues and sewer capacity: concern about fluvial flood management to the west of Paddock Wood was widespread amongst representatives, who were keen to see strong and reliable measures taken. Previous measures taken have been disappointing. Many representatives also observed that the sewer network cannot cope in periods of heavy rainfall, causing overflow into residential gardens. Capacity upgrades were needed.
- Secondary school provision and location: the current school location causes congestion and safety issues on the B2017, and this makes it difficult to walk and cycle to the school. There was concern that without proper forward planning, similar issues would occur in Five Oak Green with a new secondary school at Tudeley Village.
- Sports and leisure provision: the town has some leisure facilities but it was felt that there had been a lack of delivery in recent years. An upgrade to indoor and outdoor facilities is desired, including a swimming pool. The area north of the railway to the east of the Transfesa Road employment area was identified by the town council as ideal for a major sports hub. There is wider concern that there are few facilities for young people, leading to antisocial behaviour issues.
- Town centre impact and opportunities for the parish of Capel: the town centre of Paddock Wood is considered fragile and needs expansion and investment to thrive. Representatives queried if there would be benefits for the parish of Capel as well as Paddock Wood.
- Local anchors include Barsleys, Waitrose and the rail station – these are the main reasons why people would come into Paddock Wood.
- Cycling and walking facilities are considered quite poor, with narrow footways, busy roads and unsafe-feeling footpaths were all mentioned. Cycling infrastructure was either poor or non-existent.
- There is a housing need for young families and older people for 2-3 bed houses which are often underprioritised by housebuilders.
- Ambitions and the Neighbourhood Plan: the representatives were keen to show leadership in terms of sustainable transport ambitions (such as active travel and electric hopper bus routes), walkable neighbourhoods, housing provision that the community needs, and improving and growing the town centre's offering. The Neighbourhood Plan that was drawn up in 2016 included the concept of "green wedges" between developments to ensure access to the countryside.



Figure 7: The National Design Guide's 10 characteristics of well-designed places

Developing Design Principles

5.12 The second session focused on exploring principles that any potential growth should follow in order to deliver successful, sustainable development in Paddock Wood and east Capel. The discussion was structured around the recently published National Design Guide (MHCLG, 2019), which provides a framework of ten characteristics to consider the design of high quality places. The National Design Guide's ten characteristics have considerable overlap with Building for Life 12, a widely-accepted standard which helps to assess the quality of new development and is endorsed in TWBC's Draft Local Plan.

5.13 Each characteristic was split into a set of design principles, and within breakout groups participants were asked:

- Do you agree with the principles?
- Could they be improved?
- How could they be implemented here?
- Are there any missing?
- What are the priorities?

5.14 A number of key themes emerged from this discussion:

Context & Identity

- Physical context varies – flat landscape at Paddock Wood, in contrast to Tudeley which is undulating. AONB to the south is the rolling Downs. Development should not be allowed to interrupt or dominate views across the landscape. Principle: The impact of development on views across the landscapes should be reduced through the use of screen planting.
- This is a historic landscape, dotted with historic farmsteads and oast houses. Settlement goes back to the Iron Age. The area was a hunting ground during the Tudor period. More recently the area was the centre of the hop picking industry. The landscape shaped, and is shaped by, these activities. Principle: Development should be low density to respect the rural character.
- The area has a lot of wildlife that will be affected by development. There is a lack of confidence in the concept of 'net biodiversity gain'. Principle: Rivers and natural corridors should be protected from development, to preserve habitat.
- Local materials, e.g. Kentish Ragstone should feature in new development but should be employed in a traditional way. Principle: Use of Kentish natural materials in development should assist in ensuring development is tied to its locality.

Built Form, Uses and Homes & Buildings

- Impressions were given of recent developments – Green Lane considered attractive (tree-lined streets, front landscaping etc), recent development adjacent contrasts badly. Principle: Greened, tree-lined streets should be provided within developments.
- Bungalows are in short supply – they sell quickly. 2-3 bed houses are also in short

supply in the area and desperately needed to help maintain young families and downsizing couples in later life in the area. Live/work is supported where appropriate, especially with a shift to homeworking. Principle: A mix of housing is required tailored to local needs first, with innovative solutions explored.

- There is a need to keep communities and neighbourhoods distinct. Schools are good places to develop community spirit and relations – particularly primary schools; however, relations can fall away once children go to secondary school and they are not local. Principle: Concentrate community facilities and centres near primary schools.

Movement

- Roads aren't well connected, with lots of cul-de-sacs and poor cycling and walking facilities. Improvements to railway crossings are needed. Principle: Prioritise the pedestrian network, cycling facilities and good wayfinding in new development and ensure crossings over the railway are provided.
- Promote countryside links and links between settlements, but note safety issues (lack of overlooking). Bridleways should also be considered. The disused railway to the east could provide a good leisure route and connection. Principle: Strong links from the town out to the countryside for leisure.
- Most vehicle traffic goes between PW, Tonbridge and Royal Tunbridge Wells, and focus should be given to this triangle. Lots of traffic is school-generated. Historical eastern bypass around PW has been discussed and may still be needed in some form with new development. Principle: Concentrate on providing sustainable travel options in this triangle, especially for school trips.

Nature & Public Spaces

- Public streets should be places for people, not cars, offering good pedestrian amenity and connections. Principle: Any development should be dominated by 'green streets' with non-vehicle priority.
- Change arising from human habitation of the landscape should be minimised. There are concerns about a loss of agricultural land, and there is potential for incorporation of productive landscapes into new development. Principle: Development should be planned to include generous open spaces, should benefit from clean air, and should maintain dark skies.
- The character of open space is important. Emphasis should be on natural, rather than manicured (as at Kings Hill). Water is the dominant form of nature in Paddock Wood and it should be guiding principle in the new development. Principle: Landscape and open space design should emulate the rural character of the area, including natural landscape and village greens.
- The pandemic has encouraged people to use open spaces more. Good provision should be made for this. There is a need for green spaces around the town that are accessible; at the moment Putlands and the Memorial Field are next to each other. There is a need for green wedges outside of Paddock Wood to ensure that there is no merging of the settlements. Principle: A connected network of pedestrian routes and open natural spaces should be provided to ensure access to open space for leisure, recreation and exercise.

Resources

- Water is a key concern. There is a need to minimise surface water run off, potentially with rainwater storage required in dwellings. Catchment ponds could be for development and to aid wider area. This should couple with a utilities upgrade for sewers (surface water and foul water), which are at capacity. Principle: Greenfield rates for surface water run-off through a range of SuDS measures, and provision for a sewerage upgrade to support the growth of the town.
- Representatives were keen to set high standards for carbon neutrality and address climate change, especially through energy generation and efficient consumption. Principle: Energy efficient design throughout masterplanning, with sustainable transport prioritised.

Lifespan

- Management and stewardship of open spaces needs consideration. The Town Council would like to see a balance between local management companies and the Town Council taking stewardship roles. There can be issues with responsibility, mixed ownership, no one to blame or repair. Principle: Consider the long-term maintenance and stewardship of spaces, especially public parks or sports pitches, to ensure the whole community can use them.

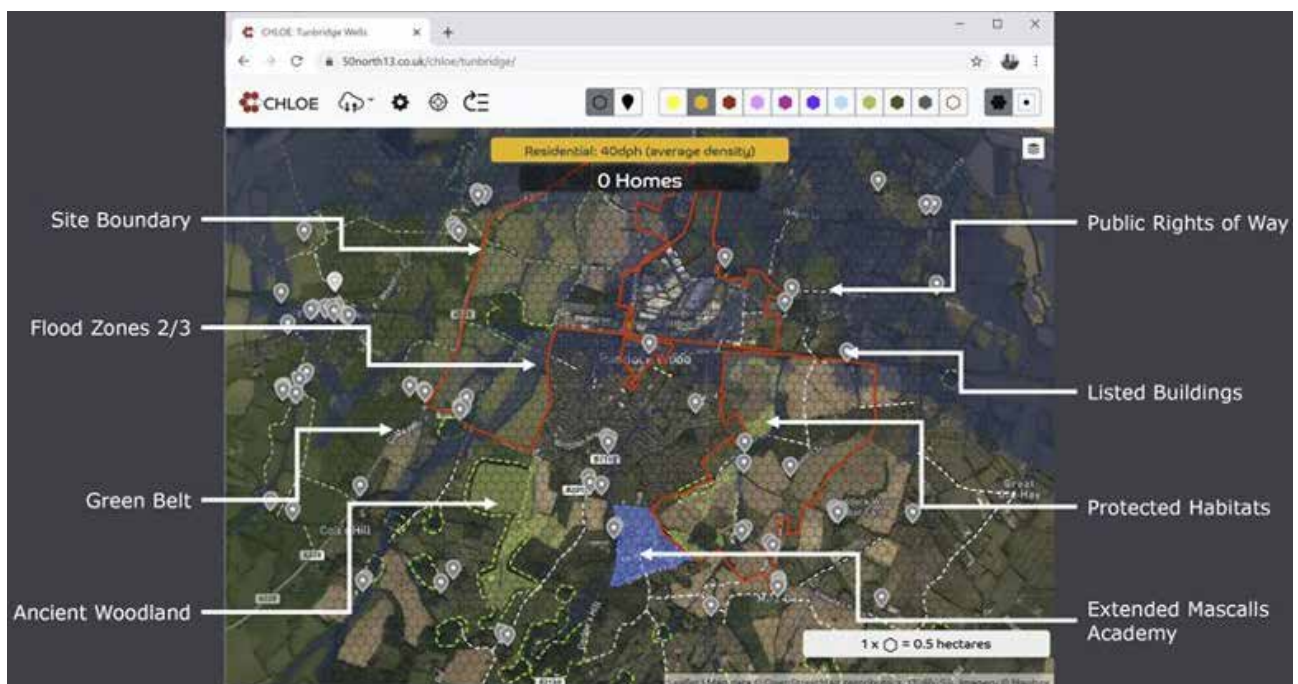


Figure 8: Example of CHLOE masterplanning tool and information displayed to workshop participants

CHLOE Digital Masterplanning

5.15 Developed in-house by DLA, CHLOE is an interactive mapping and reporting tool that promotes discussion and engagement by allowing its users to engage and contribute to the design process. CHLOE provides a platform for community stakeholders and local people to consider development that is appropriate, proportionate and that they feel best represents the existing community's needs. As proposals are built up tile-by-tile, live updates are reported back to guide the user through the design process allowing

them to make informed decisions about education provision, open space standards, community facilities and employment types/jobs to ensure that the development in question is sustainable and that the area's needs are met.

5.16 Using CHLOE, participants were asked to look at the draft allocation sites intended to be residentially-led around Paddock Wood. A range of physical constraints were illustrated on the map to aid designs.

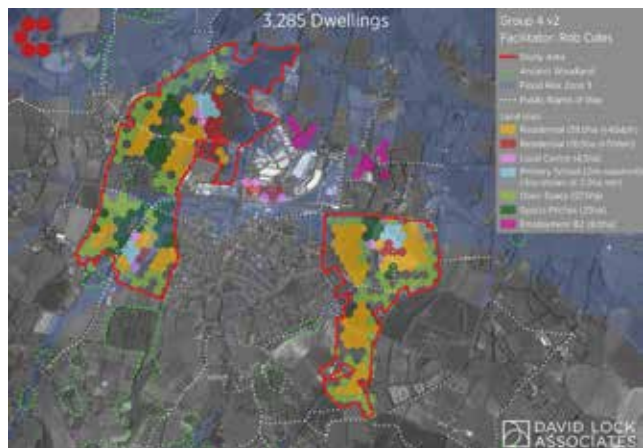


- 5.17 Using the tool, participants in small groups of 4-5 laid out key land uses and discussed rationales for doing so. At the end of the session, short presentations of the key principles were made. The plans created are shown below.

5.18 Each group provided key feedback points about the thinking behind the final output from the CHLOE masterplanning session. Whilst outputs from the final CHLOE exercise is not to be taken literally as a masterplan scenario, a number of themes or ideas were taken from the exercise for further consideration in the masterplanning process. Some groups focused on detailed masterplanning for particular areas of concern and did not cover the whole settlement during the session.

5.19 There are several themes emerging from these plans and the presentations:

 - The importance and sensitivity of flood management solutions in the south western site, with development carefully located away from water.
 - Ambitions for multifunctional use of these green corridors ("green wedges") to connect the town to the countryside, and provide quality open space for the town as a whole
 - The retention of existing treebelts and areas of woodland
 - Concern about preventing perceived coalescence between Paddock Wood, Five Oak Green and continuous development along the A228 and B2017.
 - Compact neighbourhood forms with schools, small scale local shops and other facilities at the centre of clusters of housing, located on good walking routes to the town centre. Higher density housing is often located close to these centres.
 - Many groups have proposed sporting or leisure facilities north of the railway line, or at the existing centres such as Putlands to strengthen them.



Summary and Conclusions

5.20 The Community Representatives' Workshop was a generally positive event with those attending engaging on a wide range of issues. Although it is clear that there is significant local concern around the principle and scale of development, and its effect on the character of the area, there was recognition that development could bring opportunities, particularly for Paddock Wood and its community facilities and flooding issues.

- 5.21 A range of common themes were expressed throughout the evening, which summarised could form a set of community objectives to be considered throughout masterplanning:
- A multifunctional green open space network, with natural habitats at its heart, employing a principle of 'green wedges' to provide access to open space and the countryside for all residents
 - Clear improvements to local community, sporting and leisure facilities
 - Prioritising sustainable transport options, especially walking and cycling
 - Betterment for the town's flooding issues – including surface water, sewerage and fluvial flooding
 - Sensitivity to local materials, scale of development and screening with planting to ensure it is broken up and does not cause coalescence between settlements
 - Housing tailored to the local community's needs – efficient, affordable and prioritising young families and older people

Vision & Concept

- 5.22 Expansion of Paddock Wood offers a once-in-a-generation opportunity to determine the direction and character of the town, equipping it for a future with new, sustainable infrastructure and excellent service provision. This is best achieved through a comprehensive approach which is conscious of, but not overly restricted by separate land ownerships. The Structure Plan is built upon the principles of comprehensive planning, flexibility, and economic, social and environmental sustainability.
- 5.23 Paddock Wood is a compact, bustling town that is popular with its residents and serves local needs. Its station provides regular services to Tonbridge and London. This is a strong basis upon which to grow, but deficiencies in service provision, mobility and flooding infrastructure have been identified. Comprehensively planned development at a strategic scale offers an opportunity to address these deficiencies, including the funding and delivery of new infrastructure, and inject the town centre with new vitality and viability.
- 5.24 Based around multifunctional green space of different types, the Structure Plan envisages growth of homes of different sizes and tenures to the east and west of Paddock Wood, along with additional new homes in the town centre. There are links for sustainable mobility such as walking and cycling throughout the still-compact town, and comprehensive improvements to flood management. As well as active movement, the plan considers other aspects of health and active lifestyles. This includes a major new sport and leisure hub with the potential for a co-located health centre. Paddock Wood Wetland Park is proposed as a significant new area of natural open space, enhancing locally distinctive natural habitats and opportunities for informal recreation.
- 5.25 In an era of significant uncertainty and lifestyle change, development at Paddock Wood gives the town a chance to offer a sustainable lifestyle, located in attractive countryside but with access to the facilities of a bustling town. Growth could positively improve life and opportunities for those living in the town, or those wanting to remain but unable to find a house.
- 5.26 Development of this vision, and connecting it to the underlying issues and opportunities present on the sites, has resulted in a concept plan, essentially a starting point for masterplanning, that underpins the principles and resulting Structure Plan. The concept plan highlights broad-based approaches to the location of greenspace, built development and neighbourhood centres, as well as establishing the principles of protecting heritage assets, preserving existing planting, and connectivity within the draft site allocations and to the existing town.



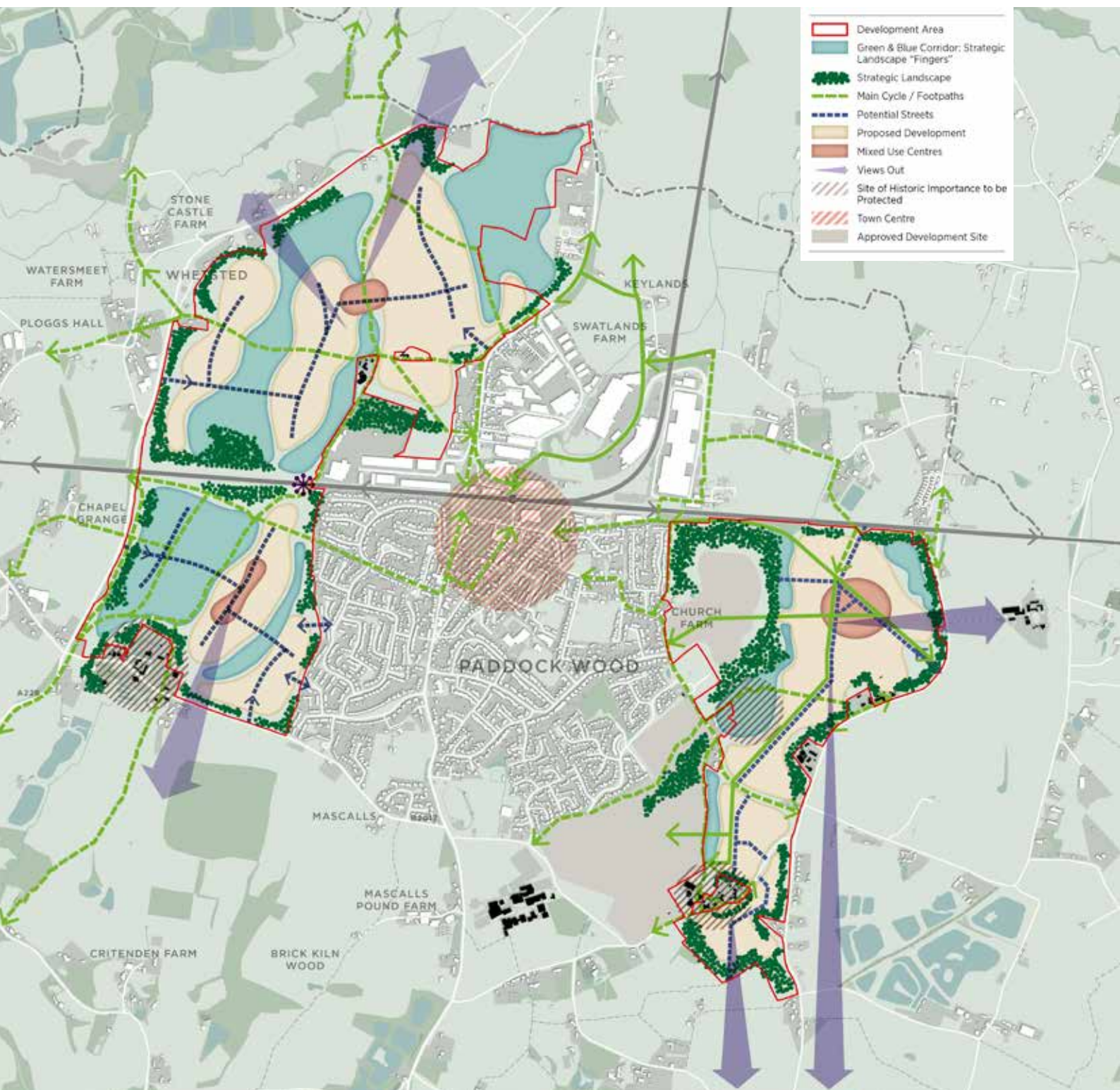


Figure 10: Concept plan to explore ideas for Paddock Wood and east Capel

Design Principles

5.27 The Structure Plan has been developed in line with TWBC's policy objective to deliver growth within the Garden Communities framework, and the underlying principles of the Garden Cities movement. The core attributes of Garden Communities are set out as:

- Clear identity
- Sustainable scale
- Well-designed places
- Great homes
- Strong local vision and engagement
- Integrated, forward looking and accessible transport
- Healthy places

- Green space
- Legacy and stewardship arrangements
- Future proofed

5.28 Garden Communities are not a one-size fits all approach, and government policy is for developments to respond to local needs, context and issues, and prioritise principles based on this.

5.29 Following the Garden Communities prospectus, and the TCPA's Garden City principles, the following core design principles have been developed to underpin the Structure Plan:



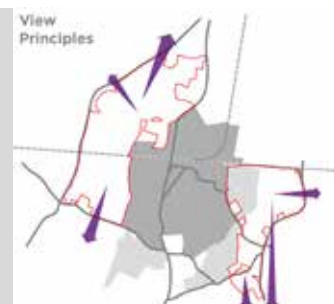
- High-quality cycling and pedestrian links into the town centre, no greater than 500m apart, to promote the centre's vitality and viability, and connect new neighbourhoods to the existing town
- Cycling and pedestrian links running through multi-functional open green spaces, creating radiating green wedges between development and incorporating leisure, play and recreational uses for new and existing residents

- Retention of ancient woodland areas and setting within a network of green and blue spaces to enhance their capacity as wildlife habitats
- Enjoyment of and access to open countryside and outdoor space, plus access to nature to promote wellbeing



- Using the pattern of water and flooding to structure development naturally, keeping houses out of potential flood zones and increasing the capacity of existing flood areas to absorb excess water under climate change scenarios
- Management of floodwaters and provision of open space and other land use provision on-site without the use of additional land
- Creation of wetland habitat to provide biodiversity gain and reflect locally distinctive natural forms

- Use of views in and out of the development to structure streets and public spaces, aligned with historic landmarks (such as oasthouses)



Setting Principles



- Development is of a scale and form that echoes the local context, framing views out to the surrounding countryside and hills, focusing on attractive historical features, and limiting visual impact through planting and tree belts. Landscaped edges create a strong new boundary to the Green Belt and the surrounding rural context.

