Cambourne North Spatial Framework Strategy Addendum Report: Transport

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July 2026

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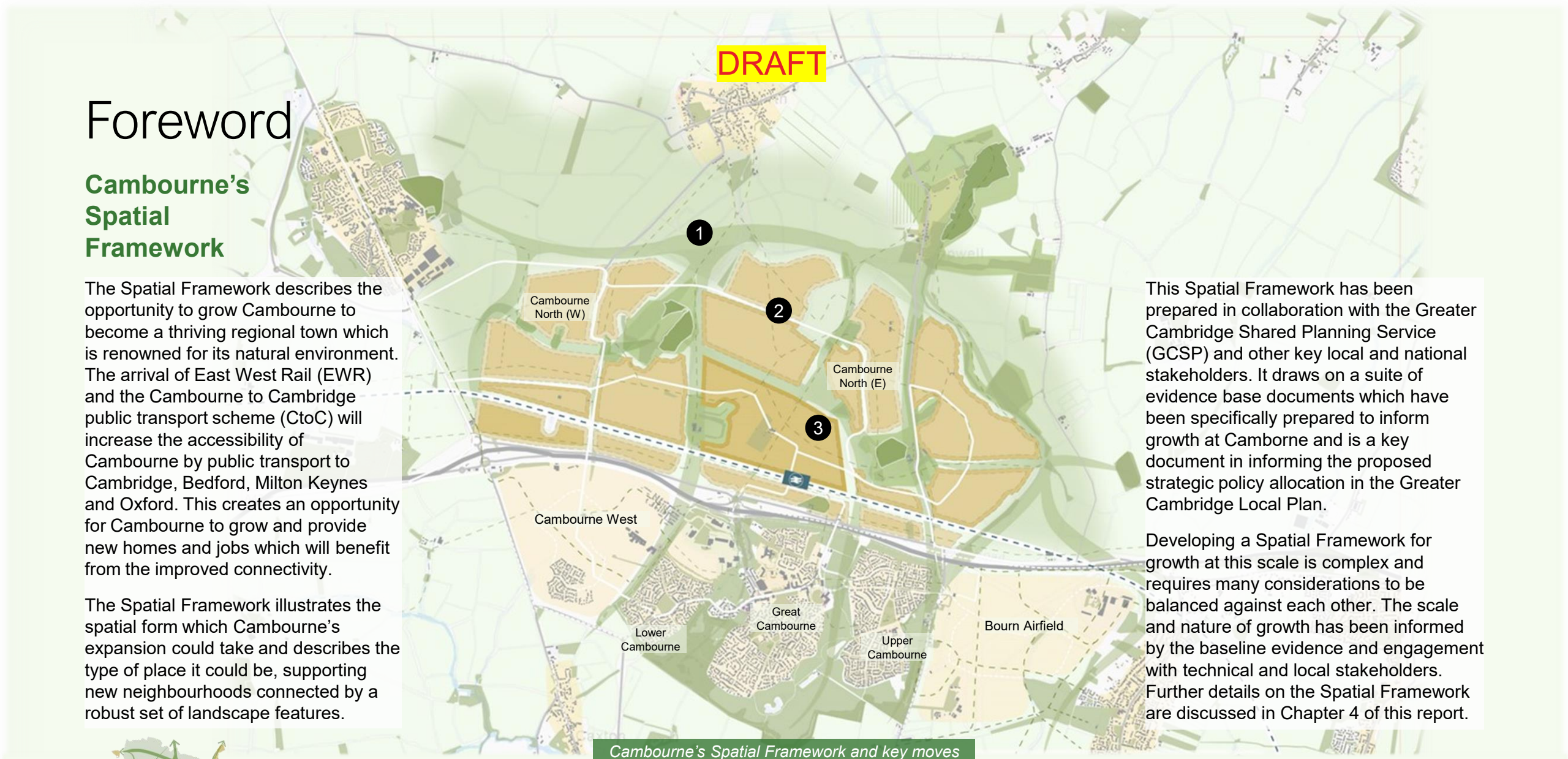
Foreword

Cambourne's Spatial Framework

The Spatial Framework describes the opportunity to grow Cambourne to become a thriving regional town which is renowned for its natural environment. The arrival of East West Rail (EWR) and the Cambourne to Cambridge public transport scheme (CtoC) will increase the accessibility of Cambourne by public transport to Cambridge, Bedford, Milton Keynes and Oxford. This creates an opportunity for Cambourne to grow and provide new homes and jobs which will benefit from the improved connectivity.

The Spatial Framework illustrates the spatial form which Cambourne's expansion could take and describes the type of place it could be, supporting new neighbourhoods connected by a robust set of landscape features.



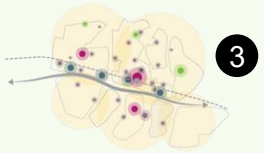
This Spatial Framework has been prepared in collaboration with the Greater Cambridge Shared Planning Service (GCSP) and other key local and national stakeholders. It draws on a suite of evidence base documents which have been specifically prepared to inform growth at Camborne and is a key document in informing the proposed strategic policy allocation in the Greater Cambridge Local Plan.

Developing a Spatial Framework for growth at this scale is complex and requires many considerations to be balanced against each other. The scale and nature of growth has been informed by the baseline evidence and engagement with technical and local stakeholders. Further details on the Spatial Framework are discussed in Chapter 4 of this report.

Cambourne's Spatial Framework and key moves

1 **Rooted in Nature** - A landscape-led approach will be central to the Spatial Framework.

2 **One Cambourne** - A strong integrated connectivity network with ample north-south and east-west links will deliver one cohesive future place, blurring the boundaries between 'existing' and the expansion of Cambourne



3 **Complete communities** - Walkable neighbourhoods realised by providing town centres with mix of uses, jobs and facilities at the doorstep of homes

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Executive Summary

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Cambourne Growth Strategy Programme

Executive Summary

Summary

This report forms part of the transport evidence base supporting the proposed strategic land allocation at Cambourne North (Policy S/CBN) in the emerging Greater Cambridge Local Plan. The draft Local Plan was consulted on under Regulation 18 between December 2025 and January 2026. This Stage 2 Transport Strategy Addendum builds on the evidence submitted at the Regulation 18 stage and is intended to demonstrate that the allocation can be supported by a credible, deliverable, and sustainable transport strategy for Regulation 19 consultation ahead of submission in December 2026.

The Regulation 18 evidence base comprised three complementary transport reports prepared by Arup (September 2025): the *Transport Vision and Principles report*, the *CtoC Busway Integration Study*, and the *Rail Integration Study*. Together, these established the overarching transport vision; set out design principles for active travel, public transport, and highways; assessed travel demand under baseline and vision-led scenarios for approximately 13,000 homes and 6,000 jobs; explored Cambourne to Cambridge High Quality Public Transport corridor (CtoC HQPT) extension route options; and examined how EWR integration could catalyse sustainable growth.

This Stage 2 report responds to Regulation 18 consultation feedback and to wider stakeholder engagement including East West Rail proposals published in the May 2026 consultation. The overall effect is a more compact development footprint with wider landscape buffers, rebalanced development clusters, higher densities near the station, and ecological dark corridors.

The Stage 1 work identified that external car trips would likely exceed the initial trip budget of 2,500 vehicles, recommending further strategic modelling, mitigation identification, and EWR integration as necessary next steps.

The CaPCAM verification exercise is ongoing and its conclusions will be critical to confirming the trip budget and demonstrating that the allocation can be delivered without unacceptable transport impacts.

Following completion of the Stage 2 strategy it is expected that further technical work will be supplemented as necessary to ensure a robust evidence base ahead of examination.

Note: This remains a draft document and several sections will be completed/ updated in response to ongoing CaPCAM transport modelling with some placeholders.

Contents

This document should be read alongside the Stage 1 Transport Principles and Vision Report and Stage 2 Cambourne spatial framework update, GBI framework updateStation Enhancement Study.

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0 Introduction

This section introduces the purpose of this report, an overview of the context and the methodology used.

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Cambourne Growth Strategy Programme

Introduction

This report sets out how the Spatial Framework for Cambourne North has developed in stage 2, building on reporting for Reg 18 consultation at the end of stage 1

The Cambourne Growth Strategy Programme has been established to consider how Cambourne should grow to inform a future allocation in the Greater Cambridge Local Plan (GCLP). The programme will provide one repository of technical evidence to inform the GCLP, EWR's economic development work and GCSP's future responses to the EWR Development Consent Order (DCO).

Planning for the future of Cambourne must take account of the needs of the existing town and surrounding villages/communities; a level of development which is sustainable and responds to the housing, employment and infrastructure needs of Greater Cambridge; and an approach to development which is deliverable and addresses complex site and wider constraints. This report builds on the spatial framework set out for Regulation 18 consultation and provides transport evidence for Regulation 19 consultation.

Stakeholder Engagement

As part of this work, several engagement workshops have been held to collaboratively discuss Cambourne's future with a range of stakeholders. The outcomes of these discussions is summarised in chapter 1 of this report and informs design development set out in chapter 2.

Development of the spatial framework

The Spatial Framework in stage 2 has been developed as set out below:

1. **Baseline information** building on the spatial framework reported for Reg 18 consultation and subsequent baseline information gathered and provided by stakeholders including responses to the DCO non-statutory consultation; and latest details of the EWR scheme.
2. **Stakeholder engagement** has been undertaken throughout this commission and feedback has informed design development as set out in chapter 2.
3. **East West Rail** proposals are still developing in lieu of any DCO application. Emerging proposals for the DCO form a baseline for incorporation within the spatial framework with further enhancements considered and recommended to achieve better outcomes for development a Cambourne North.
4. **Non-transport workstreams** including Ecology (including Dark corridors and Ancient woodland), Landscape visual impact assessment and Green Blue Infrastructure have been integrated alongside transport into design development process. Further details of non-transport workstreams are reported separately.
5. **Transport modelling** has been undertaken through Cambridgeshire County Council's Cambridge and Peterborough Combined Authority Model (CaPCAM). This has been supplemented by first principles assessment and previous CSRM2 outputs provided in Stage 1 to inform design development in lieu of detailed CaPCAM model runs. Further details are provided in chapter 6.

The next phase of work, beyond this Spatial Framework, will be to assess development viability and approaches to funding infrastructure associated with the expansion of Cambourne. This may result in a revision to the Spatial Framework, which will then be reflected in the final policy recommendation for an expansion at Cambourne as part of the emerging GCLP. Transport modelling and associated mitigation proposals will also continue to be refined ahead of Local Plan submission for examination.

This introduction continues with a summary of how this report fits into the Local Plan process and the vision and objectives for development at Cambourne North.

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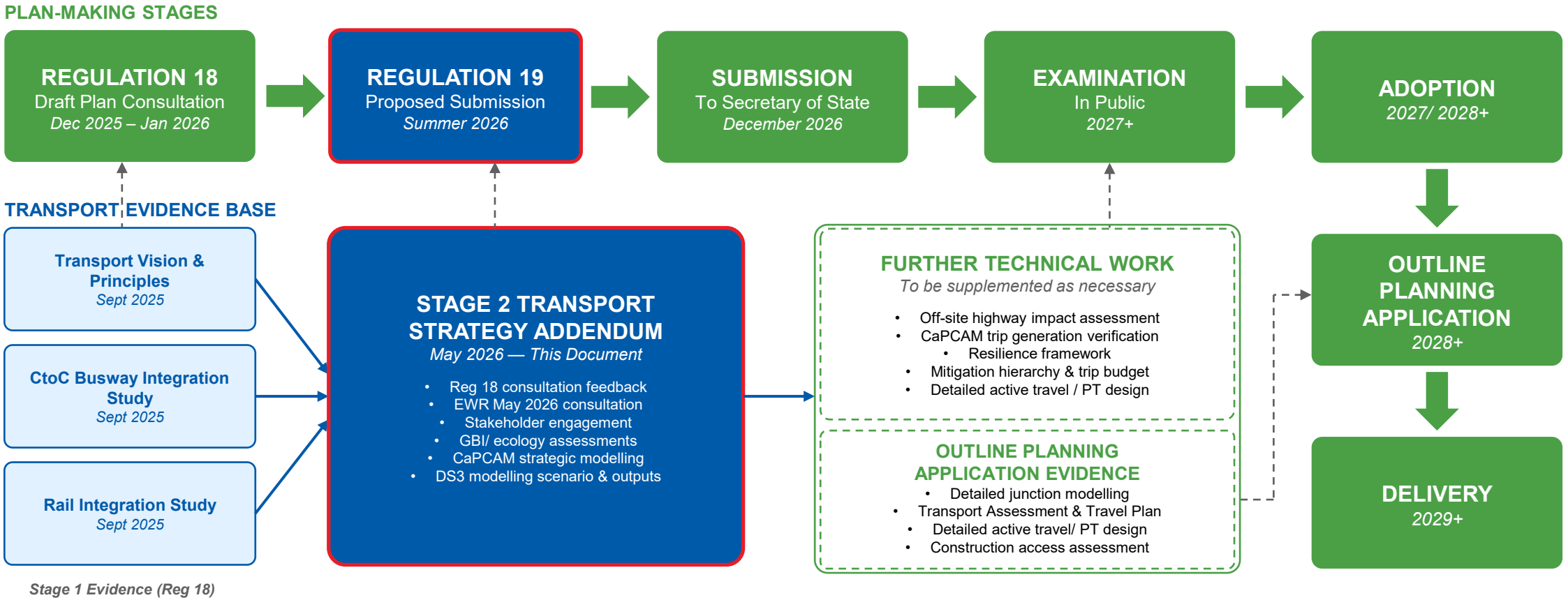
Cambourne Growth Strategy Programme

Greater Cambridge Local Plan: Process & Evidence Base

How this Stage 2 Transport Strategy Addendum sits within the plan-making process and builds on the Regulation 18 evidence base



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Vision

Cambourne 2060

In 2060, Cambourne will be a **well-connected**, **sustainable**, **thriving** and **prosperous** town that is **rooted in nature**. Cambourne will be famous across the region for the forest which wraps around the town – allowing nature to flourish and improving the wellbeing of local residents, employees and visitors. As one of the best-connected places in Cambridgeshire, Cambourne is **a fantastic place to live, work or base a business**. Everyone who calls Cambourne home will have easy access to a wealth of employment opportunities, services and facilities. Cambourne's excellent transport connections have also helped to make it **a destination in its own right**, with the Cambourne Forest, Events Hub, Leisure Hub and Cultural Hub all acting as major draws for visitors.

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Vision

Key elements of the vision explained

Well Connected Cambourne

Cambourne is one of the best connected places in Cambridgeshire, with the Cambourne to Cambridge High Quality Public Transport corridor and East West Rail making it a fantastic place to live, work or base a business. New walking and cycling routes and excellent local transport connections mean that every neighbourhood is less than fifteen minutes from local amenities, the Town Centre and Station Quarter, making it easy to get to work and access services.

Destination Cambourne

Cambourne has become a destination in its own right. People travel from across Cambridgeshire and the wider Oxford-Cambridge Region to visit an exhibition at the Cultural Hub, take in a show at the Cambourne Events Hub, go for a swim at the Leisure Hub or spend time in Cambourne's Forest.

Prosperous Cambourne

Start ups, spin outs and mid-tech businesses have flocked to the new Cambourne Station Quarter due to its favourable location (and cheaper rents than Cambridge!). New employment locations are less than 10 minutes from the Cambridge Biomedical Campus by train, as well as less than thirty minutes from several economic hubs to the West. A new economic cluster is growing around an anchor institution which has moved its headquarters here - attracted by the improved quality of life Cambourne offers its employees.

Thriving Cambourne

Cambourne's southern centre has been complemented by a new Town Centre north of the A428, with a new civic square playing host to an everchanging series of events including a regular market. New and improved connections across the A428 and EWR stitch the growing Cambourne together, with a landmark new 'landbridge' acting as an iconic connection between the main centres, Station Quarter, Leisure Hub and Events Hub.

A Place to Call Home

Each new neighbourhood of Cambourne has a unique character, with sensitively designed high quality sustainable homes that are entwined with nature. At the centre of each neighbourhood is a place to gather, with community uses, a corner shop, flexible employment spaces and a café or pub. Flexibility and resilience are built in from the start. People love living here because they can walk their kids to school, cycle to work and have culture, leisure and nature on their doorstep.

Green Cambourne

Cambourne is famous across the region for the forest which wraps around the town - creating homes for nature and improving the wellbeing of local residents, employees and visitors. The whole town has nature at its core, with neighbourhoods and centres connected by green spaces and places, strengthening local ecosystems and creating a healthy, resilient and sustainable intergenerational community.

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Objectives

What needs to be achieved to deliver on the vision for Cambourne

Rooted in Nature

1. Cambourne's expansion will create and enhance a comprehensive network of green links, spaces and places easily accessible to the public.
2. A new large-scale woodland will grow alongside the town, creating significant amenity, health and wellbeing value for both locals and visitors and creating a separation between Cambourne and surrounding villages.
3. Cambourne's expansion will protect, enhance and create homes and connections for nature, including the protection of 'nature-only' habitats and routes used by the rare species that call Cambourne home.
4. Buildings, spaces and neighbourhoods will be designed and built to ensure low levels of climate and resource impact and embed high levels of climate resilience.
5. The expansion of Cambourne will help mitigate the impacts and maximise the benefits of major infrastructure investment by integrating these sensibly into the wider landscape, and by integrating nature-based solutions into the implementation of infrastructure proposals.