- Identity and culture are brought into patterns of built form, with development on land at east Capel adopting a form akin to the villages and hamlets of the parish, and land east of Paddock Wood adopting a more integrated 'town' form

Built Form Principles



Sustainable Mobility Principles



- Adjacency to existing housing areas, securing rear gardens, and creating new pedestrian links to new facilities and knitting together new and old
- Sustainable mobility is considered first, with a route for an electric bus loop and all proposed vehicle routes traffic calmed to avoid rat running. Only buses and cycles can route directly.

- Main community and public buildings are located along key streets, with mixed use and higher densities to create well-defined places, but ensuring that the scale of neighbourhood centres does not detract from the town centre's primacy

Centres Principles



Vehicle Principles



- Integration of mixed and balanced uses where appropriate in residential areas, and walkable links to dedicated employment areas to allow sustainable commutes, embedding employment within the community, and allowing employees to use local facilities such as shops or leisure centres.

- New employment uses should be located where appropriate, with large format uses such as warehouses moving towards the edge of town and strategic transport links

Employment Principles



STRUCTURE PLAN

OPTION 1:

Recommended Structure Plan

- 5.30 The recommended structure plan, Option 1, applies these principles to comprehensive and co-ordinated development at Paddock Wood. This section outlines the design responses and key features of the plan to address the issues and opportunities, and the resulting requirements for infrastructure to deliver the plan.
- 5.31 A range of additional options which explore moderate variations based on this core structure plan are presented later in this chapter.
- 5.32 Comprehensive development delivers a range of key new opportunities for the town:
- 3,450 new homes within western and eastern expansion parcels, up to 40% of which will be affordable. Additional new homes are possible to the north of the town centre (40-140 dwellings)
 - 2 new primary schools, extensions to Mascalls Academy, and access to a new secondary school at Tudeley Village
 - The option of a new sports and leisure hub which could include a swimming pool, indoor and outdoor sports, with the potential for a co-located health centre
 - Significant new land for employment uses, revitalising local employment, and with walkable links from the new neighbourhoods
 - A town-wide system of paths and cycle routes, linking out of the town to nearby villages and leisure routes such as the Hop-Pickers Trail
 - A new north-south pedestrian and cycle bridge over the railway line to the west of the town, linking neighbourhoods and public facilities
 - On open space at the north-west near the A228, there is the potential for a Paddock Wood 'Wetland Park', a county quality water-based facility for informal leisure and recreation based around locally distinctive habitats which also controls flood water before it leaves the site
 - A revitalised town centre, with a comprehensive regeneration plan (see Town Centre study)



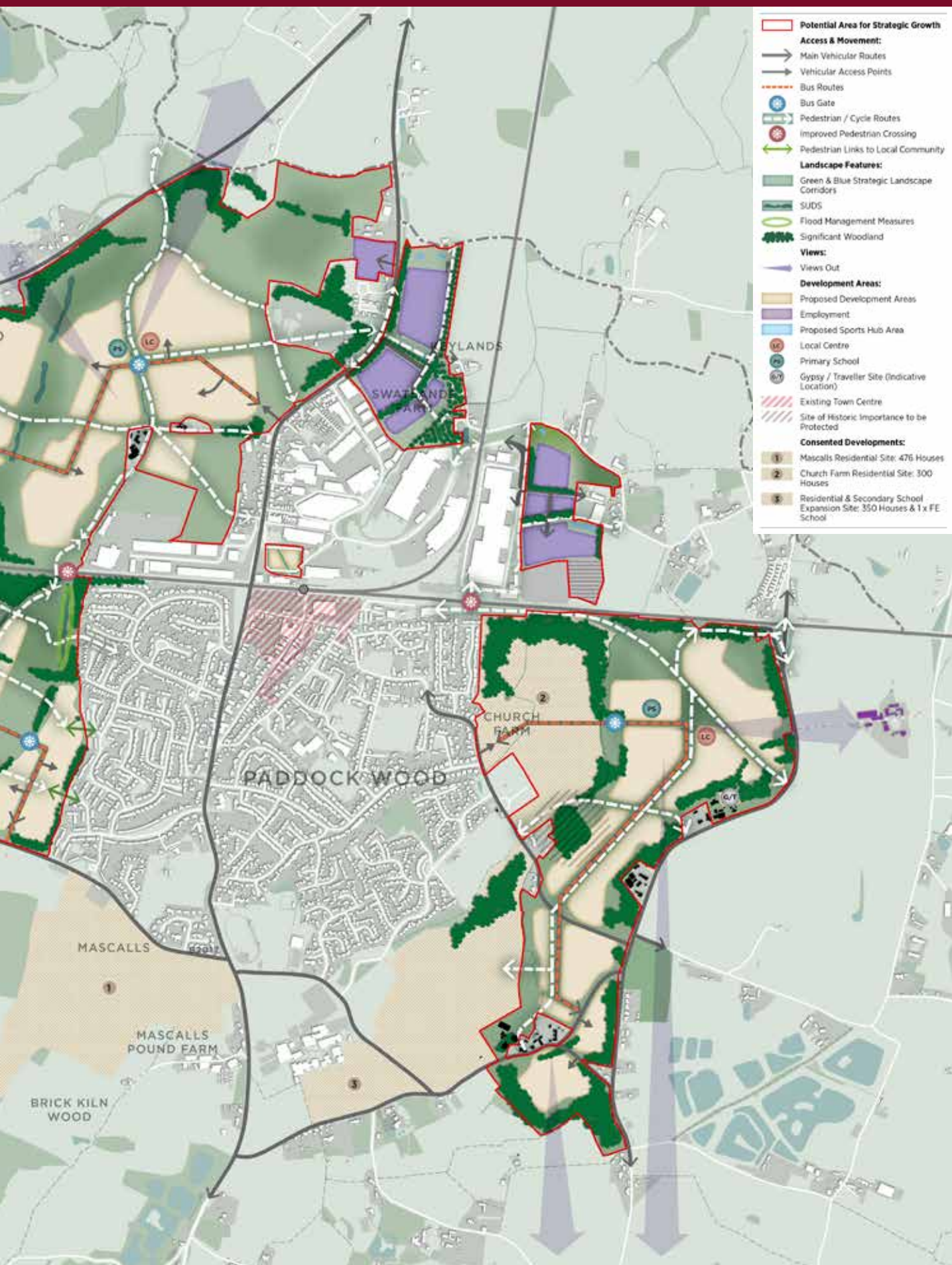


Figure 12: Option 1 Structure Plan (recommended)

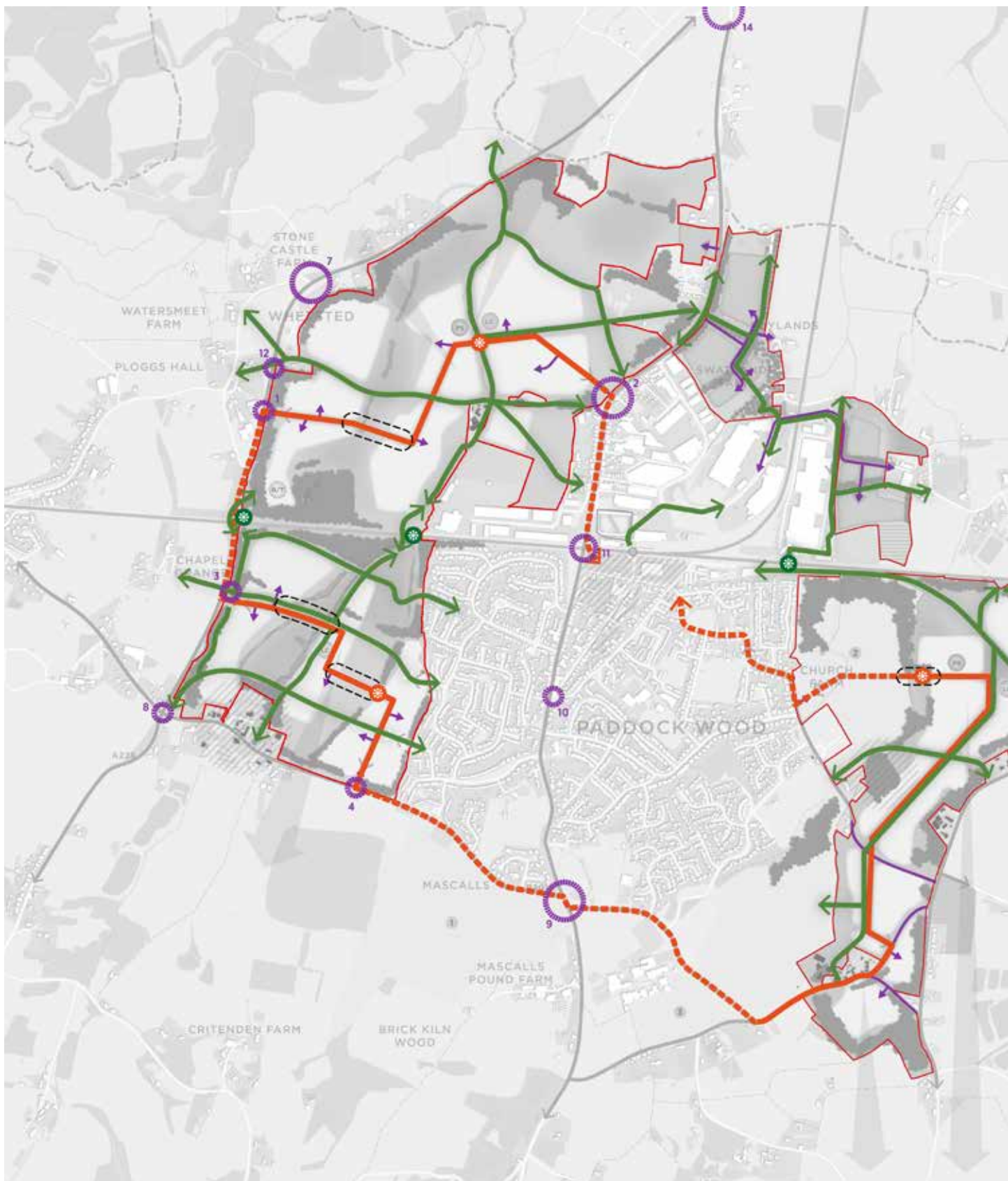
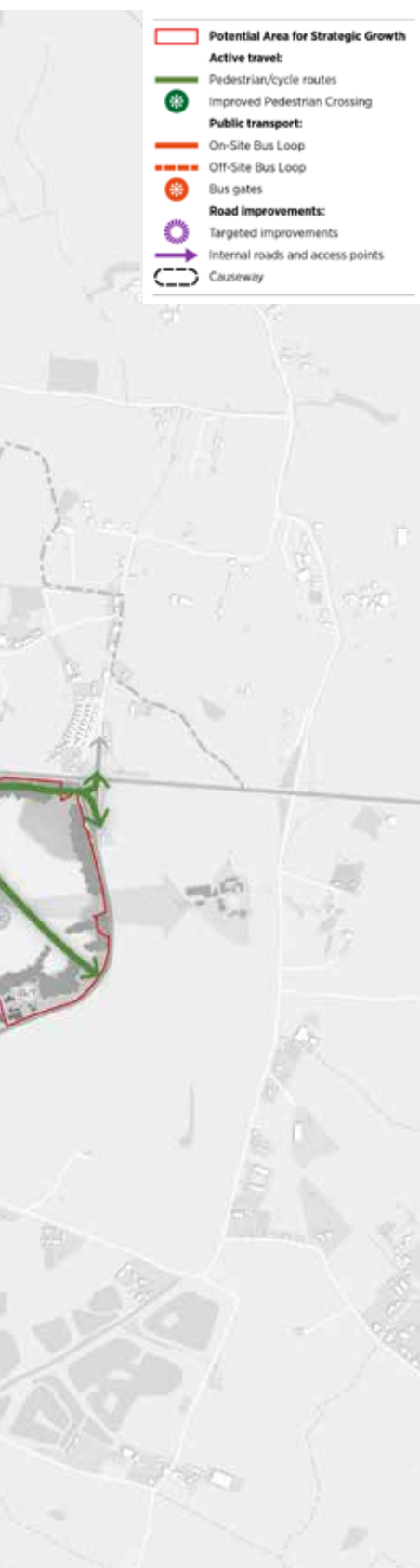


Figure 13: Movement framework layer for Option 1



Movement

- 5.33 Sustainable movement is prioritised throughout the Structure Plan. Paddock Wood is a compact town with a concentrated town centre, and it is feasible for the majority of the population to use active modes to access the town centre for day-to-day services. These connections are core to the Structure Plan.
- 5.34 Mobility beyond Paddock Wood is dominated by movement towards Royal Tunbridge Wells, Tonbridge, and to a lesser extent Maidstone. Tonbridge and Maidstone are served by direct rail links, and the Structure Plan's strong connections to the town centre enable such onward connections.
- 5.35 Pedestrian and cycling links are well-defined throughout the Structure Plan, accommodated in part within a network of open green spaces. These links are no more than 500m apart, and oriented to move people conveniently into the town centre and within neighbourhoods towards schools, local centres and open space.
- 5.36 Active travel routes strengthen connections to the wider countryside for leisure purposes by joining existing public rights of way. The Structure Plan's internal links also pick up convenient connections to suggested long-distance cycling links towards Royal Tunbridge Wells, Tonbridge and Five Oak Green that are emerging from a separate study by PJA (Local Cycling and Walking Infrastructure Plan).
- 5.37 The street network is designed to allow an electric hopper bus loop to operate via bus gates, serving the expansion areas and connecting them to the town centre, northern employment area and railway station. Such routes would facilitate future sustainable transport innovations.
- 5.38 The new neighbourhoods have restricted through vehicle movement, with the main streets controlled by bus gates at key points. As a result neighbourhoods are designed to operate on the principles of low traffic neighbourhoods, with good pedestrian and cycling grids but with managed vehicle movements.
- 5.39 To the east of the town, bus and active travel links can be achieved through the permitted Countryside development; this route is feasible for smaller buses.

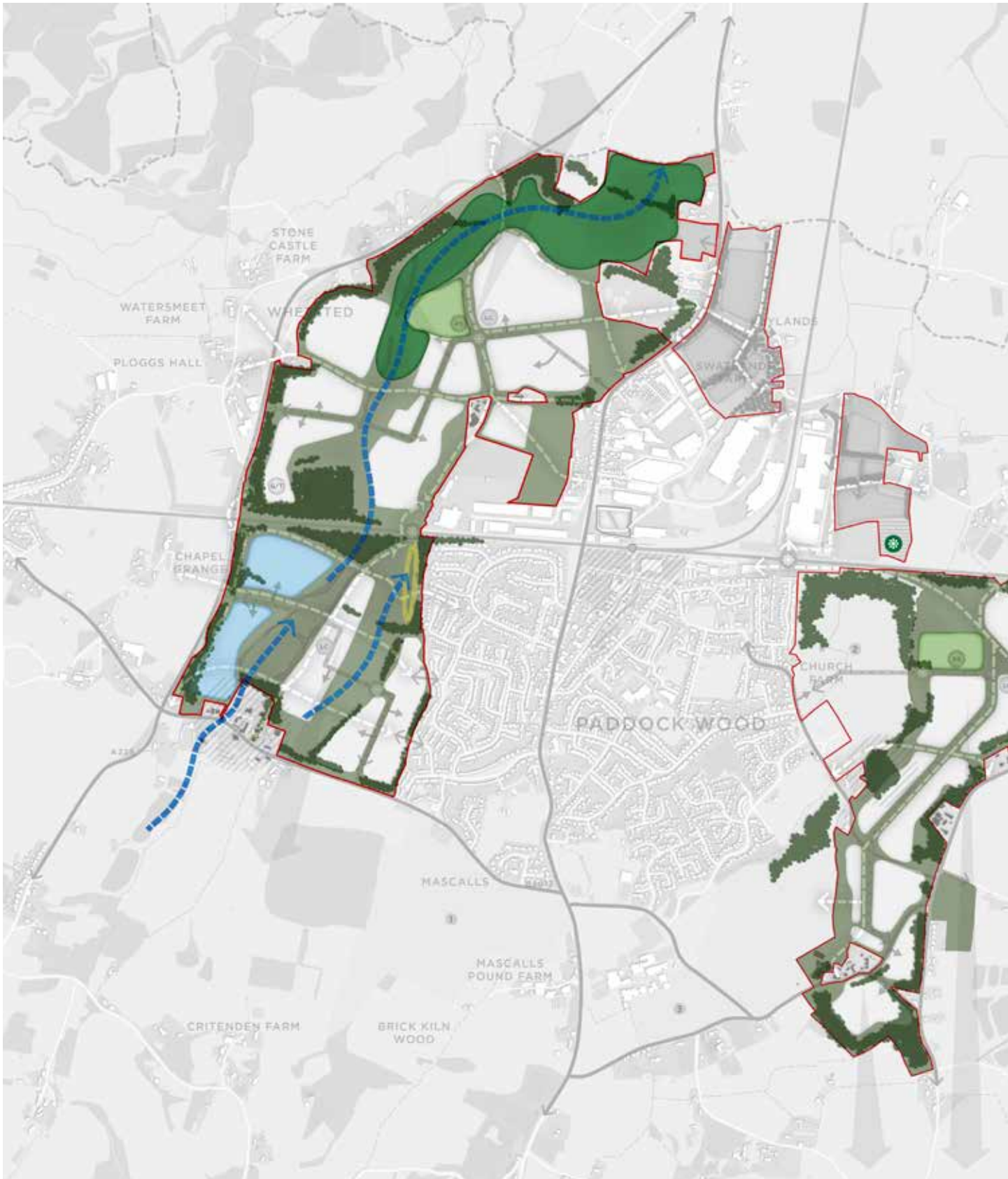


Figure 14: Green and blue framework layer for Option 1



Green & Blue

5.40 Green and blue infrastructure on the sites are strongly interlinked, and are primarily shaped by their functional relationship to flood management and alleviation. This consideration aligns them closely to natural flow patterns and landscape features, forming a strong and distinctive placemaking framework within which to plan development, and leads to distinctive characters on east and west Paddock Wood respectively.

5.41 Core masterplanning principles for flood management are derived from work undertaken in the Strategic Flood Risk Assessment, and supporting work by JBA, summarised in an appended technical note. These principles are:

Fluvial (River) Flooding:

- Cumulative impacts of development must be considered as well as impacts from specific developments
- Flood risk and drainage implications of infrastructure required to enable development should be planned for in a similar manner to residential or commercial development

Pluvial (Surface Water) Flooding:

- Management of surface water should be integrated with green infrastructure and open space provision to maximise opportunities for multi-functional use of space and delivery of multiple benefits
- Infiltration potential is likely to be low
- Enough space for surface SuDS will be required in the right locations, and outside of fluvial Flood Zones

All water management issues:

- Discharge rates, volumes and destination should be agreed early with the LLFA and IDB

5.42 Further flood modelling work to understand the impact of development on fluvial flooding has been undertaken, and is detailed later in this chapter.

- 5.43 West of Paddock Wood (i.e. in east Capel), the Structure Plan proposes significant amounts of open space, breaking development up and forming space for active movement networks. These open spaces, which vary in character and scale, are linked by watercourses and water-based habitats. They are arranged as 'green wedges' providing continuous open space between the existing urban area and wider countryside.
- 5.44 Residential development is located out of Flood Zone 3, and the vast majority is located outside Flood Zone 2. Open space or other 'water compatible uses' are located within these zones. This approach, which is a best practice 'sequential approach', works with the existing flood zones and ensures they can still store water in an inundation event. In the event that development proposals at the application stage adopt an alternative approach to the location of development parcels, applicants would need to satisfy the requirements of national policy and seek agreement with the Environment Agency, Kent County Council and TWBC that any impacts arising could be mitigated fully through a full flood risk assessment and detailed drainage proposals.
- 5.45 Raised platforms of approximately 1m are required for around 11ha of development on the western side of Paddock Wood, to ensure floodwaters remain outside of residential areas and to ensure betterment for Paddock Wood. The comprehensive approach to flood management requires co-ordination between developers north and south of the railway line to achieve a mutually beneficial result.
- 5.46 Targeted flood embankments are proposed within the north-east of the south-western parcel, protecting existing urban areas and the town. This has the effect of moving flows around the town through the northwestern site towards the Medway. As a result, to the north a large area of open space is retained to provide additional floodwater storage, in line with SFRA modelling. This large area of open space is also available to store water in the event of inundation from the north (the Medway floodplain), and prevents water ingress into the residential areas to the south which may be experiencing floodwaters from the southwest simultaneously.
- 5.47 A positive approach towards the design of this open space is the potential to provide a county-level 'wetland park' on land to the north of Paddock Wood, which could be transformed into a natural space

providing much-needed habitat and biodiversity improvements, based around water. Walking paths, information boards and educational opportunities, as well as lunchtime leisure for employment area workers, would provide an attractive facility for the town out of a functional piece of occasionally employed infrastructure.

5.48 Movement across flood management areas is proposed by causeways with culverted channels underneath. These causeways provide vehicle, cycle and pedestrian walkways above any anticipated floodwaters, with culverts enable natural flowrates of floodwater to be accommodated.

5.49 Sports provision is integrated with green open space, and new facilities are concentrated on the southwestern site in an indoor and outdoor sports hub of around 10ha.