One Cambourne

1. Cambourne will be centred around a landmark 'living station' at the heart of the town, which is a movement hub that also supports inclusive growth and acts as a focal point for healthy community life.
2. The town centre will be full of activity throughout the day, due to the mix of inclusive civic, cultural, community, commercial, retail, transport and residential uses. Local residents, and those in the surrounding villages and the wider area will be able to rely on Cambourne for their service needs.
3. Walking, cycling, wheeling and public transport will be the most convenient, safe and attractive choices for getting around, with high quality transport links between all neighbourhoods, centres, amenities and surrounding villages.
4. Cambourne will attract a range of a new employment opportunities that are complementary to those in the wider Region. It will secure an employment anchor tenant to become the cornerstone of a new economic cluster.
5. Cambourne will be a destination in the Region, with people choosing to travel by sustainable modes to access the high-quality jobs, services and amenities.

Complete Communities

1. Cambourne will be home to regionally significant cultural amenities, leisure/recreation/events facilities and green space. Together these will support the quality of life of people living in, working in or visiting Cambourne.
2. Neighbourhood centres in Cambourne will provide a range of services for daily life and public spaces for intergenerational communities to gather.
3. Homes in Cambourne will be designed to foster health and sustainability, accommodating people at all stages of life while offering opportunities for self-build and co-housing.
4. Buildings, public spaces, neighbourhoods, centres and services will all be designed to be flexible, allowing them to evolve to meet the changing needs of people, place and planet.
5. Stewardship of Cambourne's new assets will be community-led and managed, expanding Cambourne's distinctive community spirit and collaborative culture.

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1 Stage 2 engagement

This chapter covers the engagement feedback received during Stage 2.

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Cambourne Growth Strategy Programme

Stage 2 engagement

Overview

The Stage 2 transport strategy has been developed in response to feedback from Regulation 18 consultation and subsequent engagement as part of Stage 2.

This section provides a summary of feedback received:

- **Regulation 18 feedback**

- **Stage 2 engagement on the Stage 1 spatial framework** including:
    - Stakeholder workshop
    - Landowner Workshop
    - Transport officer group including East West Rail, National Highways, local highway authority

- **Stage 2 engagement on emerging Stage 2 spatial framework** including:
    - Stakeholder workshop
    - Landowner Workshop
    - Transport officer group including East West Rail, National Highways, local highway authority

Engagement will continue to inform the transport evidence through Regulation 19 and to submission for examination.

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Cambourne Growth Strategy Programme

Regulation 18 feedback

Summary of key transport themes

The Regulation 18 consultation provided a formal mechanism for stakeholders to comment on the Stage 1 spatial framework and transport evidence base with a summary of transport related responses below:

Transport impacts and congestion	• Concern regarding cumulative impacts alongside other growth (e.g. Northstowe and Bourn Airfield), particularly on the A14 corridor and surrounding rural roads • Perception that modelling assumptions and trip budgets may underestimate real-world behaviour
Public transport realism	• Doubts over whether proposed bus and rail provision would sufficiently reduce car dependency • Requests for clarity on service frequency, coverage and early delivery
Connectivity and movement patterns	• Need to address north–south connectivity, not just east–west strategic routes • Desire for improved connections between Cambourne and surrounding villages
Phasing and infrastructure delivery	• Strong emphasis on delivering infrastructure early to support development • Requests for clearer links between development triggers and transport provision
Station access, parking and wider impacts	• Concerns regarding station parking overspill and potential impacts on nearby villages • Need to ensure station design supports mode shift rather than encouraging car-based access

These themes broadly align with feedback obtained through subsequent stakeholder workshops, which highlighted similar concerns around rural connectivity, realism of transport options, and connections with surrounding communities.

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Stage 2 engagement on the Stage 1 spatial framework

Cambourne Growth Strategy Programme

Reducing impact on congestion across local villages

Need to prioritise **north-south connectivity**, not just the new east-west systems (EWR, C2C) – both for access *to* and *from* Cambourne, and to mitigate impacts on villages north and south.

Already dangerously **narrow roads** likely to take brunt of congestion.

Bypasses suggested as legitimate solution – existing Papworth bypass seen as a good example.

Suggestions of Cambourne gaining a connection to **trunk roads,** e.g. opening A14/A1198 to Cambourne traffic.

Roundabouts recognised as potential **bottlenecks**, e.g. at Anderson Road, Wellington Way and junction near Buckingway Business Park.

Suggestions of **road access** being opened up to **Cambourne West.**

Rat running to the south of Cambourne (Caldecote, Bourn, Hardwick). Elsworth to the north. Scotland Road also concerning.

Fears of **disruption during construction** – need multiple routes to alleviate traffic.

If Cambourne gets **key amenities** (e.g.secondary school) that will reduce traffic *into* other villages

Installing deterrences to car travel is understandable but **without alternatives, people will still travel by car**.

Maps and graphics should "**go beyond the red line**" – important to reassure local residents that wider transport impacts are being considered.

Need for **more public transport choice** overall.

Better bus connections from Cambourne to villages (connect to station and CtoC) and bus availability in villages in general.

Buses to go *through* villages, rather than just outskirts.

Distances mean active travel is not feasible between villages/Cambourne for many (particularly older) residents.

In contrast, fears that if villages become better connected, they could become **de facto Park and Ride locations** for Cambourne.

Ensuring integration with local villages

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Stage 2 engagement on the Stage 1 spatial framework

Cambourne Growth Strategy Programme

Learn from places like Freiburg and Netherlands

Vehicle loops around the edge of Cambourne and other towns

Potholes and **narrow roads** deter people from active travel

Suggestions for an active travel route along whole of **EWR corridor**

Bus only roads, not necessarily busways

Questions of whether Cambourne could be integrated into broader **regional greenway network** – at present, it stops at Hardwick.

Desire for **interchange hubs** and a variety of travel options

More **local services** in Cambourne to encourage active travel

Parking needed in early days of central station area to ensure it is well-visited as it develops.

Over **longer-term,** greater need to **reduce parking** in the area.

Need consider station's impact on residential parking, particularly if parking controls are implemented at station. **Resident parking schemes** as a possible solution.

Parking needed to **facilitate access to attractions** in Cambourne, not just the train station.

Contention over station parking

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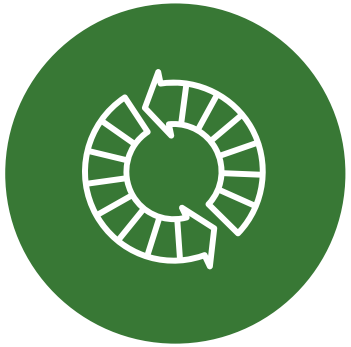
Stage 2 engagement on the Stage 1 spatial framework

Cambourne Growth Strategy Programme

Connectivity



Facilitating network-wide movement

Alongside east-west connectivity, plans need to look beyond this to consider north-south travel, ensuring Cambourne's growth does not put pressure on local routes.

Finding an urban-rural balance

Proposals need to ensure neighbouring villages can access the opportunities arising from Cambourne's development, while still retaining their rural feel.

Laying the groundwork early-on

Sequencing, phasing, and construction logistics are key. Transport infrastructure needs to be embedded from the start to support new homes, create a vibrant urban centre, and entrench sustainable habits.

Making active travel a possibility

While walking and cycling will not always be suitable for travelling to and from neighbouring villages, improvements to road quality and safer, continuous routes could make it viable for many.

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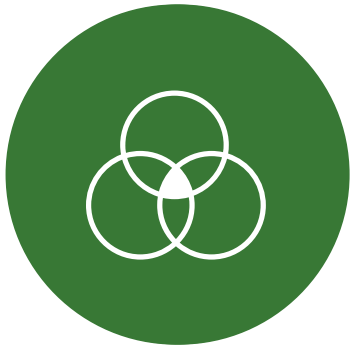
Stage 2 engagement on the Stage 1 spatial framework

Cambourne Growth Strategy Programme

Cross cutting themes

Focusing on people

Ensuring that existing communities, especially those most impacted, receive early benefits from development.



Thinking beyond the red line

Consider a wider approach to design and planning to incorporate any necessary improvements to roads, access points, and infrastructure in the proposals.

Phasing & sequencing

Identify the appropriate levels of investment and development sequence to ensure successful delivery, prioritising early infrastructure and services, and a managed transition towards sustainable transportation methods.

Ambitious yet deliverable

Proposals need to align the potential of the opportunity with confidence in successful implementation.

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Cambourne Growth Strategy Programme

Stage 2 engagement on emerging Stage 2 spatial framework

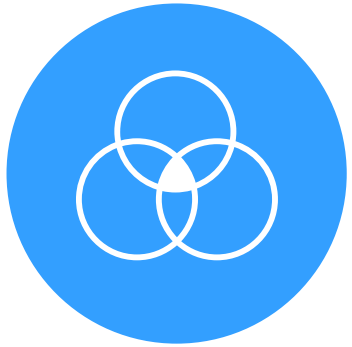
Cross cutting themes - boundaries, landscape, and connectivity

Addressing congestion through a holistic approach

Congestion remains a key concern. Proposals must be grounded in real-world experiences, ensuring sufficient access, resilience, and capacity to respond to servicing demands and regional growth.

Designing transport that works for all

Travel options must be realistic and inclusive, accounting for the needs of older and disabled residents, while considering connections in all directions from the site.



Delivering a joined-up, integrated framework

Joined-up delivery between transport and landscape, alongside coordination with EWR and developers, is needed to ensure a coherent and deliverable plan.

Clarity on ownership and obligations

Moving beyond proposals themselves, assurances on deliverability are needed to secure support – particularly around landscape buffers, bus provision, and long-term stewardship of GBI.

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Engagement from Cambourne reps

Cambourne Growth Strategy Programme

Summary

Placeholder: GCSP to provide summary

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2 Design development

This chapter describes how the stage 2 design responds to stakeholder feedback and non-transport workstreams.

Introduction

Key developments from Stage 1

Stage 1 established the overarching transport vision and principles to inform the Spatial Framework for the expansion of Cambourne. This work set out a vision-led, place-based approach, embedding transport planning from the outset to enable a significant reduction in car dependency and support long-term sustainable growth.

Key outcomes of Stage 1 included:

- A clear **transport vision** prioritising walking, cycling and public transport for most everyday journeys.
- An integrated strategy aligned with the delivery of **East West Rail (EWR)** and the **Cambourne to Cambridge (CtoC) High Quality Public Transport corridor (HQPT)**, supported by a hierarchy of mobility hubs.
- Principles for **walkable neighbourhoods**, early delivery of active travel and public transport, and land-use patterns that maximise trip internalisation.
- Identification of strategic constraints, including severance from the A428 and future EWR alignment, alongside the **need for coordinated crossings** and early infrastructure delivery.
- **Initial testing of travel demand** and trip budget to inform the scale and form of development.

Together, these elements defined a robust framework against which future spatial options could be developed and tested.

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Cambourne Growth Strategy Programme

Stage 1 principles

Snapshot of Stage 1 topics – see *Stage 1 Transport Vision and Principles report* for details

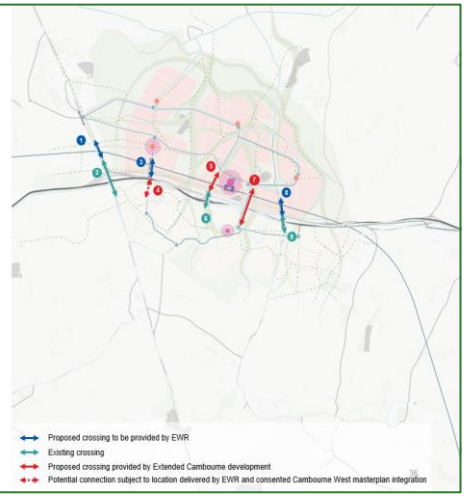
6.1 Crossings

Integrating with existing Cambourne

The image illustrates the existing, potential and proposed crossings which will ensure the connection of Extended Cambourne with Existing Cambourne.

1. New all mode crossing of A1198 and EWR
2. A428 Caxton Gibbet junction all mode crossing currently being upgraded by National Highways
3. New all mode crossing of St Neots Road over EWR
4. Potential pedestrian/ cycle and bus connection over A428 subject to integration with consented masterplan
5. New all mode crossing of EWR
6. Existing A428 dumbbell junction all mode crossing
7. Pedestrian, cycle, and busway connection to be delivered over EWR, St Neots Road and A428, with no access for general traffic. To be delivered by EWR/ Extended Cambourne
8. New all mode crossing over EWR
9. Existing all mode crossing at Broadway

Crossing provided by:
- EWR
- Local Authority/ National Highways
- Extended Cambourne

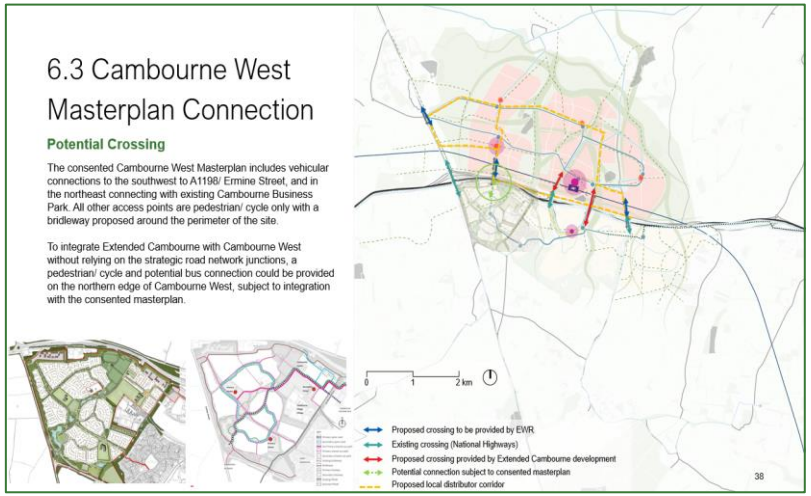


6.3 Cambourne West Masterplan Connection

Potential Crossing

The consented Cambourne West Masterplan includes vehicular connections to the southwest to A1198/ Ermine Street, and in the northeast connecting with existing Cambourne Business Park. All other access points are pedestrian/ cycle only with a bridleway proposed around the perimeter of the site.

To integrate Extended Cambourne with Cambourne West without relying on the strategic road network junctions, a pedestrian/ cycle and potential bus connection could be provided on the northern edge of Cambourne West, subject to integration with the consented masterplan.

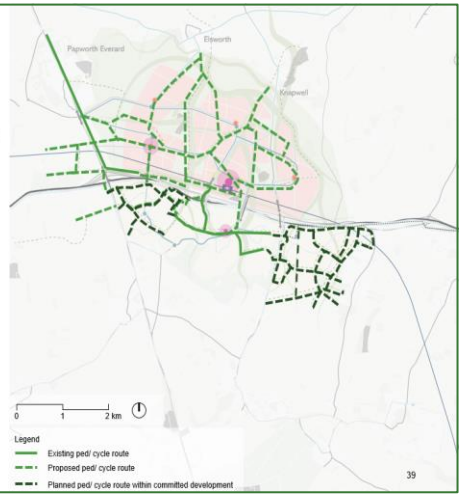


6.4 Active travel

Connecting Extended Cambourne

The image illustrates the existing, planned and proposed active travel routes which would ensure sustainable connections across and between existing and Extended Cambourne.

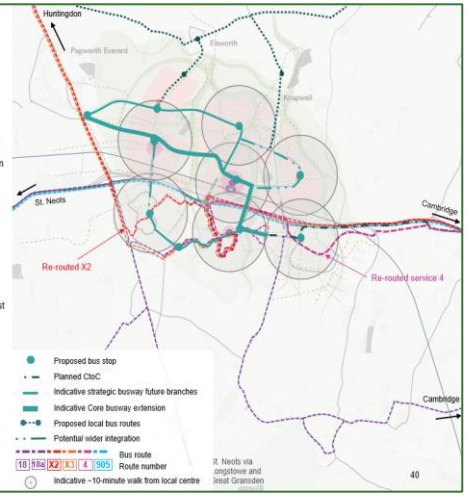
- A connected network of proposed, planned, and existing pedestrian/cycle routes forms a fine-grained grid across Extended Cambourne, existing Cambourne, and nearby villages (Elsworth, Papworth Everard, Knapwell), providing direct access to local centres, bus stops, and the EWR station.
- Strategic linkages maintain route continuity across the busway, EWR, and highways, with priority for active travel and convergence at key nodes to support safe crossings and seamless modal interchange.
- The network is integrated with a strong green-blue infrastructure, using green corridors and open spaces to support leisure routes, connect residents to nature, and promote wellbeing through active recreation.
- Wider-scale movement corridors link Extended Cambourne with existing Cambourne and surrounding villages, enabling sustainable regional connectivity and reducing car dependency.
- This layered approach delivers an inclusive, accessible, and sustainable transport network, supporting healthy, connected, and climate-resilient communities.



6.5 Public transport

Connecting Extended Cambourne

- A primary bus corridor, forming an extension to the CtoC busway is proposed to be provided through Extended Cambourne. The routing has been designed to maximise coverage whilst maintaining direct connections between local centres. It will be well-integrated into the urban form, ensuring permeability and minimising severance whilst also balancing the need to ensure fast and reliable journey times.
- The EWR station is proposed as a key mobility hub location. The station area will prioritise access by walking, cycling, and bus, with car parking located away from the station forecourt to reinforce the modal hierarchy.
- A series of new local bus routes will supplement the main corridor, enhancing connectivity to surrounding villages including Papworth Everard, Knapwell, and Elsworth, and supporting access to key destinations such as schools and local centres.
- Existing bus services, such as route X2 and 4, are proposed to be re-routed and extended to serve new developments (Bourn Airfield and West Cambourne) and improve regional links, including towards Huntingdon. The full network illustrated adjacent shows that the current bus routes serve Huntingdon, St Neots, and Cambridge, (with route 18/18a also travelling through local villages to the south). Other journeys such as those to the NE (Northstowe, Waterbeach, Milton) and SE (Duxford, Royston, Sawston), which make up a large % of commuter trips require an interchange in Cambridge (and take 1hr+ vs ~20 min drive).
- Therefore, there will need to be a comprehensive redesign of the bus network to ensure proximity of residents to frequent, reliable, and comfortable services that are integrated with EWR and CtoC to deliver a seamless, sustainable movement network across Cambourne and beyond. There will be a need to investigate new routes, extensions and diversions when masterplans are brought forward.