5.50 Development on the eastern side of Paddock Wood has a distinctly different character than that on the west. The land to the east is much less constrained than that on the west, and as such open space on the east is limited to smaller pocket parks, village greens and more formal spaces, allowing development capacity to be optimised. Access to the wider countryside is provided via a series of walking links and rural lanes, with

the former Hop-Picker's Line providing a connection, both physically, and in reference to local heritage. The northern end of this development is anchored around a triangular green of limited scale, based on an intersection of walking and cycling routes.

5.51 Land to the west has a much larger proportion of large, natural open spaces, incorporating water management, natural habitats, and views. This closely reflects the landscape and existing character of the area, with long views towards the north and south.

5.52 The western and southwestern boundaries of development within east Capel have significant amounts of structural planting to form a strong and defensible new edge of the Green Belt. This limits visibility to and from predominantly rural areas and perceived cohesion between settlements, consistent with Green Belt purposes.

5.53 The setting of the High Weald AONB has been considered in line with recommendations from TWBC's consultant, LUC. Development at the north-eastern side of the eastern parcel has been limited, and development at the southern end is reduced in density and scale, with structural planting to break up perceived development impact from the AONB.

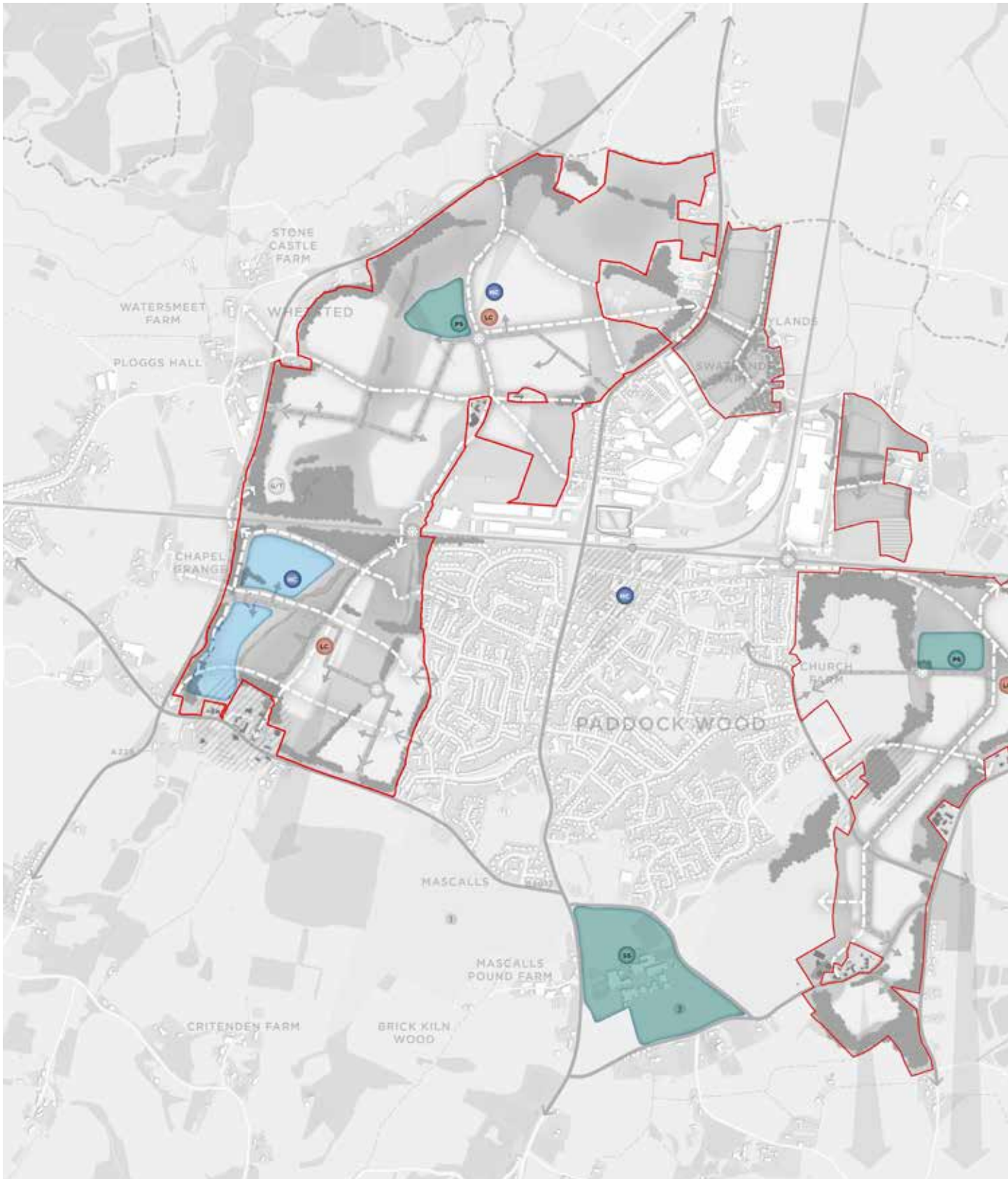


Figure 15: Community Wellbeing framework layer for Option 1



Community Wellbeing

- 5.54 New primary schools are co-located at central points of new neighbourhoods, close to local centres. Provision should be made for one 2FE with reserve land for a third form of entry in the north-west and one 2FE in the east of the town.
- 5.55 Provision of improved sports and leisure facilities has been identified as a vital part of the Draft Local Plan's Infrastructure Delivery Plan (IDP). The DLP indicates that there are two potential approaches to providing these improved facilities to Paddock Wood – improvements and additions at existing locations, or the provision of new comprehensive sports hubs for indoor and outdoor sport.
- 5.56 TWBC's Open Space SPD sets out sports field provision requirements of 1.1ha per 1,000 people for new developments, aligning broadly with Fields in Trust 'Beyond the Six Acre Standard' recommendations of 1.2ha per 1,000 population. For a development of 3,500 homes, this translates to between 9.2ha and 10ha.
- 5.57 This plan proposes a 10ha combined indoor and outdoor sports 'hub', concentrating new leisure facilities in a single location in the southwest to optimise benefits through economies of scale. This location maximises its accessibility within Paddock Wood by active means, and provides a beneficial use for land which otherwise would be constrained by flood zone constraints. Locating in the south-west also enables a softer edge to a revised Green Belt boundary. Such a facility could include:
- Indoor hub with a 6 lane, 25m swimming pool and learner pool, 4 indoor courts, health and fitness gym and 2 studios
 - Outdoor hub with football and rugby grass pitches, a hockey pitch, a football 3G pitch (training and full-size), a multi-use-games-area (MUGA) for sports such as netball or basketball.
- 5.58 Provision of grass sports pitches is likely to be located within flood zones for efficient use of land. These flood zones are likely to be inundated during 1 in 50 year events.

- 5.59 A new health centre for GP practices is proposed as part of the Draft IDP. The Structure Plan envisages three potential locations for this:
- Within or adjacent to the town centre (with potential locations identified in the Town Centre Study as part of the later High-Level Masterplans)
 - Within the local centre to the northwest
 - Co-location at the sports hub, to provide a complete lifestyle and wellness location within the town. This follows a precedent example of Portway Lifestyle Centre in Oldbury, West Midlands.
- 5.60 Draft policy also requires provision of a serviced Gypsy & Traveller site of 3 pitches. Location of this facility remains flexible within the Structure Plan, however the following assumptions about location have been made:
- Travelling (transitory) pitches should be located adjacent to the A228, ideally in the northwestern parcel
 - Permanent pitches should be located in the south-east of the site, adjacent to Church Lane
- 5.61 Local centres are situated close to the centre of new neighbourhoods, and at key intersections of the active movement network. They are typically limited in scale to small shops and community facilities for the immediate neighbourhood, and serve as a focus for slight increases in densities and built form intensity. A total of 2000m² of floor space spread across the three local centres has been assumed for the purposes of understanding trip generation in the appended Access & Movement report.
- 5.62 The northwestern local centre has the potential to be slightly larger in scale due to its comparative remoteness from the existing town centre, and poorer mobility options due to railway severance. It is understood that opportunities to site a medium sized food store in the town are being pursued, and balancing the existing Waitrose and Tesco offers in the town centre with a food store in the north could provide good food provision across the town.

Land Use & Capacity

- 5.63 The Structure Plan outlines potential for up to 3,450 homes in expansion areas, based on an average density of between 35–38dph. A total of 91ha of residential land is indicated, 1.5ha of mixed-use land, and 138.5ha of open space. There is also potential for between 40–140 dwellings on land to the north of the town centre at the Barth Haas site.
- 5.64 As a result almost 60% of land is given over to open space, plus additional land for school playing fields. This is a result of the significant flood alleviation measures required to the west of the town. This provision of open space more than satisfies TWBC requirements for provision in all typologies.
- 5.65 Primary schools are sized to provide approximately 5ha of land in total, in line with DfT guidance on provision. Although school buildings are co-located with local centres, some areas of the playing fields may be situated within flood management areas.
- 5.66 The distribution of development across the strategic growth areas has some implications for potential equalisation agreements or other delivery mechanisms between landowners. A comparison between the Structure Plan's proposals and the proposals that landowners have put forward, in terms of potential dwellings, is shown in Table 6 below.
- 5.67 This breakdown indicates that the Structure Plan broadly assigns similar numbers to developers as their own proposals, although exact spatial arrangements may vary. This provides the basis for a potentially 'light-touch' equalisation approach, focusing more on infrastructure than gross development value equalisation.
- 5.68 Land uses for schools and open space are also broadly in line with developer proposals. There is a clear difference between east and west in terms of open space allocations, as discussed in earlier sections, due to the requirements for flood management.

Table 6: Capacity of Option 1 compared to promoter proposals

	Promoter Proposals	Option 1
Crest Nicholson (NW)	1460	1545
Dandara (SW)	500	515
Persimmon Redrow (E)	1250	1330
Charterhouse (W)	80	0
Countryside (additional) (E)	60	60
Total	3350	3450

5.69 Advantages of this option are:

- Housing delivery: the recommended structure plan identifies sufficient land to accommodate enough homes to meet local needs, delivered at a residential density which is compatible with the local context and character. This is achieved by focusing more housing on the least constrained land, enabling development on more constrained land to be moderated downwards and away from flood zones.
- Green space: generous amounts of open green space can be provided to ensure relevant open space standards are met, and opportunities are provided for multi-functional greenspace to meet a range of needs. This ensures sufficient scope to design a landscape which offers a suitable new edge to the Green Belt and open countryside.
- Approach to flood management: the structure plan is prepared in accordance with the NPPF requirements for a sequential approach to development within flood zones.
- Sports Hub: Land is identified for a new sports hub, combining indoor and outdoor facilities in a single location, close to the majority of the new and existing population and on a sustainable travel route, and where it can assist in creating a softer green edge adjacent to the new Green Belt boundary.
- Movement: A comprehensive transport and movement plan can

be established, locating all homes within close proximity of public transport routes, and walking and cycling paths. This ensures good links to the town centre.

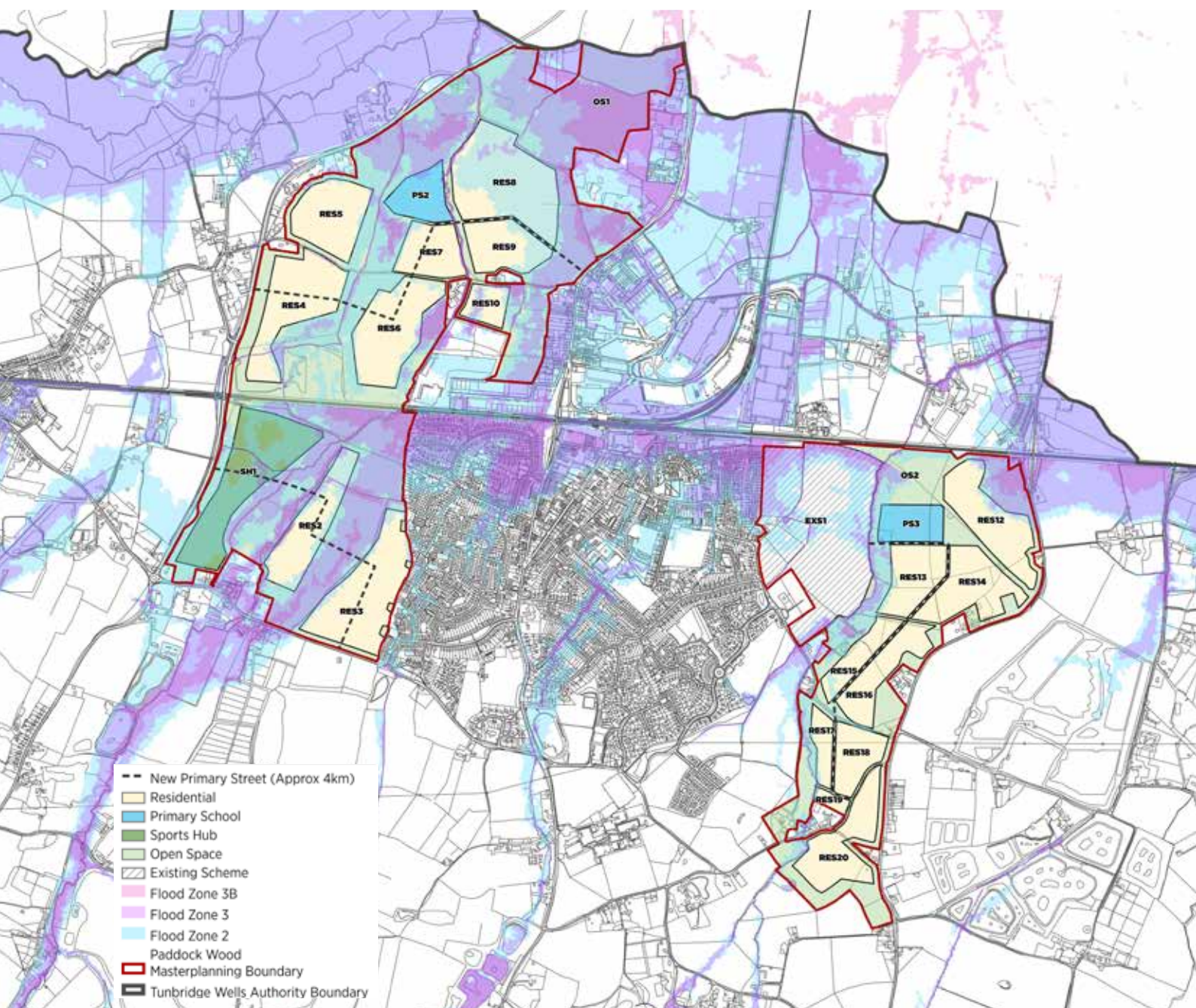
- Community Facilities: the plan enables the creation of a series of neighbourhood units, served by easily accessible community facilities at their heart.

5.70 Disadvantages of this option are:

- Delivery: delivery of this option is dependent on forms of cooperation, collaboration or equalisation between site promoters to ensure shared facilities and infrastructure are funded and provided in a timely manner. Additional work will be required to achieve this.
- Housing delivery: this option does not meet the requirement of 4,000 dwellings in the Draft Local Plan.
- Flood Risk: although a sequential approach to flood management is taken with this option, some development areas are in Flood Zone 2.

Alternative Options

5.71 Based on the broad configuration of the recommended structure plan presented (Option 1), a range of alternative options that respond to the key issues of the site and context have been prepared and evaluated, to ensure due regard is given to the advantages and disadvantages of moderately different approaches to site planning



Parcel ID	Site Section	Land Use	Area (ha)
EXS1	East	Existing Scheme	22.42
OS1	West	Open Space	98.78
West Open Space Total			98.78
OS2	East	Open Space	30.78
East Open Space Total			30.78
Open Space Total			129.55
PS2	West	Primary School	3.18
West Primary School Total			3.18
PS3	East	Primary School	3.05
East Primary School Total			3.05
Primary School Total			6.22
RES2	West	Residential	5.96
RES3	West	Residential	9.36
RES4	West	Residential	7.75
RES5	West	Residential	5.80
RES6	West	Residential	7.81
RES7	West	Residential	3.94
RES8	West	Residential	10.82
RES9	West	Residential	4.47

Parcel ID	Site Section	Land Use	Area (ha)
RES10	West	Residential	1.94
West Residential Total			57.87
RES12	East	Residential	6.58
RES13	East	Residential	4.33
RES14	East	Residential	5.89
RES15	East	Residential	2.73
RES16	East	Residential	4.29
RES17	East	Residential	1.73
RES18	East	Residential	3.34
RES19	East	Residential	0.67
RES20	East	Residential	5.95
East Residential Total			35.50
Residential Total			93.37
SH1	West	Sports Hub	10.10
Sports Hub Total			10.10
West Total			169.92
East Total			69.33
Total (exc Existing Schemes)			239.25

Figure 16: Land use budget for Option 1

OPTION 2:

Northwest Sports Hub Location

- 5.72 Option 2 locates the buildings for the combined sports hub a short distance from the north-western local centre, along the primary east-west route, and puts the pitches into an area of open space to the north. Residential development is located south-west of the railway line, adjacent to the A228. All other aspects remain unchanged.
- 5.73 Specific advantages of this option are:
- Transport: location of the hub at an intersection of active travel routes, adjacent to the Maidstone Road, and close to major employment areas, could ensure good all-day sustainable travel to the facility
 - Urban Design: location of the facility in the north west complements the existing Putlands Centre in the south and provides facilities for the northern employment areas
 - Landscape: large buildings are kept away from potential visibility from the AONB and the more sensitive landscape areas to the south, and are located close to existing large warehouses
- 5.74 Specific disadvantages of this option are:
- Transport: locating the sports hub to the north could induce more north-south vehicle traffic across the single road bridge adjacent to the town centre, as average journeys will be longer, and make access from surrounding areas more difficult as it would cut through new residential areas
 - Flooding: although the sports fields would not contribute towards flooding issues, in flood events they could be inundated by floodwaters using the northern flood storage area
 - Landscape: large buildings could be visible from some distance over the flat landscape to the north, although the existing large warehouses to the north of Paddock Wood provide a contextual precedent. Sensitive design would be needed
 - Opportunity cost: In contrast to Option 1, the opportunity to locate the sports hub where it can assist in retaining the green separation between the expanded town of Paddock Wood and villages within Capel is reduced
- 5.75 Option 1 and 3 proposed the same schedule of land uses, but are configured differently. Option 3 is considered sub-optimal to Option 1 because of the disadvantages set out above. Consequently, Option 3 is not recommended.



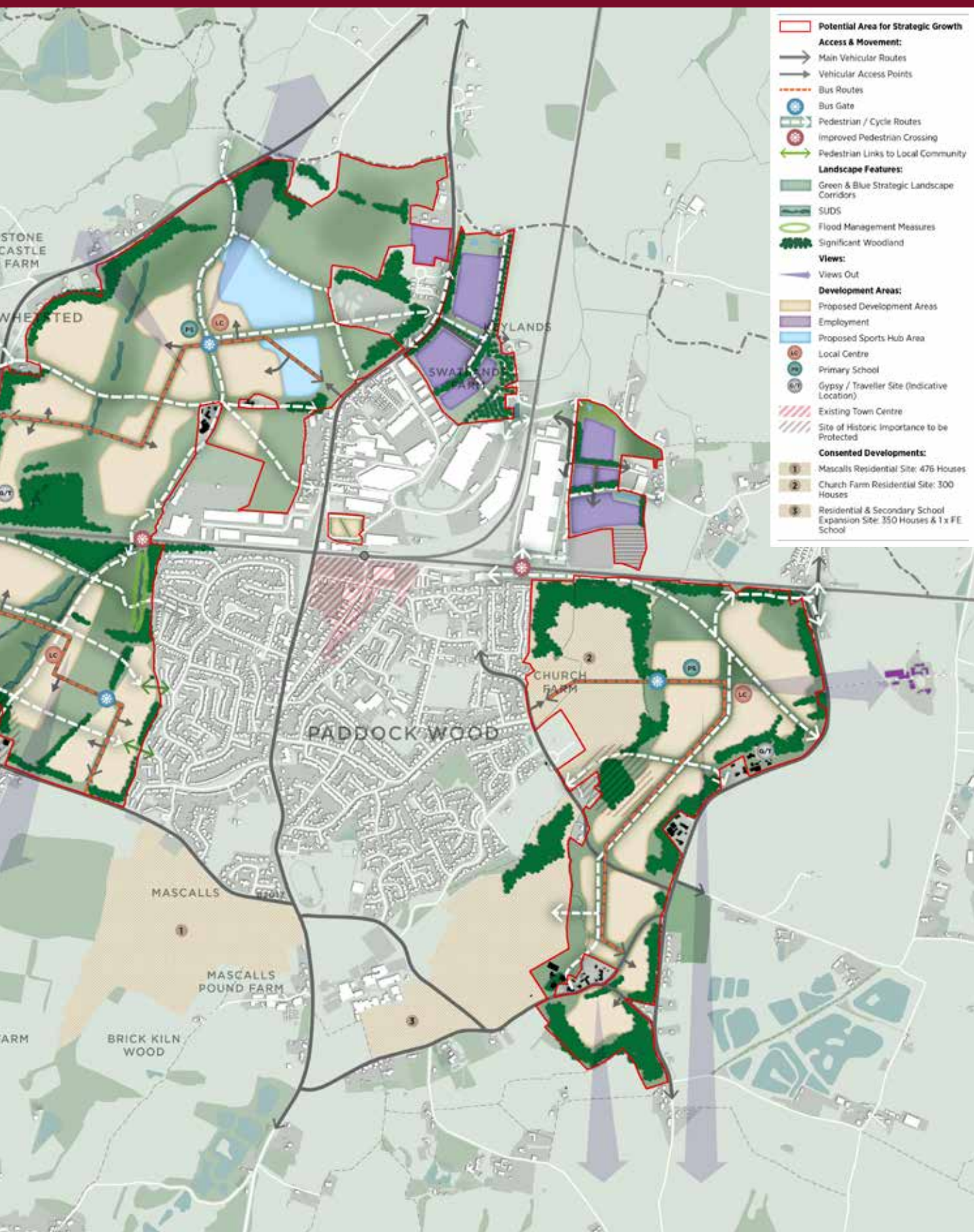


Figure 18: Option 2 Structure Plan - northwest sports hub

OPTION 3:

No Residential Development within EA-designated Flood Zones

- 5.76 Option 1 proposes a natural approach to flood management and mitigation, with targeted interventions to provide betterment for the existing urban area of Paddock Wood. This betterment redirects some water flows to the northwest and as a result a large area of open space for floodwater storage is retained. This could be used as a natural wetland park.
- 5.77 Option 1 proposes development outside of Flood Zone 3, and the vast majority of development is proposed outside of Flood Zone 2. In Option 3, all residential development is removed from Flood Zone 2 and 3. This fully respects the modelled flood zones and looks to minimise the impact of development on water flows. This is an extreme application of the sequential approach.
- 5.78 Option 3 retains the southwestern location of the sports hub, as this area is partially within Flood Zone 2. With appropriate siting of buildings out of the flood zone, sports pitches and other 'water-compatible' land uses could still be accommodated in this area.
- 5.79 The primary result of this option is a reduction in housing capacity of the draft allocations, of around 610 homes, all on the western side of the town. This would have a knock on effect on viability and deliverability of wider infrastructure.
- 5.80 This option would have a greater effect on the western sites. A comparison with the capacities for different developers is shown below in Table 7.