6.6 Mobility Hubs

Hierarchy

The Busway will be supported by a network of mobility hubs across Cambourne and the surrounding area. These will vary in scale and function, but all provide seamless interchange between walking, cycling and public transport. We anticipate a three-tier mobility hub hierarchy:

Local mobility hubs at Knapwell, Elsworth West Cambourne and Bourn Airfield, offering basic facilities and links to the wider network, including:

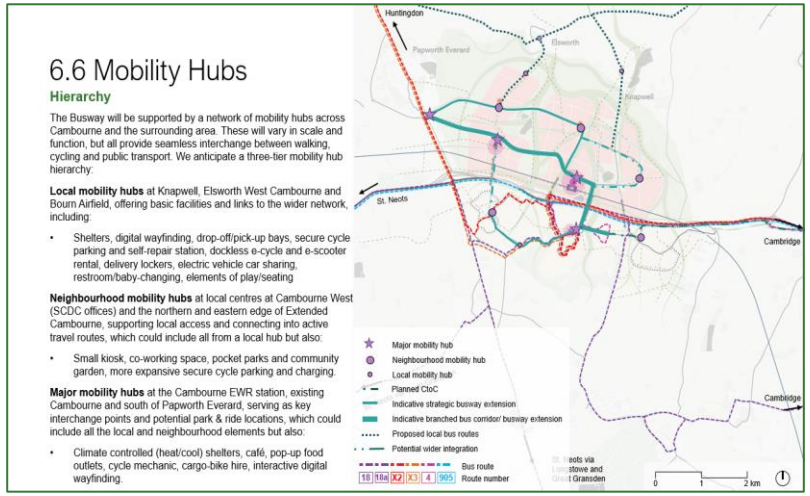
- Shelters, digital wayfinding, drop-off/pick-up bays, secure cycle parking and self-repair station, dockless e-cycle and e-scooter rental, delivery lockers, electric vehicle car sharing, restroom/baby-changing, elements of play/seating

Neighbourhood mobility hubs at local centres at Cambourne West (SCDC offices) and the northern and eastern edge of Extended Cambourne, supporting local access and connecting into active travel routes, which could include all from a local hub but also:

- Small kiosk, co-working space, pocket parks and community garden, more expansive secure cycle parking and charging.

Major mobility hubs at the Cambourne EWR station, existing Cambourne and south of Papworth Everard, serving as key interchange points and potential park & ride locations, which could include all the local and neighbourhood elements but also:

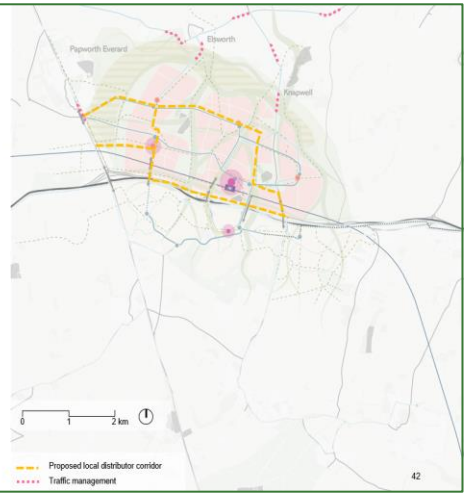
- Climate controlled (heat/cool) shelters, café, pop-up food outlets, cycle mechanic, cargo-bike hire, interactive digital wayfinding.



6.7 Highways

Connecting Extended Cambourne

- Two main corridors are provided (dashed yellow) in outer development areas the north and south to prioritise inner areas for use by active travel and buses, and to minimise crossings of sustainable networks and landscape linkages.
- The proposed main roads are also less direct than more sustainable options, thereby helping to encourage more sustainable choices, and will have low speeds to minimise conflict with other modes.
- Main vehicular routes have been proposed that align and utilise existing/planned infrastructure, including the existing A428 dumbbell roundabout and the existing Broadway crossing over A428. The existing dumbbell roundabout from A428 will provide access to the EWR station, employment areas and will allow servicing of local centres. Onward travel northbound would therefore be limited for general traffic but could provide flexibility for early development phases and serve as an important corridors for buses and active modes.
- Typical traffic management measures which could include such interventions as speed limits, priority chicanes, ANPR-based enforcement zones, or restricted turn bans at peak hours will be introduced to further help to reduce 'rat-running' through surrounding villages.



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Stage 2 key framework updates

Response to non-transport technical studies and engagement

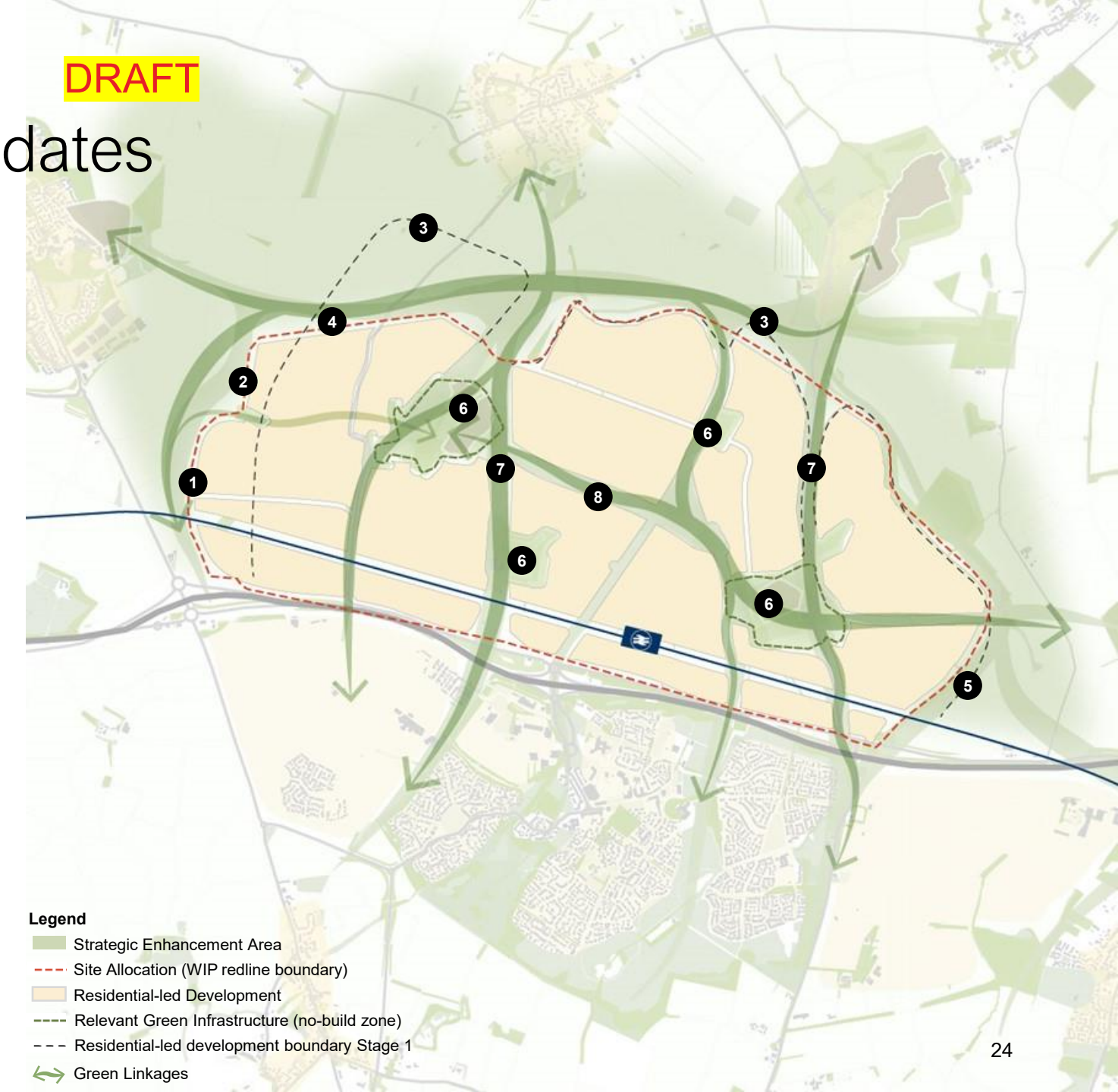
The Stage 2 spatial framework represents a significant refinement of the Stage 1 proposals, driven by three main inputs: landscape and visual appraisal findings, ecological considerations (including ancient woodlands and dark corridors), and stakeholder engagement feedback. The overall effect is a framework that pulls development away from sensitive northern settlements, expands westward onto less sensitive ground, and weaves in a more rational green infrastructure network throughout the site. Further details are provided in the accompanying *Cambourne spatial framework update* and *GBI framework update*.

Development Boundaries

Increase towards the West (LVIA-led opportunity). Boundary aligned with Parish boundaries (**1**) and field boundaries (**2**)
3 – Receded boundary to create landscape buffer to villages (LVIA Findings)
4 – Boundary alignment refined in response to LVIA findings, reducing development in visually prominent areas and improving plot deliverability.
5 – Alignment of eastern boundary with natural features

GBI-ecology led design

6 – Expansion of Ancient Woodlands to approximately 10ha in addition to a 50m landscape buffer
7 – 60m wide dark corridors
8 – EW landscape corridors between Ancient Woodlands



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Cambourne Growth Strategy Programme

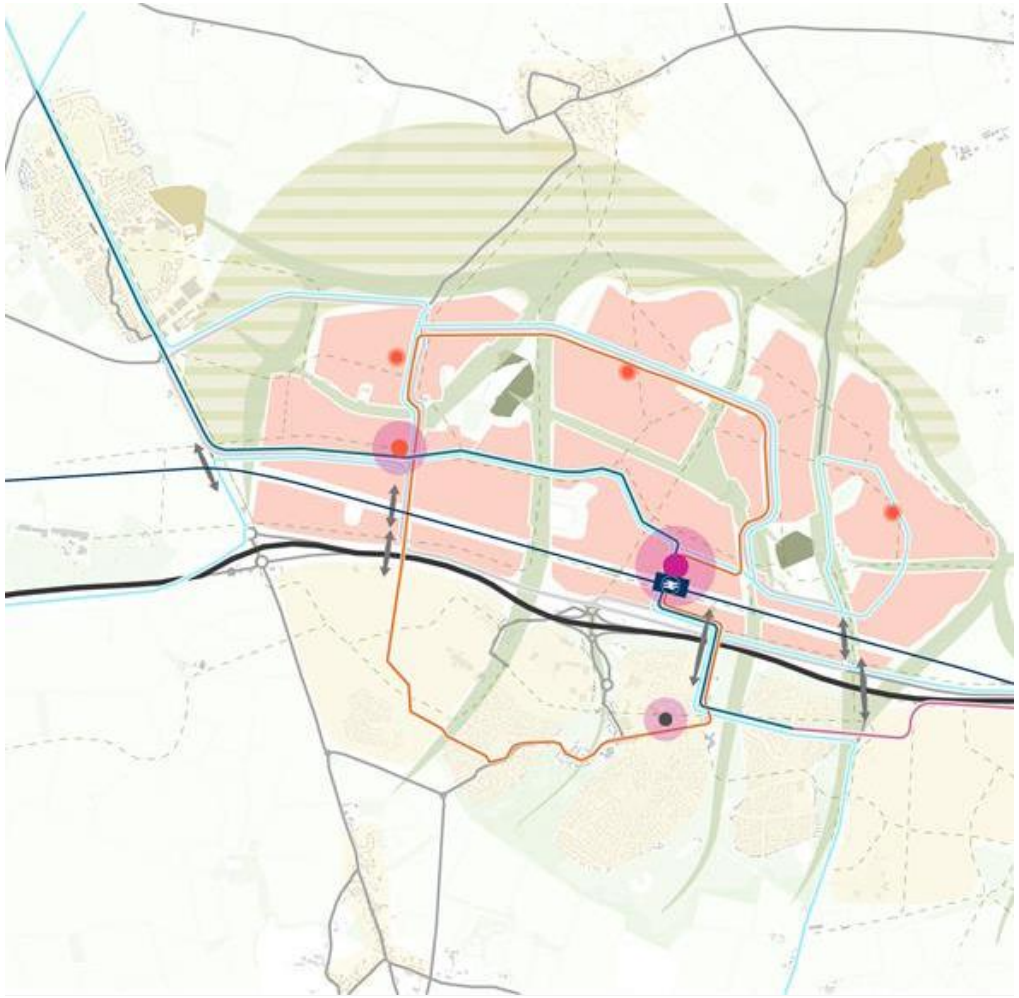
Stage 2 framework updates

Transport

Stage 2 builds on the principles identified in the Stage 1 framework and refines them in response to stakeholder feedback and non-transport workstreams.

Key transport updates in Stage 2 include:

- Refinement of spatial proposals to reflect the **GBI strategy** and **EWR DCO consultation scheme**. Further details are provided in chapter 3.
- Updated and expanded future **bus network proposals**, including potential additional routes and a local Cambourne shuttle, to strengthen north–south connectivity and improve access to the EWR station, CtoC, and surrounding villages to further expand the benefits of growth at Cambourne North. Further details are provided in chapter 4.
- A more detailed articulation of **active travel connectivity**, bringing together planned LCWIP routes and identifying potential strategic cycle connections to address strategic gaps in connectivity. Further details are provided in chapter 4.
- Greater emphasis on **integration with existing Cambourne and nearby settlements**, ensuring proposed new infrastructure supports a “One Cambourne” approach and seeks to protect surrounding villages from increased vehicular traffic. Further details are provided in chapter 4.
- Detailed **Transport modelling** to inform potential access junction considerations, on-site transport interventions and off-site mitigation to support development. Further details are provided in chapter 6.



Stage 2 Emerging Strategy – see chapters 4 and 5 for further detail

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Stakeholder and Landowner engagement

Cambourne Growth Strategy Programme

Summary of feedback on the Stage 1 spatial framework

What we heard	How this has been taken forward
Concern that congestion/ impacts could worsen across surrounding villages including on narrow rural roads and existing bottlenecks, not just along east–west routes	Further work has been undertaken to refine the first principles trip generation and trip distribution based on CSRM transport modelling to better understand likely impact. Emerging proposals include **modal filters and restricted vehicle movements** between Cambourne North and villages to the north are being reviewed as part of wider mitigation options being tested within CaPCAM transport model.
Suggestions that new or improved bypass routes could help reduce through-traffic in villages	Bypass and other strategic routing options are being **considered alongside other mitigation measures,** but such interventions will have wide-ranging (non-transport) impacts. More sustainable solutions will be sought in the first instance, but we recognise that some larger scale interventions may be needed, including beyond the Plan period.
Concern that relying on a single main route through Cambourne North could cause severe disruption during incidents or construction	Stage 2 work will **more clearly set out access proposals** and internal vehicle routing proposals including resilience and construction routing principles.
Suggestions to open up road access between Cambourne North and Cambourne West	Potential connections are being **explored in principle**, subject to landowner agreement, masterplan integration and the proposed EWR crossing locations
Ongoing issues with rat-running through villages north and south of Cambourne	The illustrative internal highway network and access proposals seek to ensure that higher category roads are used for longer trips with **further detail of the level of trips anticipated through the wider network to be provided** based on CaPCAM model outputs.

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Stakeholder and Landowner engagement

Cambourne Growth Strategy Programme

Summary of feedback on the Stage 1 spatial framework

What we heard	How this has been taken forward
Acceptance that car use needs to be managed, but concern that alternatives must be realistic	Further details of travel demand including **credible alternatives to car travel**, potential bus improvements, potential strategic active travel connection and integration of EWR station are provided in chapter 3.
Requests for reassurance that impacts beyond the site boundary are being considered	Further details of transport modelling including **wider impacts and mitigation proposals** are provided in chapters 6 and 7.
Desire for better public transport connections between Cambourne and nearby villages	**Potential additional bus routes have been identified** for testing through CaPCAM and potential strategic active travel connections identified. It should be noted that any services provided will be subject to bus operator viability assessments.
Concern that improved connections could turn villages into informal park-and-ride locations	Parking management and regulation options in surrounding villages will be **considered where this risk is identified.**
Mixed views on station parking – short-term need versus long-term restraint	EWR station parking estimates to be modelled through CaPCAM with **recommendations made to EWR** to complement/ better integrate with Cambourne North are set out in Chapter 3.