	Promoter Proposals	Option 1	Option 3
Crest Nicholson (NW)	1460	1545	1100
Dandara (SW)	500	515	380
Persimmon Redrow (E)	1250	1330	1300
Charterhouse (W)	80	0	0
Countryside (additional) (E)	60	60	60
Total	3350	3450	2840

Table 7: Comparison of capacities between promoter proposals, Option 1 and Option 3



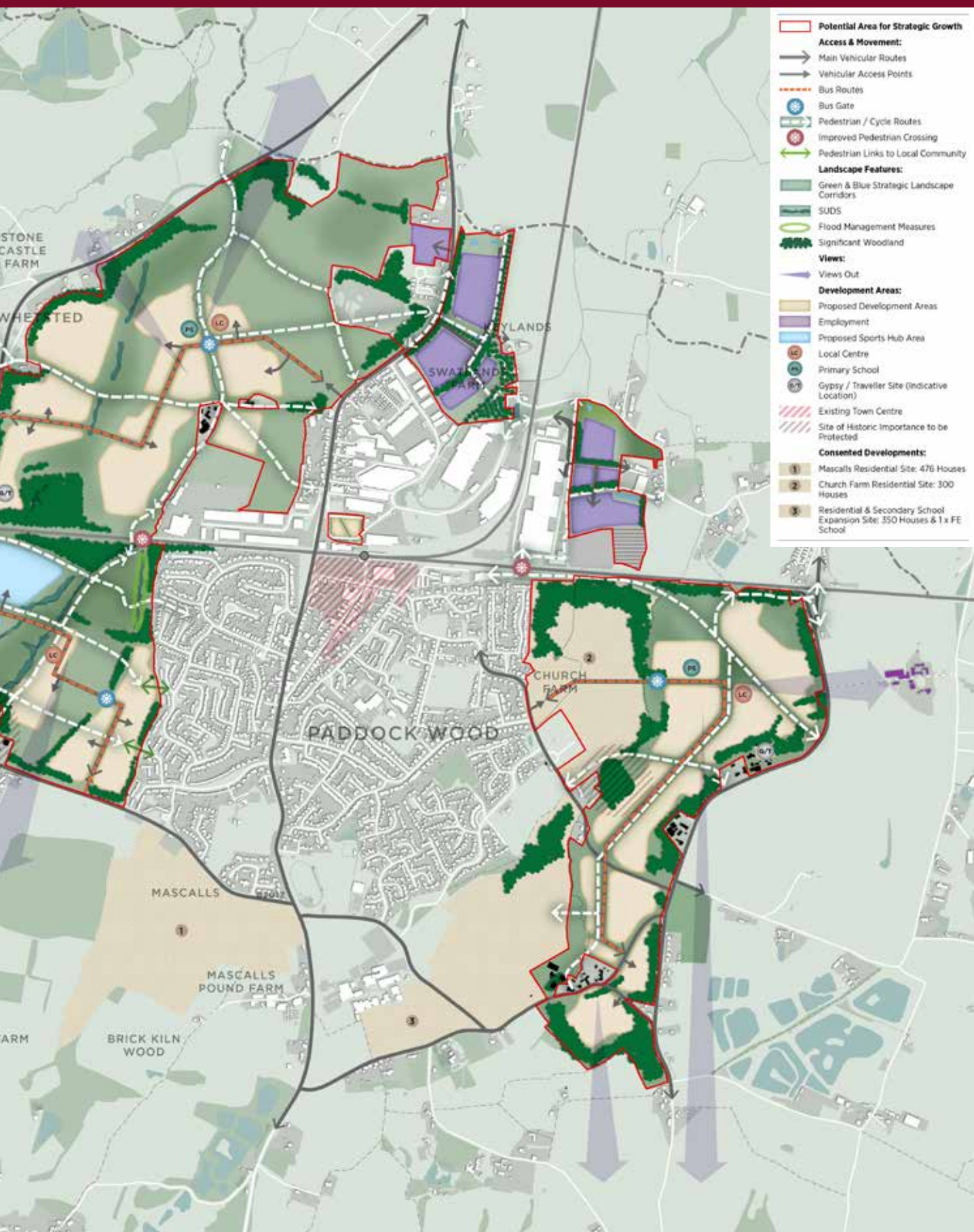


Figure 19: Option 3 Structure Plan – no development within Flood Zone 2

OPTION 4: Maximising Development Capacity

- 5.81 Policy AL/PW1 in the Draft Local Plan outlines a potential capacity of up to 4,000 homes around Paddock Wood within the allocation boundary, subject to capacity testing through masterplanning.
- 5.82 Option 4 seeks to test the ability of the draft site allocations to achieve this, and outlines a scenario within the land allocation where densities are increased at selected locations to accommodate the full policy requirement of 4,000 homes. Housing densities in these locations would be increased to around 70dph, double the site average. These locations are aligned with key intersections or main streets, reinforcing legibility and placemaking.
- 5.83 Provision is made for a sports hub in the north-west area, although could equally be accommodated in the south-west adjacent to the A228 to fulfil the policy requirement. Consideration was given to the possibility of the alternative approach of investing in the improvement of existing facilities within the town including Putlands Leisure Centre, Memorial Park and the Recreation Ground, in order to generate additional development capacity as part of this option. However, as this would represent an under-delivery of sports pitches in the context of TWBC's adopted open space standards, this was not considered appropriate.
- 5.84 The maximum capacity of this option is 3,835, illustrating the difficulty of providing the full policy requirement of 4,000 homes on the land with its physical constraints, and at a density which could reasonably be considered to be commensurate with the immediate urban context.



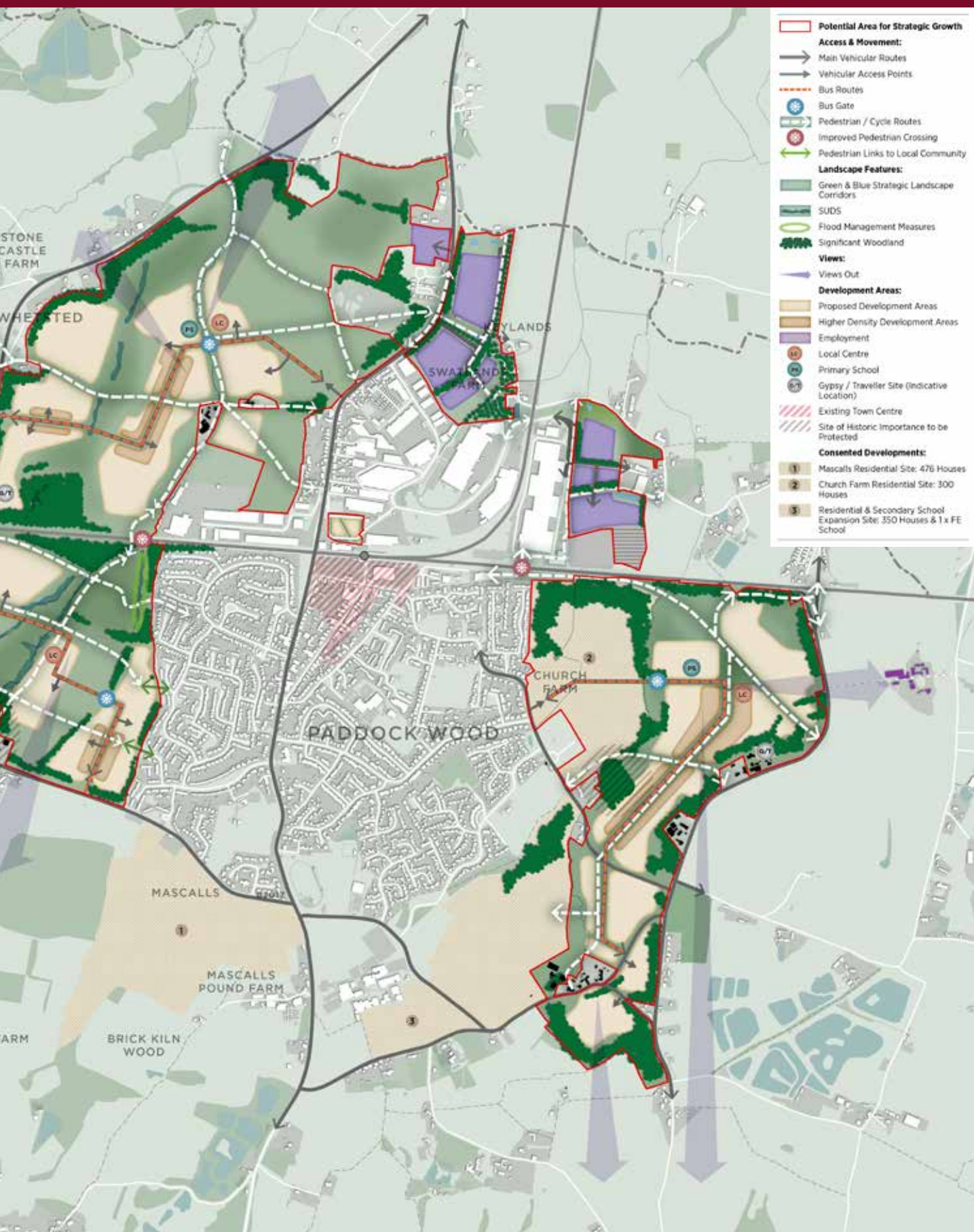


Figure 17: Option 4 Maximising Capacity

5.85 Advantages of this option are:

- Policy compliance: this option more closely fulfils the ambitions of policy AL/PW1, and the housing need calculations underlying the DLP
- Housing delivery: this options provides an additional 380 homes over Option 1, including affordable homes, with a potential wider variety of house types
- Social impact: additional population to support service viability within Paddock Wood. Also, strengthening of existing facilities that are already knitted into the fabric of the town would ensure that existing residents can clearly see the benefits of development to the existing town, and ensures that activity does not 'leak' towards centres away from the existing town.

5.86 Disadvantages of this option are:

- Contextual impact and character: such large areas of higher density homes could detract from the rural character of the edge of Paddock Wood and surrounding area. Other than a small number of terraces at the centre of the town, there are very few areas of such high density within the context. Such development could compromise the 'Garden Community' principles that TWBC's draft policy promotes

- Social impact: areas of higher density have the potential to detract from the activity and vitality of the town centre, producing a series of competing centres. Enhanced sports provisions at existing sites could be controversial or create new noise, traffic and other impacts on existing residents in locations that may not be ideally situated for increases in population using them.
- Deliverability: design of successful higher-density housing, if it is to include a mixture of mostly housing and some apartments, often requires non-standard housing types and bespoke design work, which can be difficult to secure from volume housebuilders. To improve sports provision at existing sites, works would be required at a wider range of locations across Paddock Wood, complicating delivery. A lack of a comprehensive approach means some facilities may not be delivered and the opportunity missed.

5.87 For the reasons set out above, Option 4 is not considered to offer the best possible overall response to the draft policy, and would not provide the optimum qualitative response. Consequently it is not recommended.

Impact of Development on Floodwater

- 5.88 Modelling work on the impact of the development Options 1 and 3 have been undertaken by JBA, using the same methodology as TWBC's SFRA (Option 4 does not require modelling as development occurs within the same locations as Option 1, therefore modelling would amount to the same conclusions).
- 5.89 The objective of the assessment is to understand the potential effects of the options on fluvial flood risk, compared with the existing 'baseline' condition.

Assumptions

- 5.90 Initial modelling of Options 1 and 3 showed unexpected increases in flood depths in some areas of Paddock Wood due to the obstruction of some of the existing overland flow paths. Inspection of the modelling revealed that some of these flow pathways are very shallow and related to surface runoff rather than fluvial flood risk. Surface water runoff would be expected to be managed through site drainage and landscape planning, which is not represented within the model. Additionally, the simplistic approach used to represent the residential areas (raising their entire footprint above the maximum flood level) has been retained from the SFRA

which would be expected to provide worst-case predictions. While this is unlikely to be representative of the practical approach to development of the sites, where flow pathways through the areas are likely to be incorporated into the layouts, it enables a strategic scale assessment of the potential impacts on flooding.

- 5.91 In light of the predicted increases in flooding, a relatively small number of conveyance routes were applied through residential sites in a refinement to the development scenarios. This begins to replicate the effects that localised drainage features would be expected to have on conveyance of water.
- 5.92 The modelling demonstrates the benefit of localised drainage measures and it is considered that more comprehensive drainage arrangements accompanied by more detailed analyses would enable the development of the residential sites outlined in Option 1 to be brought forward without any off-site increases in flood depths being predicted. The smaller scale of residential development associated with Option 3 lessens changes in flood depths compared with the baseline scenario, but in places localised drainage measures still need to be considered.

Conclusions

- 5.93 It is considered that masterplan development Options 1 and 3 are acceptable from the perspective of not increasing flood risk to third parties. The areas of residential development have been positioned in lowest risk flood zones (Flood Zones 1 and 2, with a significant majority in Flood Zone 1) and the modelling supports the benefit resulting from this by demonstrating the reduced changes in flooding compared with modelling prepared for the Tunbridge Wells Level 2 SFRA. Additionally, the modelling identifies the benefit that localised drainage measures can provide.
- 5.94 On this basis it is considered that the principle of development can be supported for the layout described by Option 1, provided that appropriate provision is made for the layout of drainage and flow routes through the proposed development. These measures would need to be supported by more detailed analyses and evidence that reflected the level of design detail. Consideration would need to be given to the long-term management and maintenance of the conveyance and drainage measures, so these were not inadvertently compromised for the lifetime of the development.
- 5.95 A technical note with plans is included as an appendix to this report.
- 5.96 It is anticipated that the four main housebuilders around Paddock Wood (Crest Nicholson, Dandara, Redrow and Persimmon), will build on their sites approximately simultaneously in response to market conditions.
- 5.97 For the purposes of consistency with assumptions used in the wider Local Plan viability testing, housing delivery trajectories are assumed to match those of TWBC's Draft Local Plan, with around 300 being delivered per year across the parcels towards the Medium/Long-term (2025 onwards). This equates to four outlets delivering one market home per week, plus commensurate affordable housing provision. This is a reasonable expectation for large strategic sites.
- 5.98 Delivery of houses should be co-ordinated with delivery of infrastructure, in particular any that is located off-site and will not be delivered by the housebuilders. On-site infrastructure such as access roads, active travel links and schools can be aligned with housing completion trigger points through individual S106 Agreements but infrastructure such as sports and leisure provision is more complex. The Strategic Sites Infrastructure Framework takes a balanced view, considering the need for change in Paddock Wood and east Capel, along with viability concerns about early delivery of potentially costly major new facilities.
- 5.99 Precise detail on the delivery of



infrastructure in tandem with housing delivery will be dealt with at application stage, but the framework has taken reasonable potential worst case assumptions (such as early delivery) for the purpose of an assessment on deliverability and viability.

- 5.100 Flood alleviation infrastructure is an essential component of delivering all housing on the west of Paddock Wood, and improvements in the town centre, and should be prioritised early on, before any housing delivery on the south-western site, and before the majority of housing on the north-western site.

- 5.101 Delivery of the secondary school annex should be prioritised relatively early on to mitigate against any delivery issues associated with the proposed secondary school at Tudeley Village.

- 5.102 The recommended Structure Plan and the range of options presented give a comprehensive and co-ordinated approach to development on sites around Paddock Wood. This approach means that development can address the wide range of issues surrounding strategic scale growth, including flooding, transport, integration with the existing town, landscape (including a new Green belt edge) and infrastructure provision.

- 5.103 By leading with a Structure Plan that outlines a vision and principles for development that are grounded in good urban design and placemaking best practice, appropriate choices about supporting and enabling infrastructure can be made. These can be carried forward to the Strategic Sites Infrastructure Framework with knowledge about their necessity, impacts and timing requirements.

Summary

06 INFRASTRUCTURE FRAMEWORK

Introduction

- 6.1 The strategic sites allocations in the Draft Local Plan require new infrastructure to mitigate the impact of planned development. In addition, the draft policies also seek to ensure that infrastructure is comprehensively planned, is delivered in a timely manner, is funded through the development, and contributes to a step change in transport modal shift to align with Garden Community principles.
- 6.2 This chapter sets out the necessary infrastructure to mitigate the impact of the proposals including on-site or off-site infrastructure. It then applies the necessary infrastructure to three scenarios so that they can be tested for viability purposes:
- Paddock Wood and east Capel, and Tudeley Village both going forward
 - Paddock Wood and east Capel only
 - Tudeley Village only
- 6.3 In addition, this chapter identifies appropriate costs for the required infrastructure, phasing assumptions and funding sources (such as s106).
- 6.4 The chapter also sets out the various options that have been considered to lead towards a preferred option for each scenario. For example, options have been considered in relation to transport infrastructure such as the Colts Hill Bypass, flood risk and sports and recreation. The options have been subject to high-level assessment in relation to social, environmental and economic factors as well as policy, deliverability and viability.
- 6.5 The infrastructure framework then sets out the preferred option and recommendations for scenarios 1–3.
- 6.6 Finally, the infrastructure framework for each scenario is tested for its viability, and a summary of how the viability testing has been undertaken is presented at the end of this chapter. The viability testing aims to test the full list of infrastructure needed and identified from the baseline review in relation to the above scenarios, covering phasing assumptions, affordable housing and mix, build costs and land value assumptions.

Method

- 6.7 Infrastructure provision for the strategic sites encompasses two distinct but related areas:
- Infrastructure that is required to mitigate the impacts on existing areas from new development; and
 - Infrastructure that is required to ensure that the new development on strategic sites meets TWBC policy objectives and the garden community principles, and creates successful, integrated new neighbourhoods and places.
- 6.8 Following the overall methodology set out in chapter 3, provision of infrastructure has been approached in an integrated manner, closely coupled with masterplanning at Paddock Wood and east Capel, and through engagement with land promoters at Tudeley Village and at Paddock Wood. This approach has required an iterative method to assessing infrastructure provision, beginning with a baseline position formed of TWBC draft policy, KCC policy and KCC highway schemes. In addition, masterplanning has helped to establish a list of required improvements to highways and sustainable travel infrastructure to support the proposed Structure Plan.
- 6.9 The infrastructure schedule has been tested through a baseline viability exercise to determine if development on the strategic sites to the level proposed by the Structure Plan (and Tudeley Village's draft masterplan), would be able to support the costs of that infrastructure and remain viable. The baseline exercise exposed a concern about viability with the initial schedule. As such, options for delivery of policy objectives through alternative schemes were examined, primarily options for delivering the objectives of the proposed Colts Hill bypass but through means more reasonably in line with the scale of planned growth. This chapter analyses the different options across Environmental, Social, Economic, Policy and other factors. Where appropriate, a recommended option is outlined and carried forward to the schedules of infrastructure for each scenario.
- 6.10 Infrastructure Frameworks have been prepared for each strategic site scenario has, based on an analysis of impacts arising from each development when treated separately.
- 6.11 A series of common assumptions have been used to underpin the resulting Infrastructure Framework through all scenarios, covering Phasing, Cost Sources and Funding Sources.

Infrastructure Options

- 6.12 Following the development of the Structure Plan, and discussions through the baseline assessment stage, the following infrastructure items were considered for alternative approaches that might deliver on the policy goals of TWBC:
- Improvements on the A228 at Colts Hill
 - Flood alleviation approaches at east Capel (west of Paddock Wood)
 - Sports and formal open space provision at Paddock Wood

Colts Hill Improvements

- 6.13 At Colts Hill, the A228 southwest of Paddock Wood narrows and has sharp turns. It is below the design standards of a modern 'A' road, and has significant safety issues. The road then rises towards the High Weald, again with narrow, sharp corners. It has long been identified as a concern in the local road network. Given it is a key part in a 'triangle' of routes that will enable movement arising from the strategic sites between Paddock Wood, Royal Tunbridge Wells and Tonbridge, highway improvements are considered essential.