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Stakeholder and Landowner engagement

Cambourne Growth Strategy Programme

Summary of feedback on the developing Stage 2 spatial framework

What we heard	How this has been taken forward
Existing roads too narrow and likely to take brunt of congestion	Increasing road widths is likely to encourage more/ faster vehicular trips, conflicting with Cambourne North's objectives. However, bypasses around narrow villages to the north may need to be considered subject to A428 link capacity.
Increased vehicle trips through existing villages	May need to consider subject to CN DM outputs and A428 link capacity.
Lack of access points forces centralised vehicle movements alongside HGVs	Two access points provided from A1198 in Stage 1 Spatial Framework with flexibility in how the internal network could be delivered to increase separation of HGVs from other vehicles as appropriate.
Roundabouts recognised as potential bottlenecks (Anderson Rd, Wellington Way, Buckingway Business Park)	Increasing roundabout capacity at Anderson Road/ around Buckingway Business Park are likely to increase NS movements through villages to the north. Wellington Way improvements to be considered once CN DM outputs received.
Limited road access for Cambourne West	Increasing access is subject to agreement and incorporation with Cambourne West consented masterplan.
Limited local bus routes to key locations; risk people will drive to station/HQPT	Additional routes with increased frequency are being explored to connect surrounding villages with the EWR station and CtoC HQPT.
Risk surrounding villages could become de-facto Park & Ride locations	Local parking enforcement/ regulation could be explored as the masterplan progresses.
Bus-only roads could be used, not necessarily just busways/ HQPT corridors	Modal filters have been explored to reduce impacts in surrounding villages at Elsworth and Knapwell
Concerns that mobility needs of older and disabled residents	Proposals will be reviewed to ensure **inclusive access is embedded**, with a balanced approach combining active travel and public transport options, as well as car use to meet a wider range of mobility needs.

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Stakeholder and Landowner engagement

Cambourne Growth Strategy Programme

Summary of feedback on the developing Stage 2 spatial framework

What we heard	How this has been taken forward
Ongoing concerns about understanding and trust in the transport modelling	Further work will **improve clarify and communication of modelling outputs and assumptions**, including clearer explanation of scenarios and how mitigation is represented, supported by transparent reporting.
Concern that the strategy does not fully account for movement to and between nearby villages (north–south connectivity)	The transport strategy has been **further developed to better reflect local movement patterns**, including north–south connectivity and trips between surrounding settlements, alongside strategic movements.
Concerns regarding location, function and effectiveness of mobility hubs	The role and function of mobility hubs will be **further defined and tested**, including their integration with the wider transport network and potential impacts on the highway network.
Concerns about the deliverability of infrastructure outside the site boundary (ownership, responsibilities, and delivery mechanisms)	Ongoing engagement will support **clarification of delivery mechanisms, responsibilities and phasing**, including how off-site infrastructure could be secured and implemented.
Need to consider cumulative demand and a wider range of trip types, including servicing and visitor trips	Servicing and construction access has been tested and presented in Stage 2 work.
Desire for greater transparency and flexibility in the transport strategy	The evolving strategy will continue to be **presented as a flexible framework**, with options refined as further evidence emerges and ongoing engagement informs the approach.
There is potential for western access directly in the northern dumbbell of the Caxton Gibbet improvement scheme to provide more direct access into Cambourne North.	This would require detailed conversations with National Highways and Cambridgeshire County Council.

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3 East West Rail

This chapter covers the latest EWR proposals based on the May 2026 consultation and their implications for Cambourne North. EWR proposals continue to evolve and ongoing engagement between EWR, GCSP, landowners and other stakeholders will inform the future development of both the rail scheme and the spatial framework.

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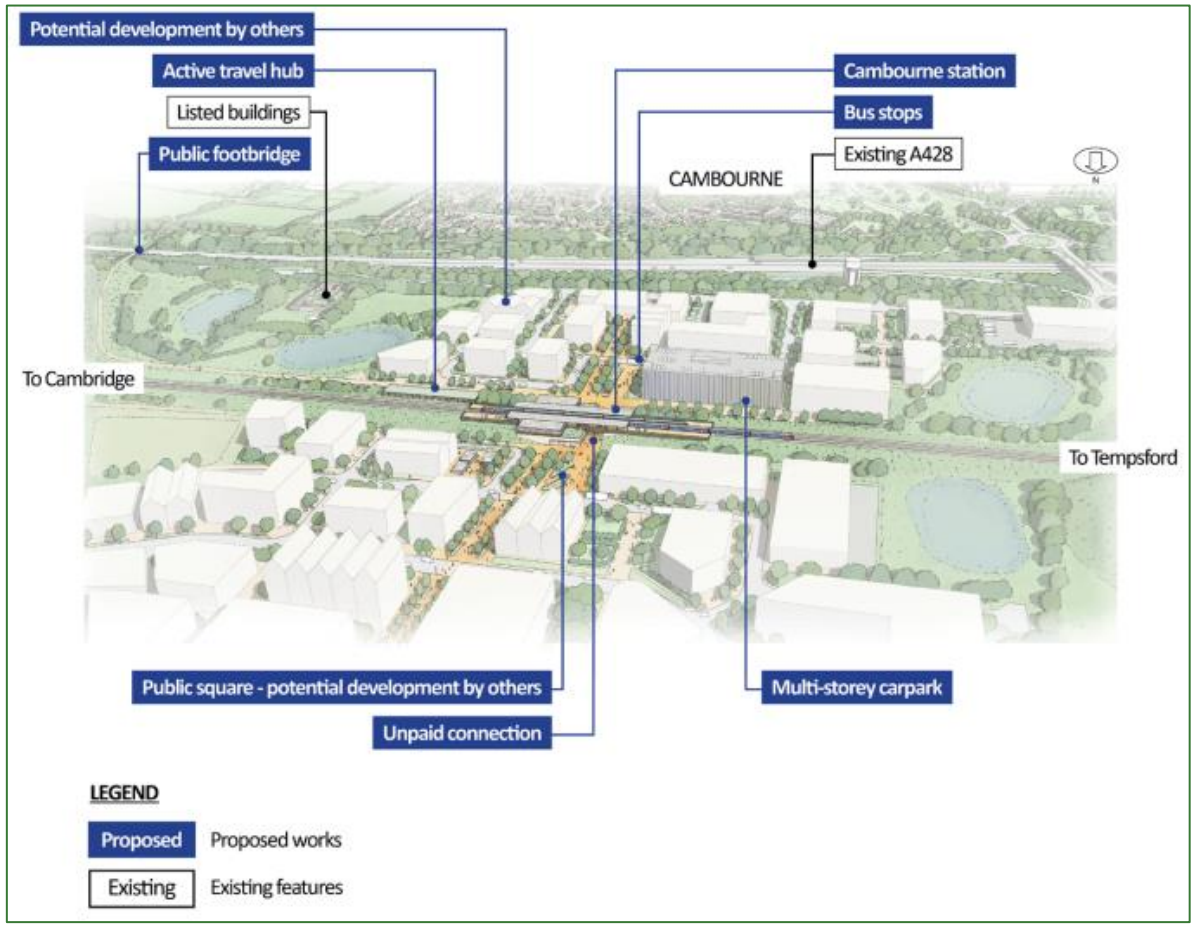
Cambourne Growth Strategy Programme

EWR May 2026 Consultation

Cambourne Station design

The latest station layout proposals indicates a dual-sided station with public squares and access provided from both sides of the railway. The station is conceived to form part of a wider ‘place’, with potential for surrounding mixed-use development rather than a standalone transport hub or facility.

Although the station will attract trips from beyond Cambourne, it is intended to function primarily as a station serving Cambourne and surrounding communities, rather than as a strategic park-and-ride facility. Access is proposed to be prioritised by walking, cycling and bus from surrounding neighbourhoods. EWR proposals continue to evolve through ongoing design development and stakeholder engagement.



Source: EWR Consultation May 2026

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Cambourne Growth Strategy Programme