- 6.14 The Draft Local Plan Policy TP 6 (Safeguarding Roads) provides safeguarding for land for 'offline' A228 strategic link (A228 Colts Hill bypass). The route of the new section of highway (A228) has been subject to considerable historic assessment and has been 'safeguarded' in previous Development Plans. The primary reason for the bypass is to address highway safety issues. The Kent County Council scheme is priced at approximately £46m.

- 6.15 This cost is a significant burden for new development to shoulder, and in line with Regulation 122 of the Community Infrastructure Levy Regulations (2010), any contribution to the cost of the bypass must meet the necessary tests, including being reasonably related in scale and kind to the new development.

- 6.16 The Transport Assessment underpinning the Regulation 18 Draft Local Plan assesses the need for improvements at Colts Hill to be attributable to pre-existing safety concerns, as well as a wider set of changes to the transport network in this part of Kent, including the proposed Lower Thames Crossing. These reinforce concerns that the full cost of a bypass at Colts Hill could not feasibly be funded through development alone. The baseline viability assessment confirmed that inclusion of the full £46m cost of the scheme would undermine viability and deliverability of the allocations.
- 6.17 However, it is important to point out that development will have an impact at Colts Hill on safety and may require additional capacity, so it is appropriate that options to mitigate impact are explored, and funding for those improvements secured.
- 6.18 Therefore, alternative means of securing road safety improvements have been explored, including the provision of online route improvements and online/offline alternative route which would not be as costly and achieve a lesser environmental and landscape impact than the wholly offline option. Such options would address safety concerns, especially the exacerbated impact of additional traffic on the A228 in this location, whilst ensuring that it could be funded through development.
- 6.19 A two-stage approach may be necessary, with development funding immediate improvements at the most important locations, without prejudicing the ability for the full KCC scheme to be delivered in the future (i.e. as a second stage) should further funding be agreed.
- 6.20 This section details Option 1, the Colts Hill Bypass scheme as existing, along with analysis of the alternative options that have been assessed. The alternative options are presented, along with analysis of their impacts across:
- Viability
 - Deliverability
 - Phasing/timing
 - Capacity
 - Policy compliance
 - Social impact
 - Environmental impact (including ecology, flooding, congestion, landscape, air quality, noise)

Option 1: Fully Offline Colts Hill Bypass

- 6.21 The Offline Colts Hill Bypass is a Kent County Council scheme. It incorporates roundabout junctions at the north and south links to the A228, with junctions being sized to accord with the number of junction arms at each connection. It is understood that the carriageway would be 10m wide, plus 1m margins, and the majority of its length would be within cutting. The section south of Alders Road is within a deep cutting due to having to pass under Alders Road, which in turn results in a very deep cutting that has a large impact on the AONB.
- 6.22 The offline Colts Hill Bypass would impact on the natural environment, particularly the AONB, as it cuts through the countryside. A new road would also contribute to an impact on air quality and noise in the area. The bypass is priced at £46m and therefore would be the largest, single infrastructure cost item within the Infrastructure Framework, and contributes largely to making the proposals unviable.
- 6.23 In line with national policy and regulation, planning obligations can only be sought if they are necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to the development. As the Offline Colts Hill Bypass has been proposed for several years, and land safeguarded in previous developments plans, it is questionable that the scheme is directly related to the development. Although any safety improvements will also increase capacity, it is also a scheme that aims to improve current highway safety and is not directly related to the proposed development at Paddock Wood and east Capel.

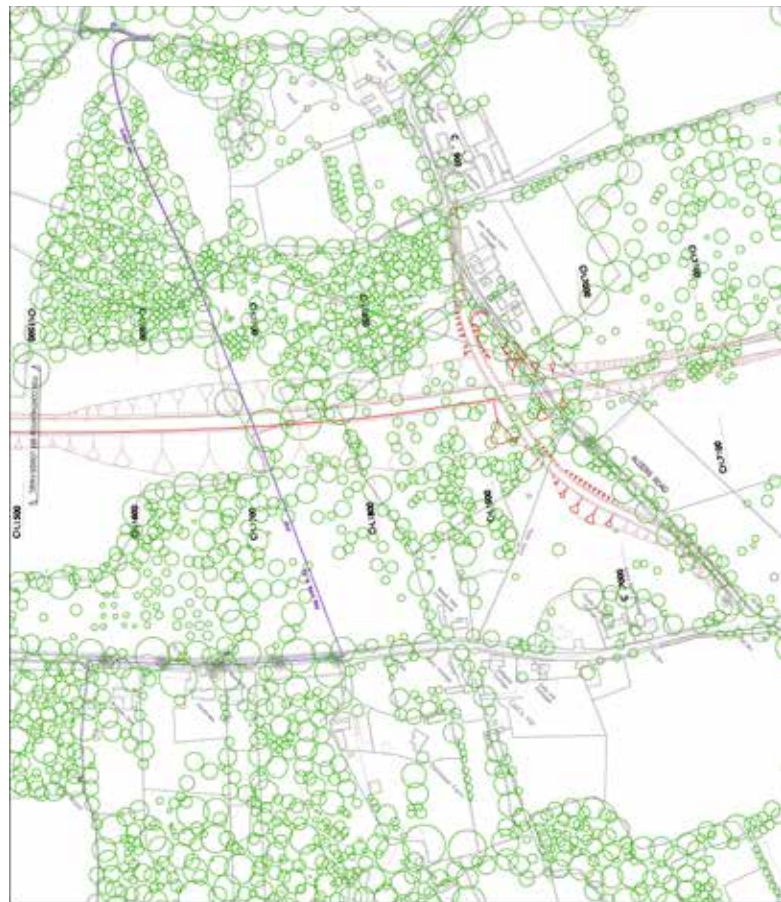


Figure 20: Option 1 Colts Hill Bypass - full KCC scheme (Prepared by Stantec)

Option 2: Online Improvements

- 6.24 This option would involve online improvements along the south of Alders Road. It comprises:
- 6.75m wide road width, plus margins of 225mm which accord with the Kent Design Guide for a Local Distributor type road, which is considered appropriate for an online widening scheme that would accommodate HGVs and buses;
 - Verges up to 3m wide which could also facilitate cycle/ pedestrian facilities;
 - Road curve radii which meets DMRB standards, improved junction and forward visibility;
 - Roundabout junction with Alders Road and Crittenden Lane.
- 6.25 The benefits of the online option would be an improvement to road safety in Colts Hill and significantly cheaper than the bypass option – approximately £15-20m. It would also have less impact on the environment; for example, it would be less disruptive to surrounding greenfield land and AONB, it would avoid ancient woodland and local flood zones, and it would not involve the loss of large amounts of trees. However, there would be an impact to the operation of the A228 during construction phase and would require third party land which would be disruptive; also, full corridor improvement to the required standard would not be possible due to properties fronting A228 in Colts Hill.

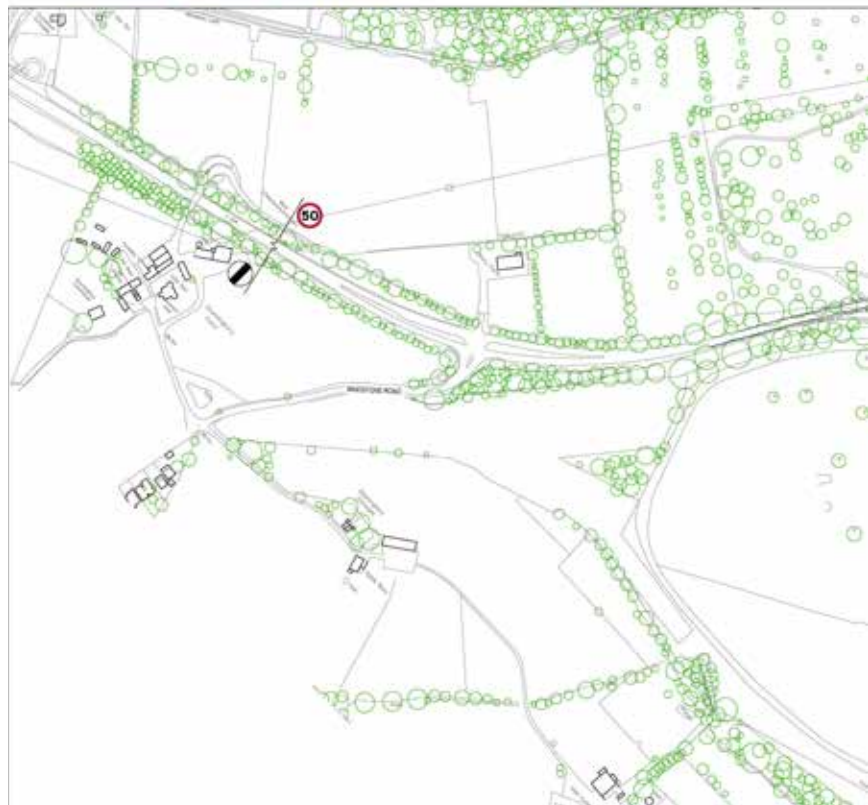




Figure 21: Option 2 Colts Hill improvements - online upgrades only

Option 3: Local Bypass of Colts Hill

- 6.26 This option would involve an online / part offline A228 scheme, which would involve bypass similar to the one proposed in Option 1.
- 6.27 The benefits of this option would be an improvement to road safety in Colts Hill and less costly than the offline bypass – approximately £15–20m, plus land costs. It would also use part of the alignment previously evaluated by KCC. A northern section could be delivered early on bypassing part of the A228 with a safety issue. The current A228 through Colts Hill could also be closed to through traffic and become a pedestrian/cycle/public transport route. Construction would be offline with minimal impact to the existing A228 when compared to the disruption through the online improvements set out in Option 2. There would be improvements to air quality and the avoidance of local flood zones and ancient woodland.

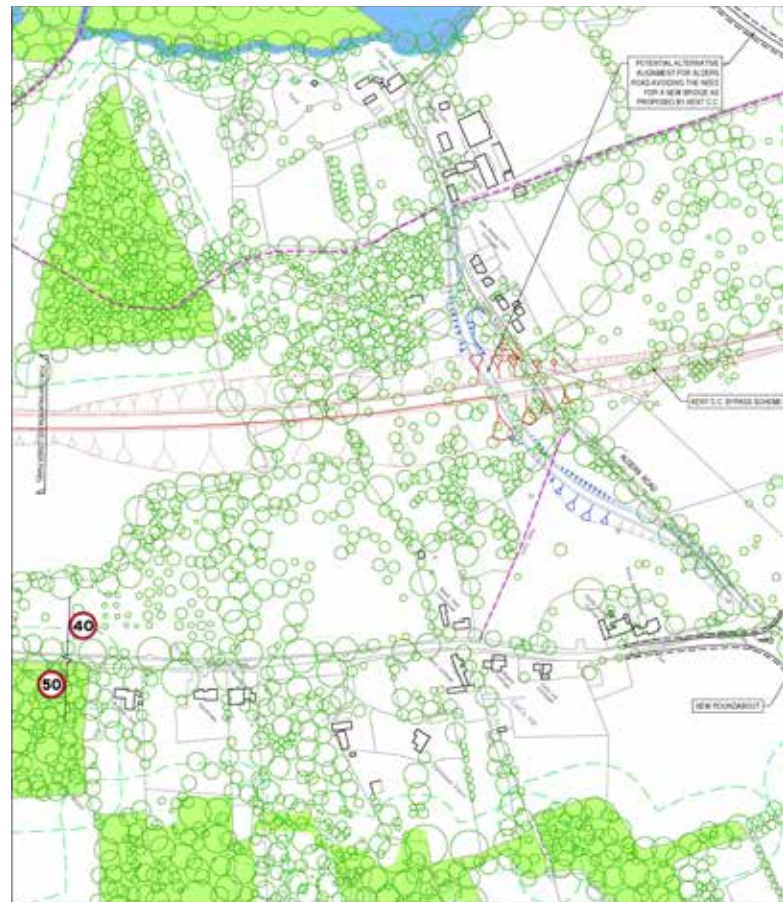




Figure 22: Option 3 Colts Hill improvements - local bypass of Colts Hill

- 6.28 Should additional funding and agreement be obtained to provide the full improvements as envisaged by KCC, this option would not prejudice its delivery.
- 6.29 However, this option would be more costly than the online improvements. It would be comparatively more disruptive to greenfield areas and loss of trees and would be viewed from the AONB. Also, substantial third-party land would be needed to deliver the scheme.
- 6.30 A sub-alternative to this scheme has also been explored (shown above), with a shorter bypass section of the houses at Colts Hill. This scheme would not use the KCC alignment but would require less new construction, potentially lowering the cost. Whilst the impact and cost of this scheme would be limited, it may prejudice the delivery of the full KCC scheme at a future date due to its alignment.





Figure 23: Option 3a Colts Hill improvements – local bypass of Colts Hill alternative alignment

Scheme Comparison

- 6.31 Table 8 below shows a comparison of the benefits and disbenefits of the Colts Hill improvements options 1, 2 and 3.

Table 8: Full comparison of Colts Hill alternatives across key areas

TOPIC	OPTION 1 – KCC BYPASS	OPTION 2 – ONLINE	OPTION 3 – LOCAL BYPASS OF COLTS HILL
Viability	£46m	£15–20m	£20m
Deliverability	Requires significant additional land and works in AONB	Requires third party land from properties on Colts Hill	Requires some third party land near Colts Hill
Phasing/timing	Significant timescale in securing funding and construction	Work within Colts Hill would be wasted if KCC option then came online	Can deliver two-stage solution working with KCC option
Capacity	Highest capacity achieved	Least capacity achieved	Some capacity improvements
Policy compliance	Delivers capacity and safety improvements	Delivers capacity and safety improvements, although full highway standard not possible due to positioning of properties.	Delivers capacity and safety improvements. Does not prejudice future delivery of full KCC scheme.
Social impact	Opportunity to create enhanced cycle and pedestrian route through Colts Hill	Change to character of Colts Hill. Disruption during construction.	Opportunity to create enhanced cycle and pedestrian route through Colts Hill
Environmental impact	Cuts through AONB. Impacts ancient woodland. Significant use of greenfield land. Air quality impact in countryside. Ecological mitigation required.	Air quality impact in Colts Hill from additional traffic. Removal of trees on road. Avoid local flood zones. Not visible from AONB. Less ecological impact.	Use of greenfield land. Removal of some trees. Visible from AONB. Avoids local flood zones. Potential to remove Alders Road bridge and cutting. Ecological mitigation required.

	Favourable		not favourable		Neither favourable nor not-favourable
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Conclusion and Recommendations

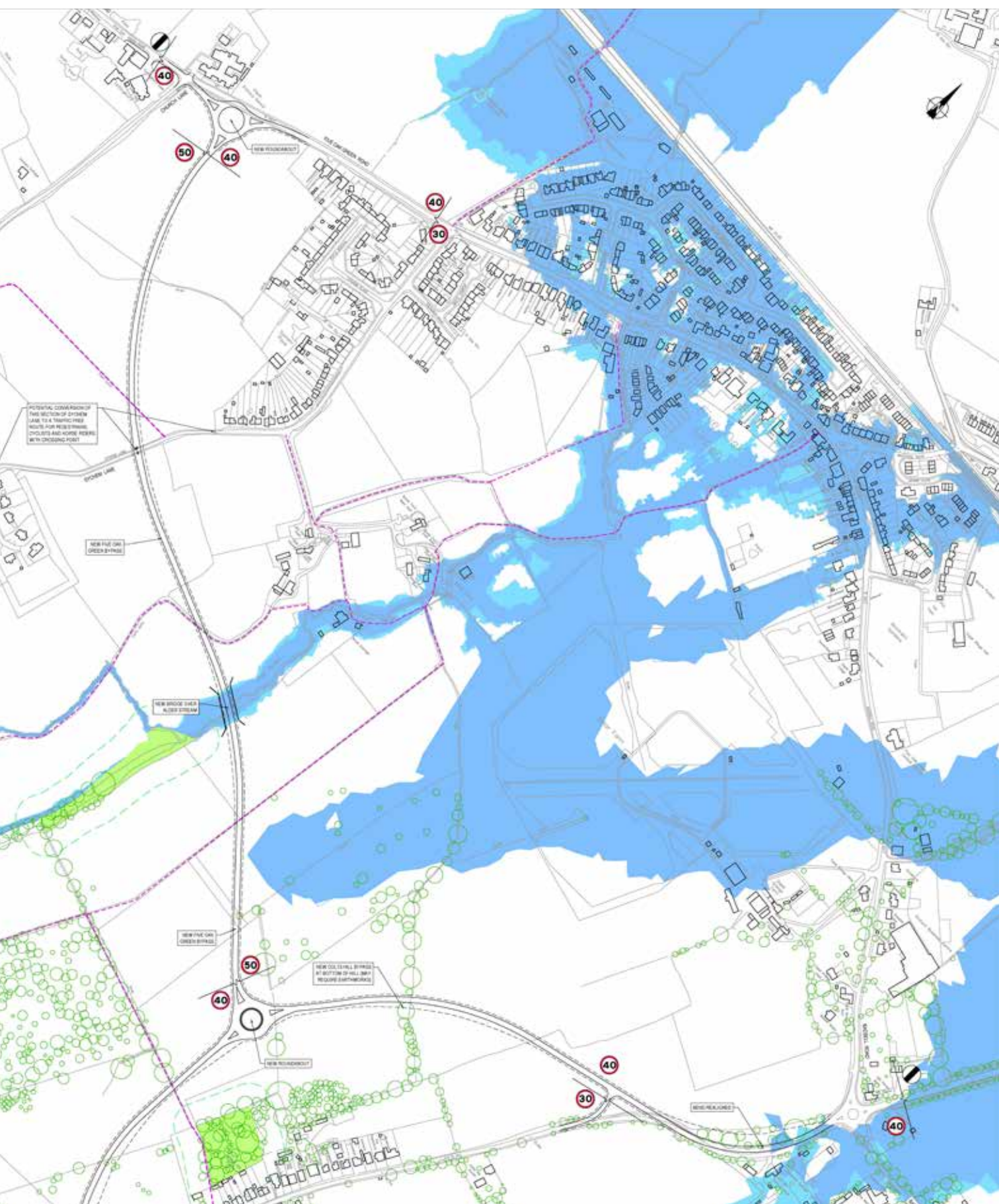
6.32 The comparison between the three options reveals that none is fully favourable, and each option would result in impacts. However, on balance, Option 3 is preferable in relation to options 1 and 2. As a result of this analysis, Option 3 is recommended to be taken forward (Local Bypass of Colts Hill) for growth Scenarios 1 and 2,

as it offers the improvements in safety and capacity required to mitigate the impact of development, but with less environmental impact than Option 1. It significantly reduces the cost burden on development, and does not prejudice the delivery of the full KCC scheme in the future, should funding be secured.

Five Oak Green Bypass

- 6.33 Five Oak Green is constrained in the centre of the village for traffic flows and the growth at Tudeley Village (and to a more limited extent that at Paddock Wood and east Capel) would increase traffic along the B2160 through the village. On-street parking narrows the road running lanes to <4.5m, and footways are <0.5m in places causing safety issues, particularly for school children. The Transport Assessment (SWECO) underpinning the Regulation 18 Draft Local Plan pinpoints the need for a bypass of the village to alleviate issues caused by strategic development at Tudeley Village.
- 6.34 Therefore, it is recommended that should Tudeley Village come forward, a link road is needed to reduce highway trips through Five Oak Green. The link road would need to join the A228 near Colts Hill.
- 6.35 The preferred option for this link comprises:
- 6.75m wide road width, plus margins of 225mm which accord with the Kent Design Guide for a Local Distributor type road;
 - Verges up to 3m wide which would facilitate cycle/ pedestrian facilities;
 - Road curve radii which meets DMRB standards;
 - Roundabout junction with B2017 east of Church Lane.
- 6.36 The scheme option assumes an alignment that avoids flood land, ancient woodland and seeks to minimise the number of landholdings through which it passes. Given the short distance of the link (approximately 1.1 to 1.2 kilometres) there are limited options available for this route, hence that shown is the most logical and economical that minimises length of road and impact.





6.37 An option utilising Alders Road has been explored, however the alignment, width and forward visibility of the existing route is not considered appropriate for upgrade and would likely result in significant impacts on the AONB, hedgerows and trees.

Flood Alleviation at Paddock Wood and east Capel

- 6.38 The Draft Local Plan strategic policy recognises that the proposals for Paddock Wood and east Capel will require mitigation measures for flooding. This could be for new or improved infrastructure as part of planned development, contributions, or on/off site provision. These options were examined through the Strategic Flood Risk Assessment (SFRA) to determine their feasibility.
- 6.39 The starting point for the Structure Plan was to understand whether on-site mitigation could be achieved whilst meeting all other policy requirements such as the quantity of homes and open space. This approach was considered preferable to off-site mitigation because it can be delivered within land controlled by the site promoters, and therefore carries a greater degree of certainty that mitigation can be achieved as part of the development.
- 6.40 The Structure Plan shows that potential surface water flooding can be managed through the integration of green infrastructure and open space as well as the provision of land for SuDS.

6.41 This approach satisfies the policy requirements of betterment for Paddock Wood's existing urban areas, whilst conforming to the Sequential Approach to locating development advocated by the Environment Agency.

6.42 The recommendation therefore is to incorporate a requirement for on-site mitigation into the Structure Plan. As a consequence of this finding, the exploration of potential solutions for off-site mitigation was not considered necessary. . This recommendation has been carried forward through the Scenarios presented later in this chapter.

Sports and Recreation

6.43 The Baseline Review found that there is a detailed list of sports and recreation requirements for Paddock Wood. For example, an indoor and outdoor sports hub, swimming pool, as well as new sports pitches and improvements to existing facilities. The cost of providing all these items was a contributing factor in the baseline assessment that Paddock Wood and east Capel, and Paddock Wood/Tudeley Village scenarios were unviable. Therefore, it was necessary to consider alternative, more affordable options for the delivery of sports facilities despite the loss of potential social benefits to providing both new and improvements to existing infrastructure.

Phasing Assumptions

- 6.44 One option therefore considered how to combine some of the requirements. For example, separate requirements for sports pitches could be combined to form a new sports and leisure hub which would provide a swimming pool, indoor as well as outdoor sports pitches. This option is therefore more economical in viability terms and provides for economies of scale. The provision of this hub also provides a means of meeting the Draft Local Plan's open space requirements for sports pitches within planned development.
- 6.45 The spatial implications of these options have been explored in the Structure Plan chapter.
- 6.46 As a result of the preferred Structure Plan option, and the above notes, the combined sports field and sports facility approach has been recommended and carried through the Infrastructure Framework, and deliverability approaches have been noted in the following chapter.
- 6.47 Structure Plan Option 4 did include a dispersed arrangement for sports pitches, with no indoor and outdoor hub, in order to seek to maximise development capacity. However, this approach did not meet the full policy requirement, and was not recommended.
- 6.48 Across all scenarios and options tested, a series of common assumptions have been made about phasing based on successful experience of delivery of strategic scale sites.
- 6.49 Strategic sites require a patient approach to delivery and capital returns. Early phases require significant investment in non-cash-generating items such as access roads, quality open space, drainage and local centres. Early investment and delivery of infrastructure can make a significant difference to quality of place, realised values and sales rates, if essential facilities and attractive open spaces are ready for first occupation.
- 6.50 Table 9 below lists the assumptions used for phasing of different infrastructure items.
- 6.51 These phasing assumptions have been used to inform the detailed infrastructure lists presented in the Scenarios later in this chapter, and applied to the strategic phases of development in the viability testing.

Table 9: Infrastructure phasing assumptions

CATEGORY	PHASING	COMMENTARY
Strategic Highways	Preparation early, but construction during site buildouts	<p>Preparation for some strategic highway interventions, such as at Colts Hill, is likely to take some years, and this should commence early. Construction is likely to take place as the site is being built out, and phasing has been timed on earliest feasible delivery to mitigate development impacts.</p> <p>Site access for vehicles must be provided prior to first occupation.</p>
Sustainable Travel	Early	Providing high quality active travel and public transport connections from first occupation can 'bake in' sustainable travel habits and support modal shift
Education	Closely aligned with housing buildout	<p>Initial occupations are likely to take up existing spare places in local schools</p> <p>Primary schools are a key local placemaking feature and early delivery within neighbourhoods is preferred. Detailed negotiations with KCC at the outline application stage will help to identify triggers for school opening</p>
Flood Alleviation	Early	Flood alleviation, particularly around Paddock Wood and east Capel, functions strategically and early, comprehensive works to ensure this have been assumed.
Utilities	Early	<p>Network upgrades are typically lump-sum capital investments with little savings (and some complications) if multiple smaller upgrades are made. As such upgrades required to support strategic growth should be phased early.</p> <p>Utility connections within developments are considered as part of build costs and are thus phased on a per-unit basis.</p>
Community Facilities	When critical mass can support	Successful and sustainable community facilities can only be delivered when sufficient critical mass is established to support them. The framework biases early on their delivery to enable early community benefit, whilst limiting the amount of operating subsidy that may be required to sustain them before sufficient local catchment is present.
Open Space	Closely aligned with development delivery	Structural green infrastructure will be needed early to accommodate strategic drainage and habitat creation, providing an early framework for development. Local open space and play provision contributes in a number of ways to new developments and are considered essential for first occupation, but provision can be spread over development build-out.
Others	Varied	Items such as primary care contributions, travel plan contributions and others are phased on a per-unit basis.

Costing and Information Sources

- 6.52 A range of information sources have been used to assemble cost estimates to underpin the Infrastructure Framework and viability analysis.
- 6.53 Unlike the Structure Plan at Paddock Wood and east Capel, this study has not undertaken masterplanning for Tudeley Village. Information about on-site infrastructure at Tudeley Village has been assembled through engagement with the Hadlow Estate's planning consultant, Turnberry. As a result of the discussions, key aspects of the emerging master plan, such as railway crossings, access points and key facilities, were collated into a schedule. Costs for these infrastructure items were then estimated using the same sources as those for Paddock Wood. This approach is intended to ensure consistency between the treatment of the sites.
- 6.54 The following cost sources have been used:
- Highways and sustainable transport infrastructure: linear per-metre engineering estimates derived from historic construction costs; discrete items such as bridges and roundabouts from historic construction costs of similar projects.
 - Causeways: recent construction costs per-metre from similar causeway at Cranbrook, Devon (new settlement masterplanned by DLA).
 - Utilities: Stantec estimates on infrastructure upgrades based on similar historic projects.
 - School provision: sourced from Department for Education cost benchmarking report (2019), with costs taken at 80th percentile. These costs have been cross-checked for consistency with KCC's estimated per-place provision costs.
 - Open space: capital costs taken from TWBC's Open Space Assessment, part of the Draft Local Plan evidence base.
 - Primary care contributions: taken from previous strategic growth projects and experience of S106 agreements elsewhere in south-east England.
 - Leisure, recreation and community facilities: taken from the estimates included in the Draft Local Plan IDP.
 - Sports hub/sports facilities: taken from benchmark costs produced by Sport England, and cross-checked with BCIS costs.
- 6.55 The viability and deliverability of the draft allocations have been assessed on the basis that the allocations will be able to support all of the required infrastructure financially, without external subsidy. This section outlines assumed funding mechanisms to secure the required infrastructure funds from the proceeds of that development.

Funding Sources

- 6.56 Existing permitted developments are not assumed to contribute – contributions they have made towards improvements are not considered as part of this Infrastructure Framework. However the Draft Local Plan includes a clause in the policy for other development in Paddock Wood that developer contributions may be sought from residential schemes towards the infrastructure set out in this study. As a result any future applications may contribute.
- 6.57 Should 60 additional dwellings be permitted on the Countryside site (east of Paddock Wood), it is assumed they will contribute on an equal basis to other allocated sites. .
- 6.58 The following categories of infrastructure have been identified:
- A: On-site infrastructure, wholly within a single promoters' site and intended to serve only that promoters' development. Primarily this infrastructure would be delivered directly by developers, as a Development Cost.
 - B: On-site infrastructure, wholly within a single promoters' site but intended to serve development across multiple sites. This infrastructure would be delivered by the relevant developer on-site as a Development Cost, but with costs offset by S106 contributions by other developers.
 - C: On-site infrastructure, across two or more promoters' sites. Funding would be delivered through Section 106 contributions or via equalisation arrangements.
 - D: Off-site infrastructure, intended to serve a single allocation (either Paddock Wood and east Capel or Tudeley Village only). Funding would be delivered through Section 106 contributions (or in the case of highways improvements, Section 278 funding).
 - E: Shared off-site infrastructure, required by both Tudeley Village and Paddock Wood and east Capel, where cost-sharing between the two sites would be appropriate. Funding likely delivered through S106 contributions, but with special delivery mechanisms required.
 - F: General contributions to external funds that do not require physical infrastructure, e.g. Travel Plan contributions. Funded through S106.
- 6.59 As noted above, many items identified as shared infrastructure, where responsibility for delivery crosses a number of landowner/promoter parcels, or where off-site delivery is necessary, require special delivery and funding mechanisms. These mechanisms and funding strategies are covered in more detail in the following chapter.



Draft strategic site in East Capel (looking north)



Draft strategic site east of Paddock Wood (looking south)

6.60 The following assumptions on funding sources for different categories of infrastructure have been made:

- Highways Improvements: S106/S278 contributions for off-site improvements, and Development Costs for on-site access and primary/secondary streets
- Sustainable Transport: S106/S278 contributions for off-site improvements, and Development Costs for on-site access and primary/secondary streets
- Community Facilities: S106 contributions for off-site facilities, or S106 contributions towards delivery on another developers' site
- Utilities: Development costs for on-site connections, S106 contributions to local utility providers for larger infrastructure costs
- Flood alleviation measures: 'roof tax' approach, delivered via S106 agreement, as detailed in following chapter
- Primary Education: funded by developers on-site as a Development Cost, or through S106 contributions to KCC
- Secondary Education: funded through S106 contributions, development cost at Tudeley Village
- Open Space: funded as a development cost by the relevant developer

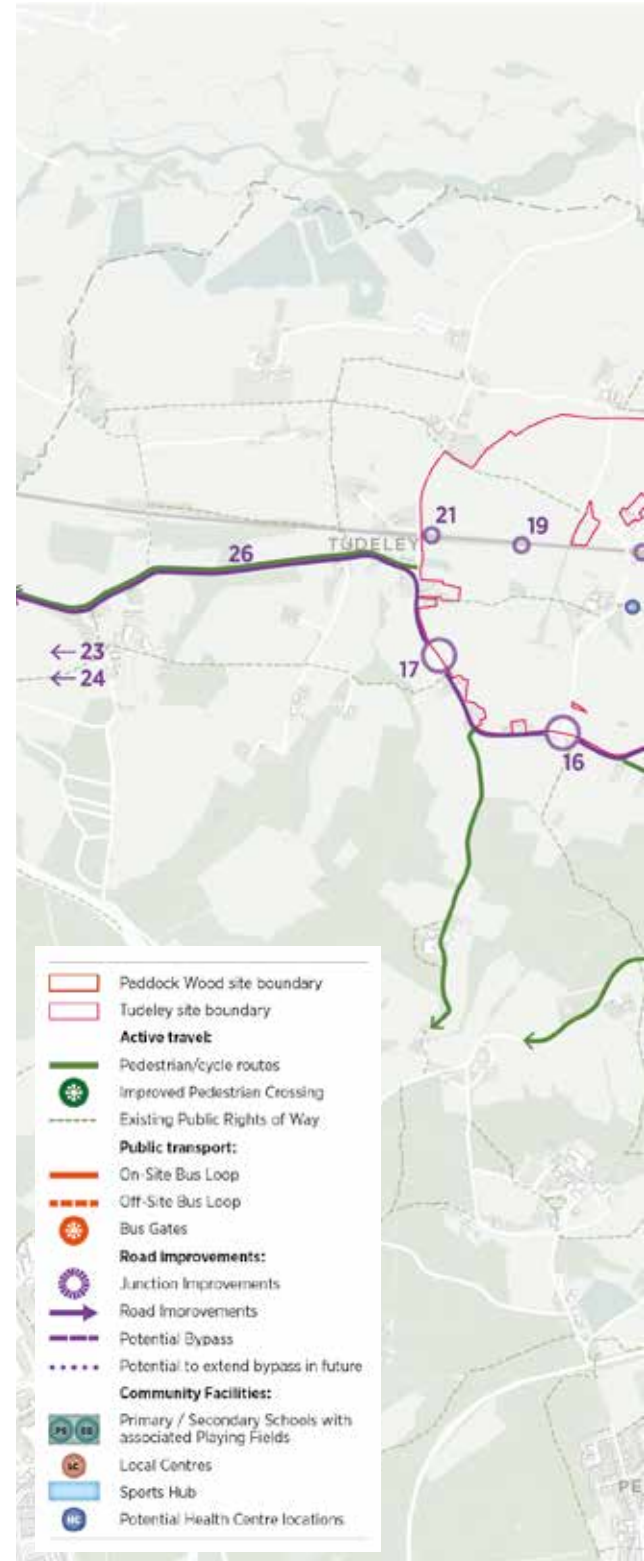
6.61 Viability testing of the proposed infrastructure schedules has demonstrated that they are viable and deliverable using the appropriate methodology of Local Plan testing. Although this report does not explore it in detail, the Housing Infrastructure Fund (HIF) from MHCLG is available to support essential infrastructure that is seen as necessary to deliver new housing growth, and may be relevant in the event that funding for infrastructure is needed in advance of the construction of new homes that will ultimately contribute towards its cost.

Scenario 1 – Both Sites Come Forward

- 6.62 Figure 25 above outlines key infrastructure required for the successful delivery of both sites, assuming development in accordance with Option 1 of the Structure Plan.
- 6.63 Table 10 below lists the infrastructure, preferred phasing and category. It is split into three sections: Shared Infrastructure required and funded by both sites, infrastructure to be funded by development at Paddock Wood and east Capel, and infrastructure to be funded by development at Tudeley Village. A full tabular breakdown of costs, delivery partners and other information is contained in the Appendices. Key items picked up in commentary are highlighted in bold.
- 6.64 A key to phasing and infrastructure categories used in the table is shown below.

Table 10: Key to phasing and infrastructure categorisation

PHASING		CATEGORY	
Short	Phase 0 – before 2024	A	On-site infrastructure, wholly within a single promoters' site and intended to serve only that promoters' development
Medium	Phase 1/2 – 2025–2032	B	On-site infrastructure, wholly within a single promoters' site but intended to serve development across multiple sites
Long	Phase 3/ Longer – beyond 2032	C	On-site infrastructure, across two or more promoters' sites
		D	Off-site infrastructure, intended to serve a single allocation (either Paddock Wood and east Capel or Tudeley Village only)
		E	Shared off-site infrastructure, required by both Tudeley Village and Paddock Wood and east Capel, where cost-sharing between the two sites would be appropriate
		F	General contributions to external funds that do not require physical infrastructure



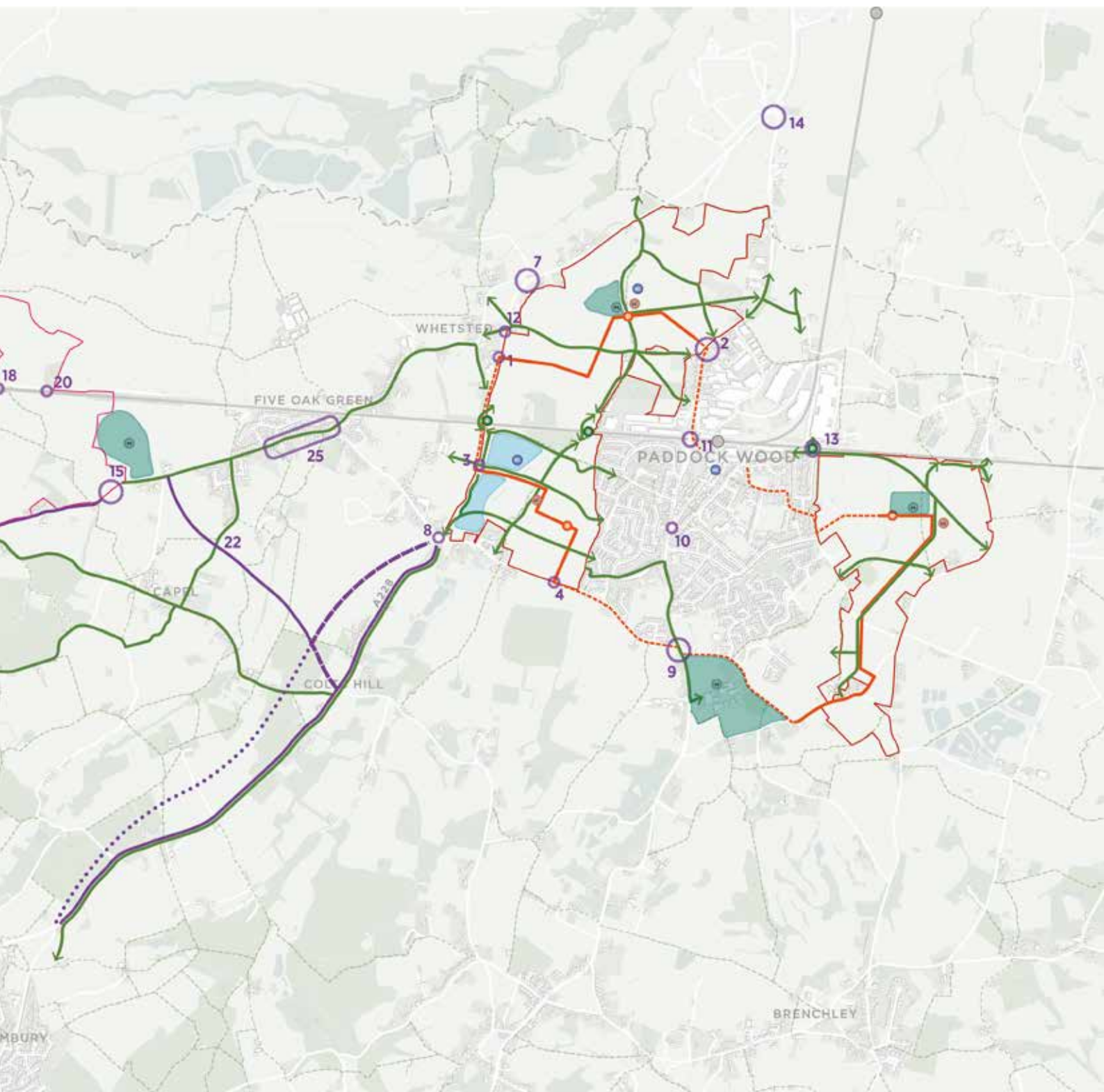


Figure 25: Infrastructure plan for Scenario 1 – both sites

Table 11: Infrastructure requirements for Scenario 1 – both sites

S H A R E D			
Plan Ref	Item	Category	When?
	Colts Hill improvements	E	Medium
7	A228 Maidstone Road / Whetsted Road priority junction;	E	Short
8	A228 Maidstone Road / B2017 Badsell Road (Colts Hill) roundabout	E	Short
	Five Oak Green to A26 on road cycle route – on B2017	E	Short
	Pedestrian/Cycle Route to Tunbridge Wells – A228 Route	E	Medium
	Pedestrian/Cycle Route to Tudeley Village	E	Short
	6FE Secondary School – Tudeley Village site, costs shared	E	Medium/Long
	New health centre facility	E	Medium

P A D D O C K W O O D			
Plan Ref	Item	Category	When?
	Highways		
	Access road with loop within site – East	A	Short
	Internal road off main access road – East	A	Short/Medium
	Access Road off Church Road to site – East	A	Short/Medium
	Bus / cycle / ped 'causeway' to Countryside site – East	C	Short
	Internal link road between the A228 and B2160 Maidstone Road – North West	A	Short/Medium
	Internal road between link road and northern & southern parcels – North West	A	Short/Medium
1	Roundabout Access with A228 – North West	A	Short
2	Priority access with Maidstone Road – North West	A	Short
	Road/bus/cycle/ped 'causeway' over floodplain – North West	A	Short
	Internal road off Badsell Road – South West	A	Short/Medium
3	Access with A228 – South West	A	Medium
4	Access with Badsell Road – South West	A	Medium
	Internal road off A228 – South West	A	Medium
	2x Road/bus/cycle/ped 'causeways' over floodplain – South West	A	Medium
14	A228 Whetsted Road/A228 Bransbridges Road/B2160 Maidstone Road roundabout	D	Short
9	B2017 Badsell Road / B2160 Maidstone Road signalised junction;	D	Short
10	B2160 Maidstone Road / Commercial Road priority junction	D	Short
11	Shuttle signal Bridge Paddock Wood High Street	D	Medium
12	Crossing on the A228	D	Short
	Sustainable Transport		
	Proposed cycleway/footway routes through site (x3) – East	A	Short/Medium
	Bus stops on site along internal road – East	A	Short/Medium
	Hop Pickers Line integration to the Pedestrian and cycle infrastructure – East	A	Short

	Proposed cycleway/footway route – North West	A	Short
	Bus stops on site along link road – North West	A	Short
5	Pedestrian/cycle bridge across Railway – West	C	Medium
6	Pedestrian/cycle bridge across Railway – immediately east of A228 – West	C	Medium
	Bus stops on site along access road – South West	A	Medium
	Pedestrian/cycle route through site – South West	A	Medium
	New bus route subsidy support (5 years)	F	Short/Medium/Long
	Travel Plan contribution	F	Short/Medium/Long
	Pedestrian and cycle improvements – Stantec assumed upgrades and PJA presentation routes	D	Short
	Cycle storage improvements at Paddock Wood Station	D	Short
	New bus route subsidy support (5 years)	F	Short/Medium/Long
13	Improvement to NE existing pedestrian/cycle bridge over Railway	D	Medium
	Education		
	4FE primary provision, with a potential for one additional FE	B	Short/Medium/Long
	2FE Secondary school annex	D	Medium
	Health		
	Primary Care contribution	F	Short/Medium/Long
	Water		
	Sewage Works Upgrade	D	Short/Medium
	Utilities		
	Electricity – New Connections	A	Short/Medium
	Electricity – Diversion of Existing Utilities	A	Short
	Gas – New Connections	A	Short/Medium
	Water – New Connections	A	Short/Medium
	Foul Water – New Connections	A	Short/Medium
	Foul Water – Diversion of Existing Utilities	A	Short
	Green / Grey / Blue		
	Improved conveyancing (enhanced or new channels in SFRA)	B	Short
	Flood defences – embankment/wall	B	Short
	Raised platform (11ha by 1m)	A	Short/Medium
	Groundworks	A	Short/Medium
	SuDS	A	Short/Medium
	Outdoor Sports Hub	B	Medium
	Allotment provision	A	Short/Medium
	Amenity space	A	Short/Medium
	Children's Play area capital costs	A	Short/Medium
	Cultural		
	Indoor Sports Hub with pool	B	Medium
	Other		
	Climate Change Adaptation per Unit	F	Short/Medium/Long

TUDELEY VILLAGE			
Plan Ref	Item	Category	When?
	Highways		
15	Site Access to East of Tudeley	A	Short
17	Site Access to West of Tudeley	A	Short
16	Site Access south of Tudeley	A	Short
	Primary Roads (x5)	A	Short/Medium
	Secondary Roads (x8)	A	Short/Medium
18	Tunnel	A	Medium/Long
	Link Road through site	A	Medium/Long
19	Railway bridge all Modes – ped and cyclist vehicle	A	Medium
21	Works to reduce existing rail bridge	A	Medium
22	Link by passing Five Oak Green+R'bout with A228	D	Medium
23	A26/B2017 Roundabout	D	Short
24	A21/A26 Roundabout	D	Short
25	Traffic Management in Five Oak Green	D	Medium
26	Widening of B2017 – Site SE corner to A26	D	Medium
	Sustainable Transport		
20	Railway bridge – ped and cycle	A	Long
	Proposed cycleway/footway routes through site (x6)	A	Short/Medium
	3m shared cycleway/footway along internal link road	A	Short/Medium
	Pedestrian and cycle crossings	A	Short/Medium
	New bus route subsidy support	F	Medium/Long
	Travel Plan contribution	F	Medium/Long
	Cycle route west to the A26	D	Medium/Long
	Cycle route south to A21 via Half Moon Lane	D	Short
	Cycle storage improvements at Tonbridge Station	D	Short
	New bus route subsidy support	F	Short/Medium/Long
	Education		
	4FE primary provision	A	Medium
	Health		
	Primary Care contribution	F	Short/Medium/Long
	Water		
	Sewage Works Upgrade	D	Medium
	Utilities		
	Electricity – New Connections	A	Short/Medium/Long
	Electricity – Diversion of Existing Utilities	A	Short
	Gas – New Connections	A	Short/Medium/Long
	Water – New Connections	A	Short/Medium/Long
	Foul Water – New Connections	A	Short/Medium/Long
	Foul Water – Diversion of Existing Utilities	A	Short
	Green / Grey / Blue		
	Groundworks	A	Short/Medium

Allotment provision	A	Medium
Amenity space	A	Medium
Children's Play area capital	A	Medium
Sports pitches contribution (per Open Space SPD)	A	Medium
Tennis Courts	A	Medium
Cricket pitch	A	Medium/Long
Cultural		
Indoor hall / community hall with sports provision – bowls, badminton, trampolining	A	Medium
Other		
Climate Change Adaptation per Unit	F	Medium/Long

Commentary

6.65 This scenario proposes a comprehensive list of required infrastructure. Key items to highlight are:

- Shared infrastructure: highways, sustainable travel, education and health
- Key highways improvements required by each site
- Major works such as railway crossings and flood infrastructure
- Significant works on railway crossings at Tudeley Village
- Sports & formal open space provision at Paddock Wood and east Capel

6.66 Both sites have a need for improved junctions along the A228, particularly the B2160/A228 junction. Both sites will contribute to increased traffic flows and safety issues on Colts Hill, and both sites will need to be interconnected with excellent place-to-place sustainable travel links.

6.67 Both sites will share a secondary school at Tudeley Village, although additional capacity will be created at Paddock Wood solely for the growth there. Finally, both sites will generate a need for additional GP facilities, with a combined health centre considered most appropriate in cost and operational terms.

6.68 Away from joint infrastructure, each site generates different infrastructure needs.

At Paddock Wood and east Capel, apart from infrastructure identified as part of the Structure Plan, key items include a new pedestrian crossing of the railway in east Capel, and an additional crossing adjacent to the A228 for pedestrians.

6.69 Land within east Capel is also subject to some flood alleviation measures to provide betterment for Paddock Wood. These include an embankment to the south of the railway line adjacent to the existing urban area, and improved conveyancing between channels as envisaged within the SFRA. Some residential development areas will require raised platforms by up to 1m.

6.70 Sports and formal open space provision at Paddock Wood and east Capel is provided in line with Structure Plan Option 1, as a comprehensive sports hub in the south west.

6.71 At Tudeley Village, significant infrastructure will be needed on-site to cross the railway line, in line with the masterplanning ambitions of the Hadlow Estate. These include railway bridges and a new tunnel to replace the existing road under the railway in the centre of the site.

6.72 Tudeley Village's development also requires the development of a bypass of Five Oak Green, due to its highly constrained nature and potential increases in traffic levels.

Scenario 2 – Paddock Wood & east Capel only

- 6.73 Figure 26 above outlines key infrastructure required for the successful delivery of development in accordance with Option 1 of the Structure Plan, and assuming Tudeley Village does not come forward.
- 6.74 Table 12 below lists the infrastructure, preferred phasing and category. A full tabular breakdown of costs, delivery partners and other information is contained in the Appendices. Key adjustments between this scenario and scenario 1 are picked up in commentary and are highlighted in bold.
- 6.75 A key to phasing and infrastructure categories used in the table is shown below.

Table 12: Key to phasing and infrastructure categorisation

PHASING		CATEGORY	
Short	Phase 0 – before 2024	A	On-site infrastructure, wholly within a single promoters' site and intended to serve only that promoters' development
Medium	Phase 1/2 – 2025-2032	B	On-site infrastructure, wholly within a single promoters' site but intended to serve development across multiple sites
Long	Phase 3/ Longer – beyond 2032	C	On-site infrastructure, across two or more promoters' sites
		D	Off-site infrastructure, intended to serve the whole Paddock Wood and east Capel allocation
		F	General contributions to external funds that do not require physical infrastructure



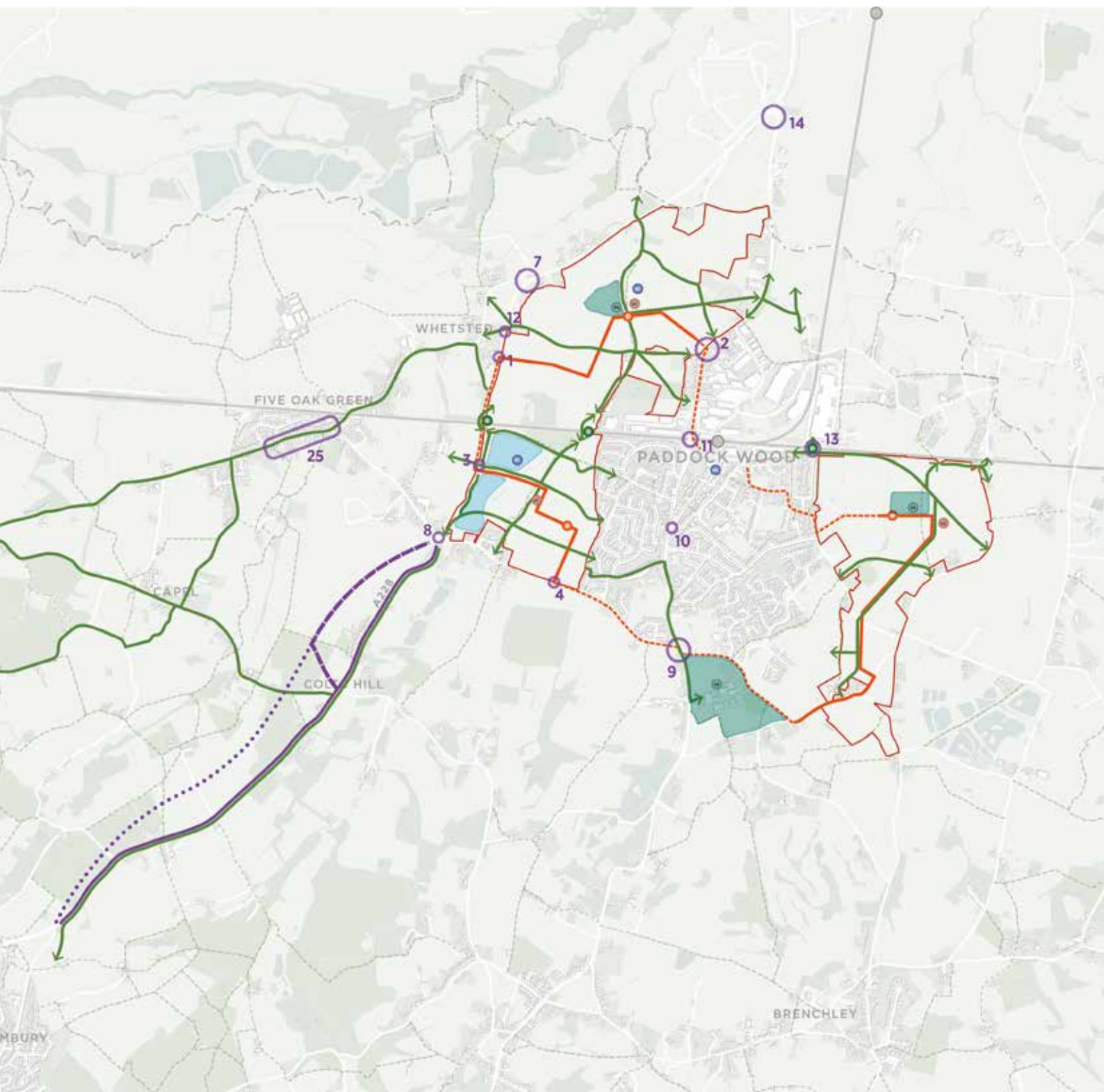


Figure 26: Infrastructure plan for Scenario 2 – Paddock Wood and east Capel only

Table 13: Infrastructure requirements for Scenario 2 – Paddock Wood and east Capel only

Plan Ref	Item	Category	When?
	Highways		
	Access road with loop within site – East	A	Short
	Internal road off main access road – East	A	Short/Medium
	Access Road off Church Road to site – East	A	Short/Medium
	Bus / cycle / ped 'causeway' to Countryside site – East	C	Short
	Internal link road between the A228 and B2160 Maidstone Road – North West	A	Short/Medium
	Internal road between link road and northern & southern parcels – North West	A	Short/Medium
1	Roundabout Access with A228 – North West	A	Short
2	Priority access with Maidstone Road – North West	A	Short
	Road/bus/cycle/ped 'causeway' over floodplain – North West	A	Short
	Internal road off Badsell Road – South West	A	Short/Medium
3	Access with A228 – South West	A	Medium
4	Access with Badsell Road – South West	A	Medium
	Internal road off A228 – South West	A	Medium
	2x Road/bus/cycle/ped 'causeways' over floodplain – South West	A	Medium
	Colts Hill improvements	D	Medium
7	A228 Maidstone Road / Whetsted Road priority junction;	D	Short
8	A228 Maidstone Road / B2017 Badsell Road (Colts Hill) roundabout	D	Short
14	A228 Whetsted Road/A228 Bransbridges Road/B2160 Maidstone Road roundabout	D	Short
9	B2017 Badsell Road / B2160 Maidstone Road signalised junction	D	Short
10	B2160 Maidstone Road / Commercial Road priority junction	D	Short
11	Shuttle signal Bridge Paddock Wood High Street	D	Medium
12	Crossing on the A228	D	Short
	Sustainable Transport		
	Proposed cycleway/footway routes through site (x3) – East	A	Short/Medium
	Bus stops on site along internal road – East	A	Short/Medium
	Hop Pickers Line integration to the Pedestrian and cycle infrastructure – East	A	Short
	Proposed cycleway/footway route – North West	A	Short
	Bus stops on site along link road – North West	A	Short
5	Pedestrian/cycle Bridge across Railway – West	C	Medium
6	Pedestrian/cycle Bridge across Railway - immediately east of A228 – West	C	Medium
	Bus stops on site along access road – South West	A	Medium
	Pedestrian/cycle route through site – South West	A	Medium
	New bus route subsidy support (5 years)	F	Short/Medium/Long
	Travel Plan contribution	F	Short/Medium/Long
	Five Oak Green to A26 on road cycle route – on B2017	D	Short
	Pedestrian/Cycle Route to Tunbridge Wells – A228 Route	D	Medium
	Pedestrian and cycle improvements – Stantec assumed upgrades and PJA presentation routes	D	Short
	Cycle storage improvements at Paddock Wood Station	D	Short
	New bus route subsidy support (5 years)	F	Short/Medium/Long
13	Improvement to NE existing pedestrian/cycle bridge over Railway	D	Medium

	Education		
	4FE primary provision, with potential for one additional FE	B	Short/Medium/Long
	2FE Secondary school annex	D	Medium
	3FE Contribution towards secondary school provision elsewhere	F	Medium
	Health		
	Primary Care contribution	F	Short/Medium/Long
	New health centre facility	D	Medium
	Water		
	Sewage Works Upgrade	D	Short/Medium
	Utilities		
	Electricity – New Connections	A	Short/Medium
	Electricity – Diversion of Existing Utilities	A	Short
	Gas – New Connections	A	Short/Medium
	Water – New Connections	A	Short/Medium
	Foul Water – New Connections	A	Short/Medium
	Foul Water – Diversion of Existing Utilities	A	Short
	Green / Grey / Blue		
	Improved conveyancing (enhanced or new channels in SFRA)	B	Short
	Flood defences – embankment/wall	B	Short
	Raised platform (11ha by 1m)	A	Short/Medium
	Groundworks	A	Short/Medium
	SuDS	A	Short/Medium
	Outdoor Sports Hub	B	Medium
	Allotment provision	A	Short/Medium
	Amenity space	A	Short/Medium
	Children's Play area capital costs	A	Short/Medium
	Cultural		
	Indoor Sports Hub with pool	B	Medium
	Other		
	Climate Change Adaptation per Unit	F	Short/Medium/Long

Commentary

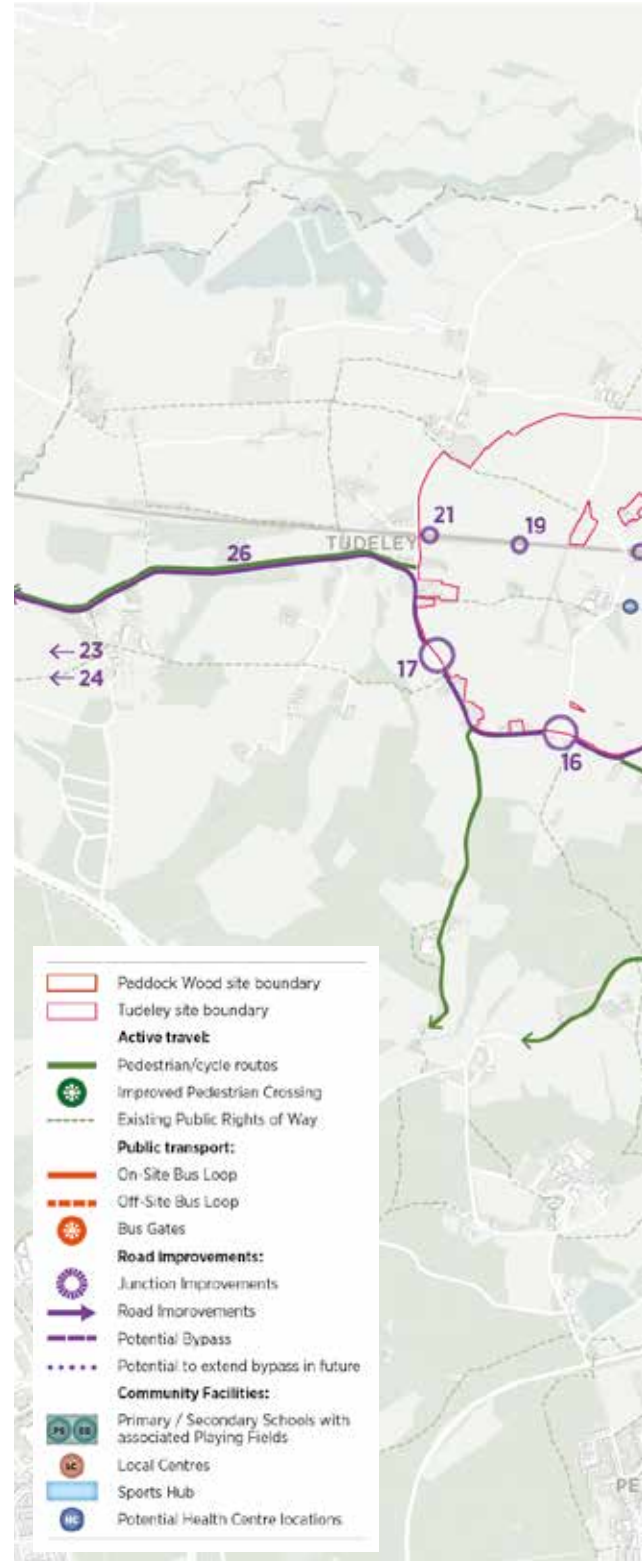
- 6.76 When compared with Scenario 1, the primary changes are:
- Removal of infrastructure items only required for Tudeley Village
 - Removal of the Five Oak Green Bypass
 - Retention of improvements at Colts Hill
 - Secondary school provision changes
 - Health centre facility reduced in scale
- 6.77 The Five Oak Green Bypass has been removed, as this is only considered necessary due to the increase in traffic between Tudeley Village and Paddock Wood from the Tudeley Village development, and the sharing of a secondary school at this site.
- 6.78 Safety improvements at Colts Hill have been retained, as the A228 is a key route for Paddock Wood traffic to access the wider strategic road network.
- 6.79 The secondary school at Tudeley Village will not come forward, so the costs towards that secondary school provision has been allocated as a wider contribution for KCC to distribute across neighbouring schools for targeted expansion. The expansion of Mascalls has been retained.
- 6.80 The proposed Health Centre facility has been reduced in scale due to the lower overall quantum of development in the area.

Scenario 3 – Tudeley Village only

- 6.81 Figure 27 above outlines key infrastructure required for the successful delivery of development at Tudeley Village, assuming no development comes forward at Paddock Wood and east Capel.
- 6.82 Table 14 below lists the infrastructure, preferred phasing and category. A full tabular breakdown of costs, delivery partners and other information is contained in the Appendices. Key differences between this scenario and scenario 1 are picked up in commentary and are highlighted in bold.
- 6.83 A key to phasing and infrastructure categories used in the table is shown below.

Table 14: Key to phasing and infrastructure categorisation

PHASING		CATEGORY	
Short	Phase 0 – before 2024	A	On-site infrastructure
Medium	Phase 1/2 – 2025-2032	D	Off-site infrastructure, intended to serve the Tudeley Village allocation
Long	Phase 3/ Longer – beyond 2032	F	General contributions to external funds that do not require physical infrastructure



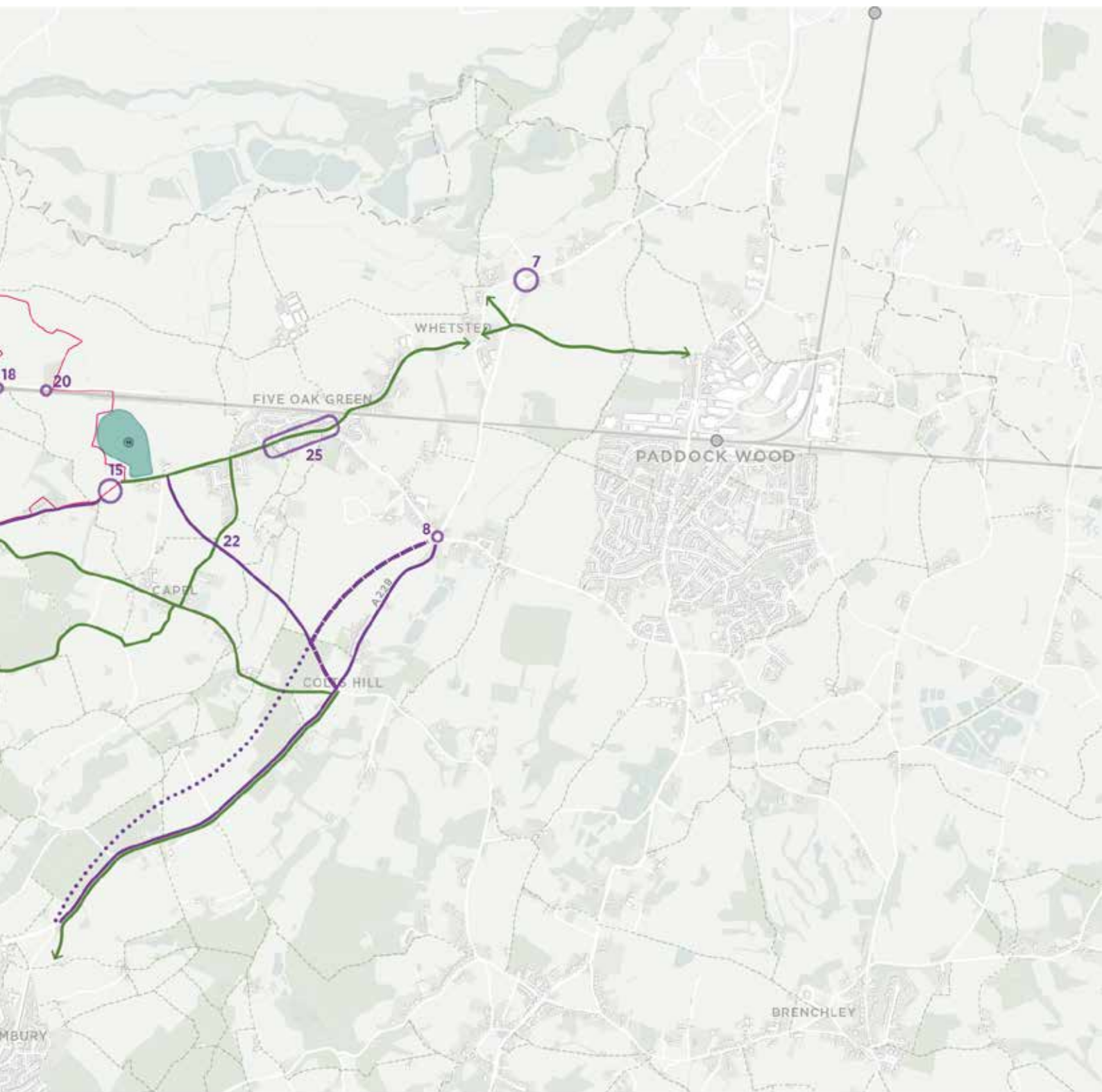


Figure 27: Infrastructure plan for Scenario 3 - Tudeley Village only

Table 15: Infrastructure requirements for Scenario 3 – Tudeley Village only

Plan Ref	Item	Category	When?
	Highways		
15	Site Access to East of Tudeley	A	Short
17	Site Access to West of Tudeley	A	Short
16	Site Access south of Tudeley	A	Short
	Primary Roads (x5)	A	Short/Medium
	Secondary Roads (x8)	A	Short/Medium
18	Tunnel	A	Medium/Long
	Link Road through site	A	Medium/Long
19	Railway bridge all Modes – ped and cyclist vehicle	A	Medium
21	Works to reduce existing rail bridge	A	Medium
7	A228 Maidstone Road / Whetsted Road priority junction;	D	Short
8	A228 Maidstone Road / B2017 Badsell Road (Colts Hill) roundabout	D	Short
22	Link by passing Five Oak Green+R'bout with A228	D	Medium
23	A26/B2017 Roundabout	D	Short
24	A21/A26 Roundabout	D	Short
25	Traffic Management in Five Oak Green	D	Medium
26	Widening of B2017 – Site SE corner to A26	D	Medium
	Sustainable Transport		
20	Railway bridge – ped and cycle	A	Long
	Proposed cycleway/footway routes through site (x6)	A	Short/Medium
	3m shared cycleway/footway along internal link road	A	Short/Medium
	Pedestrian and cycle crossings	A	Short/Medium
	New bus route subsidy support	F	Medium/Long
	Travel Plan contribution	F	Medium/Long
	Five Oak Green to A26 on road cycle route – on B2017	D	Short
	Pedestrian/Cycle Route to Tunbridge Wells – A228 Route	D	Medium
	Pedestrian/Cycle Route to Tudeley	D	Short
	Cycle route west to the A26	D	Medium/Long
	Cycle route south to A21 via Half Moon Lane	D	Short
	Cycle storage improvements at Tonbridge Station	D	Short
	New bus route subsidy support	F	Short/Medium/Long
	Education		
	4FE primary provision	A	Medium
	3FE Contribution towards secondary school provision	A/F	Medium
	Health		
	Primary Care contribution	F	Short/Medium/Long
	New health centre facility	A	Medium
	Water		
	Sewage Works Upgrade	D	Medium

	Digital		
	Utilities		
	Electricity – New Connections	A	Short/Medium/Long
	Electricity – Diversion of Existing Utilities	A	Short
	Gas – New Connections	A	Short/Medium/Long
	Water – New Connections	A	Short/Medium/Long
	Foul Water – New Connections	A	Short/Medium/Long
	Foul Water – Diversion of Existing Utilities	A	Short
	Green / Grey / Blue		
	Groundworks	A	Short/Medium
	Allotment provision	A	Medium
	Amenity space	A	Medium
	Children's Play area capital	A	Medium
	Sports pitches contribution (per Open Space SPD)	A	Medium
	Tennis Courts	A	Medium
	Cricket pitch	A	Medium/Long
	Cultural		
	Indoor hall / community hall with sports provision – bowls, badminton, trampolining	A	Medium
	Other		
	Climate Change Adaptation per Unit	F	Medium/Long

Commentary

- 6.84 When compared with Scenario 1, the primary changes are:
- Removal of infrastructure items only required for Paddock Wood and east Capel
 - Retention of the Five Oak Green Bypass
 - Removal of Colts Hill improvements
 - Secondary school provision changes
 - Health centre facility reduced in scale

- 6.85 The Five Oak Green Bypass has been retained, as this is considered necessary due to the increase in traffic between Tudeley Village and Paddock Wood from the Tudeley Village development, and the secondary school at this site.

- 6.86 Safety improvements at Colts Hill have been removed, as a conservative view of traffic levels on the A228 from the Tudeley Village development has been assumed. However, this is an assumption based on available evidence at the time of this study, and should be reconsidered in detail as part of any transport assessment prepared to support a planning application for Tudeley Village.

- 6.87 The secondary school at Tudeley Village is likely to come forward, but the development will only generate 3FE of school place requirement. Its construction will have to be supported by additional funds from elsewhere in the local area, from other allocated development contributions.

- 6.88 The proposed Health Centre facility has been reduced in scale due to the lower overall quantum of development in the area.

Summary of Viability Testing

- 6.89 The Local Plan must be supported by evidence which demonstrates the viability of development and infrastructure provision; unless schemes are deemed to be affordable, capable of delivering policy compliant measures including affordable housing, and generating an acceptable level of developer profit (without which there is no incentive to build), it would not be appropriate to pursue their allocation.
- 6.90 A number of input assumptions have been made in the preparation of the viability analysis. These are chosen for consistency with other Draft Local Plan viability assumptions.
- Delivery trajectory matching TWBC Draft Local Plan assumptions for Tudeley Village, with 2100 homes delivered during the plan period. This delivery trajectory accords with the expectations of the Hadlow Estate and is considered appropriate to test.
 - Delivery trajectory for Paddock Wood sites have been modified downwards slightly, with a maximum delivery rate of 300 units per year rather than 333, due to the reduced capacity demonstrated through masterplanning. As noted in the Structure Plan for Paddock Wood and east Capel, this delivery trajectory is not unreasonable considering the scale of the sites and number of housebuilders involved.
- 4 Strategic Phases aligning with the Draft Local Plan delivery trajectory
 - o phase 0 to 2024 (Paddock Wood and east Capel only)
 - o phase 1 to 2028
 - o phase 2 to 2032
 - o phase 3 to 2036
 - o any costs beyond that (for Tudeley Village) treated as an extra phase.
 - Housing mix and sizes as set out in the most recent Strategic Housing Market Assessment (SHMA)
 - Sales prices as set out in the market baseline review earlier in this report
 - BCIS Average Build Costs for building construction costs, and the infrastructure schedule prepared through this study for all other on-site and off-site costs
- 6.91 The high-level viability assessment for the two strategic sites was performed by Dixon Searle Partnership (DSP), using costs information from this study in the infrastructure framework. As well as the assumptions detailed above, the assessment used a common set of assumptions and the methodology applied for the rest of the Local Plan's viability assessment to ensure consistency of results.
- 6.92 Findings for the tested scenarios, modelling changes in sales value,

Table 17: Summary of viability testing results for Scenario 1 (both sites come forward) (Dixon Searle Partnership)

PADDOCK WOOD & EAST CAPEL – 3,450 DWELLINGS, 40% AFFORDABLE HOUSING			
AVERAGE MARKET VALUE (£/M ²)	BLV (£/HA)	DEVELOPER RETURN	SURPLUS/DEFICIT % OF GDV
£4,500	£250,000	17.5%	5.61%
		20%	3.62%
	£370,000	17.5%	-0.86%
		20%	-2.85%
£4,300	£250,000	17.5%	1.71%
		20%	-0.26%
	£370,000	17.5%	-5.32%
		20%	-7.28%

TUDELEY VILLAGE – 2,800 DWELLINGS, 40% AFFORDABLE HOUSING			
AVERAGE MARKET VALUE (£/M ²)	BLV (£/HA)	DEVELOPER RETURN	SURPLUS/DEFICIT % OF GDV
£4,500	£250,000	17.5%	3.19%
		20%	1.20%
	£370,000	17.5%	-2.86%
		20%	-4.85%
£4,300	£250,000	17.5%	-1.25%
		20%	-3.22%
	£370,000	17.5%	-7.98%
		20%	-9.94%

benchmark land value (BLV) and developer profit levels are shown in Table 17. Results are expressed for simplicity as a percentage of benchmark land value – positive values generate a surplus once all costs, BLV and developer profit are deducted.

6.93 The BLV is the level of land value considered appropriate as required to bring forward a site for development, with the reference point being existing use value and a landowner's premium considered additionally. In the results a base BLV level of £250,000/ha has been applied applied to the gross (whole) assumed site area, representing circa 10x existing use value. As the results table for each site shows, this has also been tested at a higher level.

6.94 As is usual when assessing the potential viability of a large strategic site, the results remain high-level indications only and are based on the current particular assumptions made in this assessment, including on infrastructure. The timescales over which the delivery of these sites is scheduled to take place allied to the number of variables means that the end result cannot possibly be known at this stage. The results of any viability process at this stage can only indicate a likelihood of delivery rather

than anything more specific. A small change in one assumption can have a relatively large impact on the outcome / result.

6.95 Overall, the results point to reasonable prospects of delivery based on the Council's emerging Local Plan policies, with no values growth (and cost inflation) or other / additional external funding or grant assumptions currently used. From the perspective of the viability assessment work it is considered that the criteria of the NPPF can be met with these scenarios included as part of the new Local Plan.

6.96 Due to the high-level nature of the assumptions and potential economic fluctuations over the lifetime of development, the headline BLV surplus/ deficit figures all indicate reasonable prospects of viable delivery. This includes figures that are negative, which due to their small magnitude do not give rise to concern over the overall conclusion of deliverability of the sites under a range of scenarios.

6.97 A full report on the findings, including sensitivity testing, of the viability assessments for the strategic sites will be published as an additional part of the Draft Local Plan Evidence Base.

Summary

6.98 The Baseline Review provided a detailed list of infrastructure items to input into the infrastructure testing and viability testing for three scenarios: Paddock Wood and east Capel, Tudeley Village, and Paddock Wood/Tudeley Village combined. Further testing and refinement of the infrastructure identified in the Baseline Review, as well as the consideration of alternative options, has led to a preferred Infrastructure Framework for each scenario. This sets out the delivery timing of the different elements of infrastructure and the costs of the infrastructure items as well as the delivery partners. The next chapter considers some of the implications for the shared funding of infrastructure, and highlight possible mechanisms to ensure that infrastructure providers operate on comprehensive and co-operative manner in the delivery of infrastructure.

07 DELIVERY

Overview

- 7.1 The Council is seeking the coordinated funding and delivery of infrastructure in a timely manner to ensure that the impact of growth is mitigated at a rate commensurate with that growth, and to support the expanded community through the provision of social infrastructure including primary and secondary schools.
- 7.2 Many of the identified infrastructure items arise as a consequence of the overall scale of the growth proposed in the draft policy, and consequently it is anticipated that the cost of providing these items will need to be shared across several or all of the allocated sites. This includes:
- Education
 - Highways
 - A sports hub with indoor and outdoor sport facilities
 - GP Surgery
- 7.3 In addition, there are some instances where a collaborative approach to delivering mitigation will be called for, requiring two or more developers to work together, potentially with third party and public sector organisations, to deliver on-site mitigation. This may include:
- Flood mitigation for land in east Capel, with Crest and Dandara achieving an overall flood mitigation strategy for land north and south of the railway.
 - Improved pedestrian and cycle rail crossing for land in east Capel, with Crest, Dandara and Network Rail working to deliver a new crossing linking the sites and the existing Public Right of Way which runs to the east of the Tudeley Brook.
 - The provision of a sports hub in east Capel, south of the railway and adjacent to the A228, with TWBC, Crest and Dandara working in cooperation to deliver a new facility.
- 7.4 Cooperation will also rely in some instances on the willingness and ability of a landowner safeguarding land which is required for a shared facility. This includes:
- Land at Tudeley Village being set aside for a secondary school to meet the wider growth in demand for places.
 - Land in east Capel controlled by Crest and Dandara being safeguarded for the provision of a sports hub which will also meet need arising from the Redrow-Persimmon land in the east of Paddock Wood.

- 7.5 In order to ensure the fair distribution of infrastructure costs, as well as the ability to fund and deliver the infrastructure at the point when it is required (even if some of the homes that will eventually contribute to the cost have not yet been consented or completed) it will be necessary to adopt reasonable and appropriate mechanisms which can be included in S106 Agreements. This may include approaches to equalisation and financial contributions arising from the monetisation of infrastructure items.
- 7.6 This chapter sets out key considerations and outlines some of the principles upon which this can be achieved. It cites a number of examples drawn from the recommendations of the Structure Plan and Infrastructure Framework.
- 7.7 Instances may arise where one developer is meeting the full cost of infrastructure shared by all, or one is disproportionately contributing in a different way such as by providing land. It may be appropriate to pursue an equalisation agreement, with the intention of evening-out any inequality in on-site provision between landowners through an equalised tariff mechanism. For illustrative purposes, if the cost of the sports hub (including the value of the land) is X, which represents say, £1,000 per unit, but Developer A is providing all the land, then Developer A's contribution per unit will be decreased by the value of the land.
- 7.8 Developer consensus is needed to enter into an equalisation agreement, and also the parties will need to reach agreement on the value and cost of the elements that are disproportionately provided. The structuring and negotiation of such agreements is possible but takes time.
- 7.9 If developer consensus is not achieved, or is likely to delay the delivery of homes, the local planning authority can utilise a combination of planning conditions and S106 obligations to secure a workable position. To achieve this, as much of the infrastructure requirement as possible would need to be monetised, so it is clear what financial contribution is being paid by each developer, and on what basis, towards the provision.

Key Considerations and Indicative Approaches

- 7.7 Instances may arise where one developer is meeting the full cost of infrastructure shared by all, or one is disproportionately contributing in a different way such as by providing land. It may be appropriate to pursue an equalisation agreement, with the intention of evening-out any inequality in on-site provision between landowners through an equalised tariff mechanism. For illustrative purposes, if the cost of the sports hub (including the value of the land) is X, which represents say, £1,000 per unit, but Developer A is providing all the land, then Developer A's contribution per unit will be decreased by the value of the land.
- 7.8 Developer consensus is needed to enter into an equalisation agreement, and also the parties will need to reach agreement on the value and cost of the elements that are disproportionately provided. The structuring and negotiation of such agreements is possible but takes time.
- 7.9 If developer consensus is not achieved, or is likely to delay the delivery of homes, the local planning authority can utilise a combination of planning conditions and S106 obligations to secure a workable position. To achieve this, as much of the infrastructure requirement as possible would need to be monetised, so it is clear what financial contribution is being paid by each developer, and on what basis, towards the provision.

- 7.10 In this instance, the S106 Agreement would need to identify that money contributed, say, towards the provision of a new sports hub, would be retained by the local planning authority for an agreed period until such a time as the trigger for the provision of the facility was reached through development coming forward on other sites. In the event that the delivery of the sports hub was not triggered because other development had not come forward within an agreed period, the retained money would be spent on other projects that would directly contribute to meeting the sports needs of the delivered units for which the contribution had been made. A fallback position in this example would be to spend the money on the improvement of existing facilities so that they could accommodate higher levels of use. This represents an additional element of risk for the public sector but would greatly assist in facilitating the delivery of infrastructure and improvements to support growth.
- 7.11 The monetisation of the infrastructure into a range of financial contributions from each developer means that the delivery of the infrastructure may be transferred to the public sector. This is particularly applicable for off-site infrastructure such as highways, where the money would meet the cost of delivery by the Highways Authority, but less so for any shared infrastructure to be provided on site.
- 7.12 In a case where infrastructure requirements are converted into financial contributions, indexation is essential to protect the final delivery body from fluctuations in cost. Similarly, plotting the trajectory of contributions against unit delivery and the timing of key pieces of infrastructure will be necessary. For example, if a key off site work is triggered by say 1000 units, but its cost is spread across more units, a cost shortfall will occur in the short term. Solution to the funding gap will need to be addressed.
- 7.13 It may be possible to even out the shortfalls by cross subsidising key delivery points with payments for infrastructure to be delivered later on, and then back filling as the later contributions come forward, but such an approach needs to be free from any challenge for repayment. There also needs to be an understanding of how any shortfall in provision from another pot would be met if contributions borrowed from it have been spent on something else, and further development to backfill the "borrowing" for any reason does not come forward.
- 7.14 A preferable solution may be to seek funding from central Government, for example through the housing infrastructure fund, to ensure new homes can be delivered alongside necessary infrastructure.

Illustrated Approach

7.15 The diagram below illustrates one way in which agreement could be structured to achieve the delivery of infrastructure for sites in Paddock Wood and east Capel.

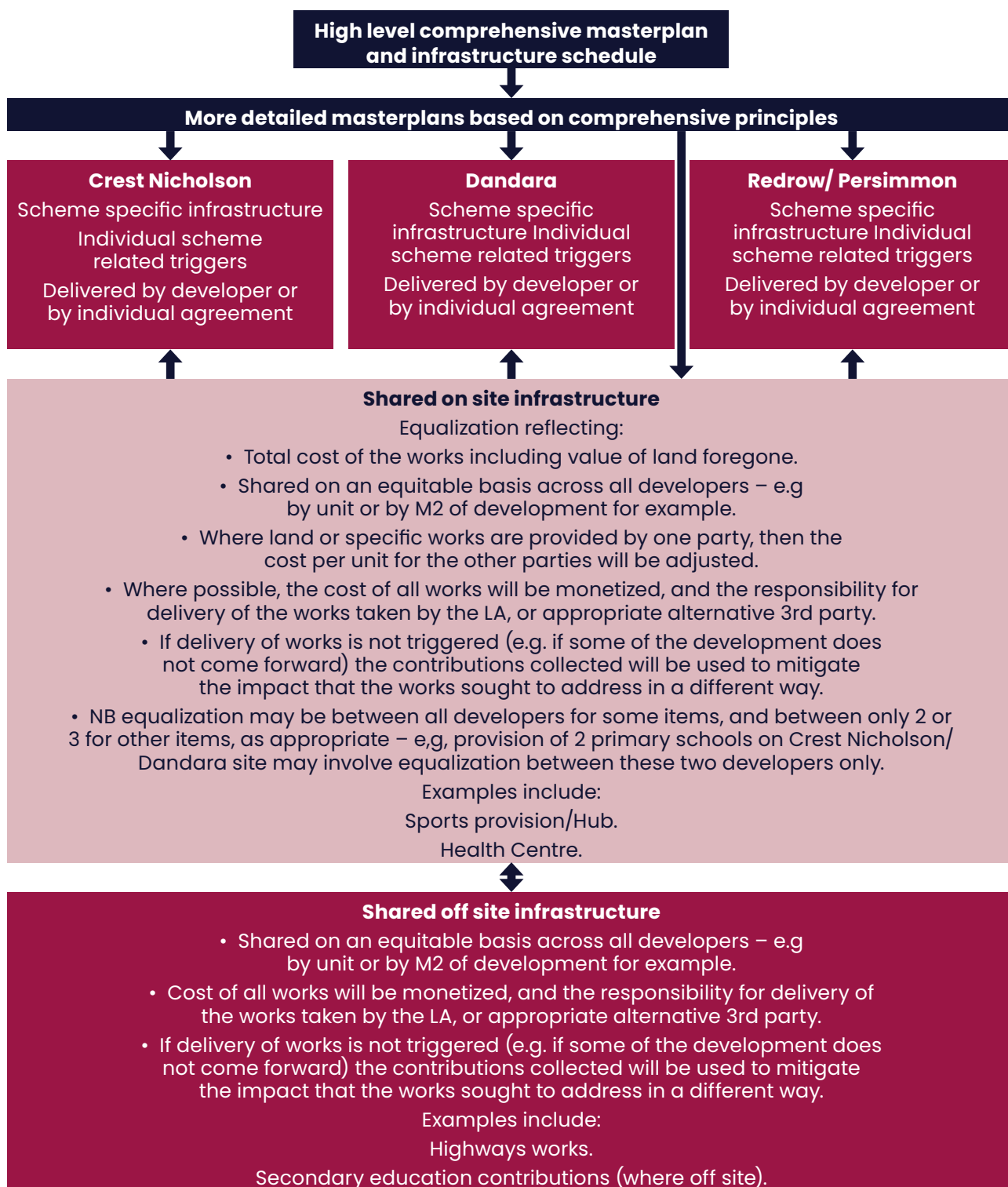


Figure 28: Illustrated approach to delivery approaches across strategic sites

Principles

- 7.16 The following principles should underpin the approach to meeting the requirement for shared infrastructure funding and delivery:
- Each development will be able to proceed independently at its own speed
 - Where possible, shared infrastructure will be monetized to enable equalisation/equitable contributions
 - A joint infrastructure delivery plan will be developed indicating trigger points for each element of shared infrastructure and responsibility for delivery
 - There will be an agreed timetable and mechanism for re-allocating contributions if some developments do not proceed
 - Developers should be invited to form their own collaboration agreement or alternative mechanism for the equal sharing of costs. Should this not occur, TWBC should facilitate this process. This may include the joint appointment of an impartial adviser tasked with identifying the most equitable costs, values and mechanisms for cost sharing.
 - Early agreement on the approach to be used would be advantageous, so that the granting of planning permission is not unduly delayed.





APPENDICES