EWR May 2026 Consultation

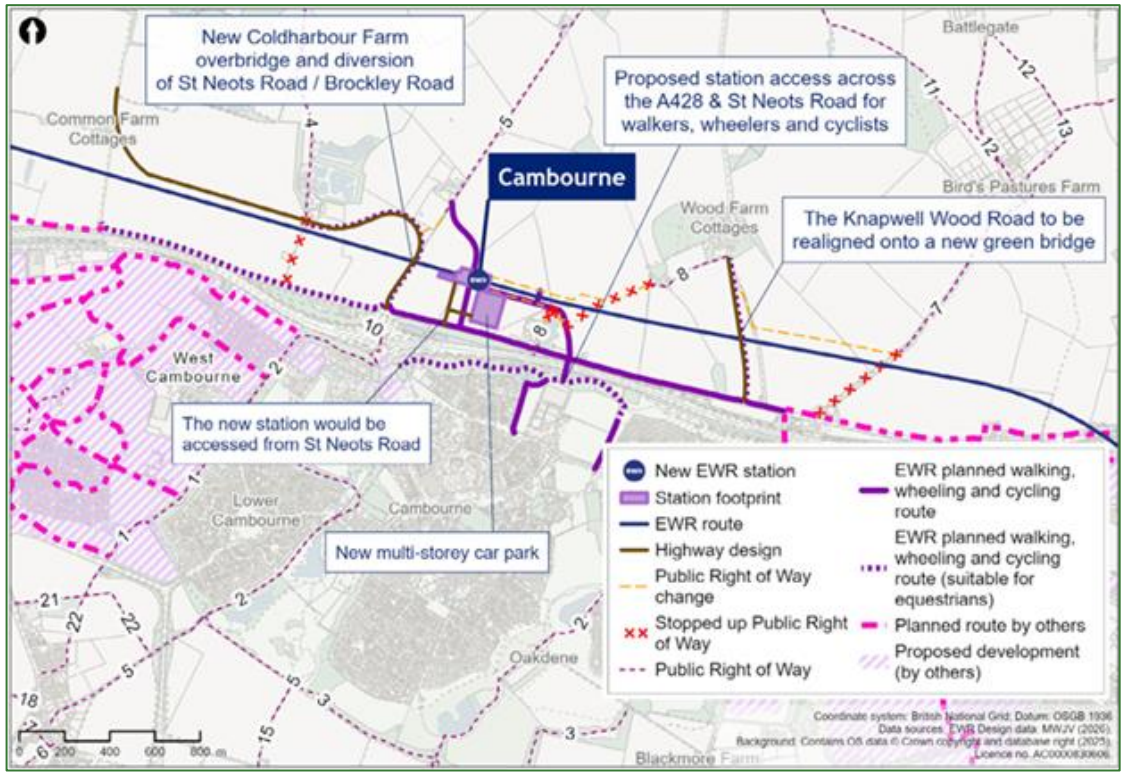
Car parking approach

The latest EWR plans show provision for a multi-storey car park at Cambourne station, located to one side of the station rather than dominating the main station square. While some car parking is expected to play a role in ensuring early station viability and accessibility, the transport strategy for Cambourne North makes clear that parking provision should be carefully managed.

A managed parking approach is preferred. While EWR's current proposals include provision for a multi-storey car park, parking provision should be carefully monitored and phased over time to support station accessibility whilst avoiding unnecessary car-based access trips.

Excessive station parking would risk absorbing a disproportionate share of the available trip budget and encouraging longer-distance car trips into Cambourne, undermining the wider objectives for mode shift and protecting surrounding villages. The preferred approach is therefore to:

- prioritise access to the station by walking, wheeling and cycling and public transport;
- manage parking provision to support the station's role in serving Cambourne, Cambourne North and surrounding communities, whilst avoiding a significant park-and-ride function; and
- review parking provision over time as public transport connectivity, surrounding development and travel behaviour mature.



Source: EWR Consultation May 2026

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Cambourne Growth Strategy Programme

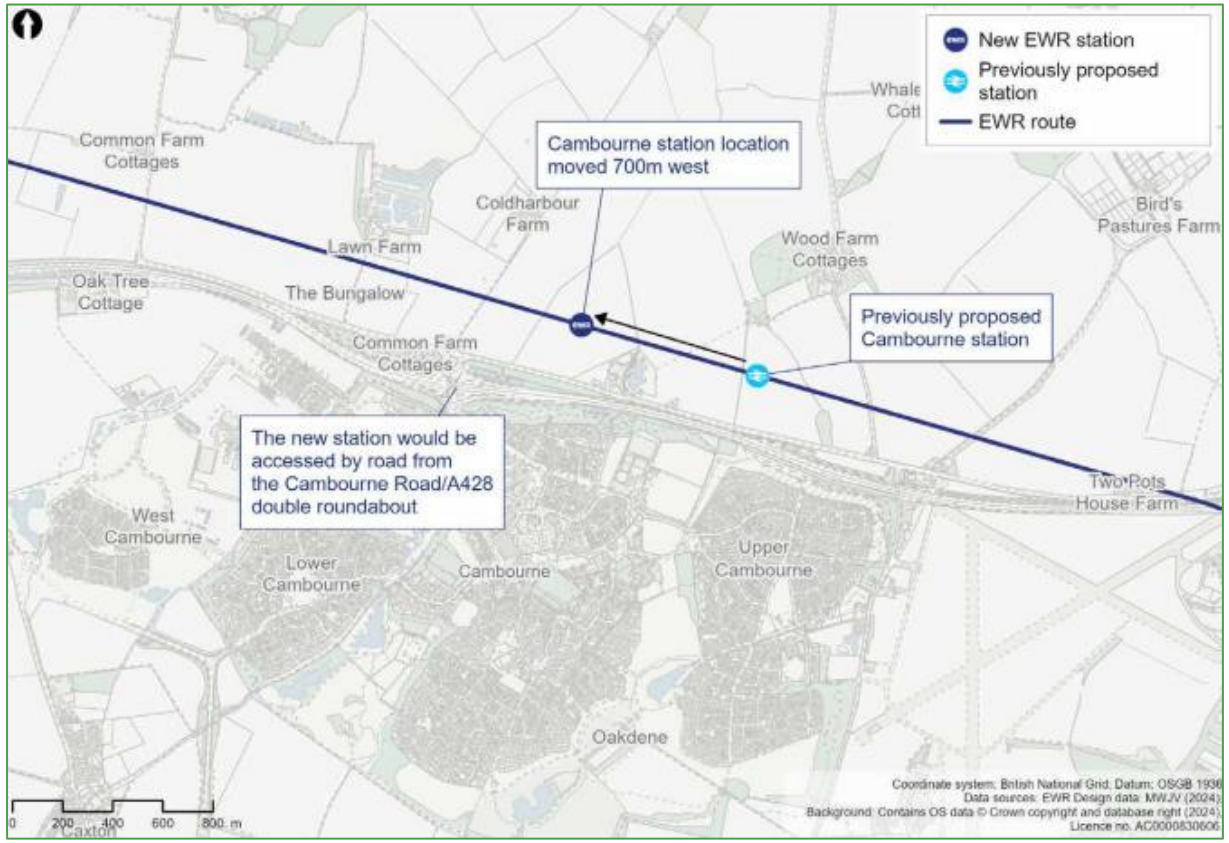
EWR May 2026 Consultation

Station location

The May 2026 consultation proposes relocating Cambourne station approximately 700m west of the previously proposed location, positioning it closer to the A428 Cambourne junction and improving access to the town centre and surrounding development areas.

This revised location responds to stakeholder feedback that the previous site was poorly connected to Cambourne and key movement corridors. It also supports future growth more effectively, including planned residential and employment development in the area.

The new alignment reduces environmental impacts by moving the station further away from Knapwell Wood and associated sensitive habitats. It also enables a more integrated layout, with improved connections to the highway network and opportunities to enhance walking, wheeling and cycling links to the station.



Source: EWR Consultation May 2026

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Cambourne Growth Strategy Programme

EWR May 2026 Consultation

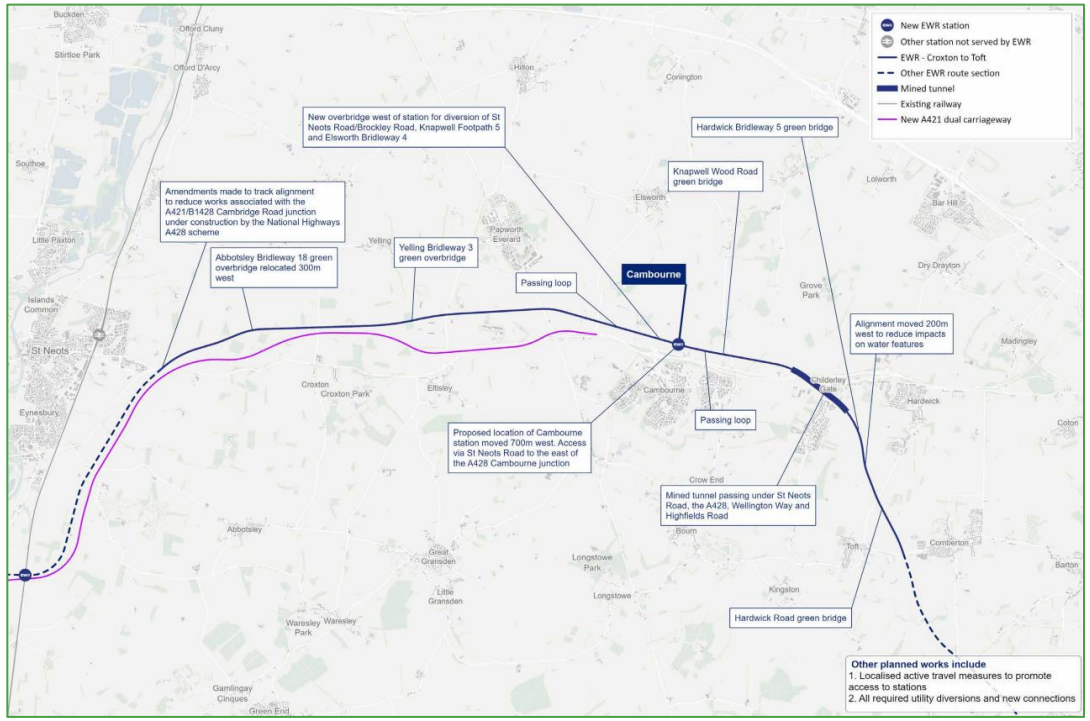
Rail alignment

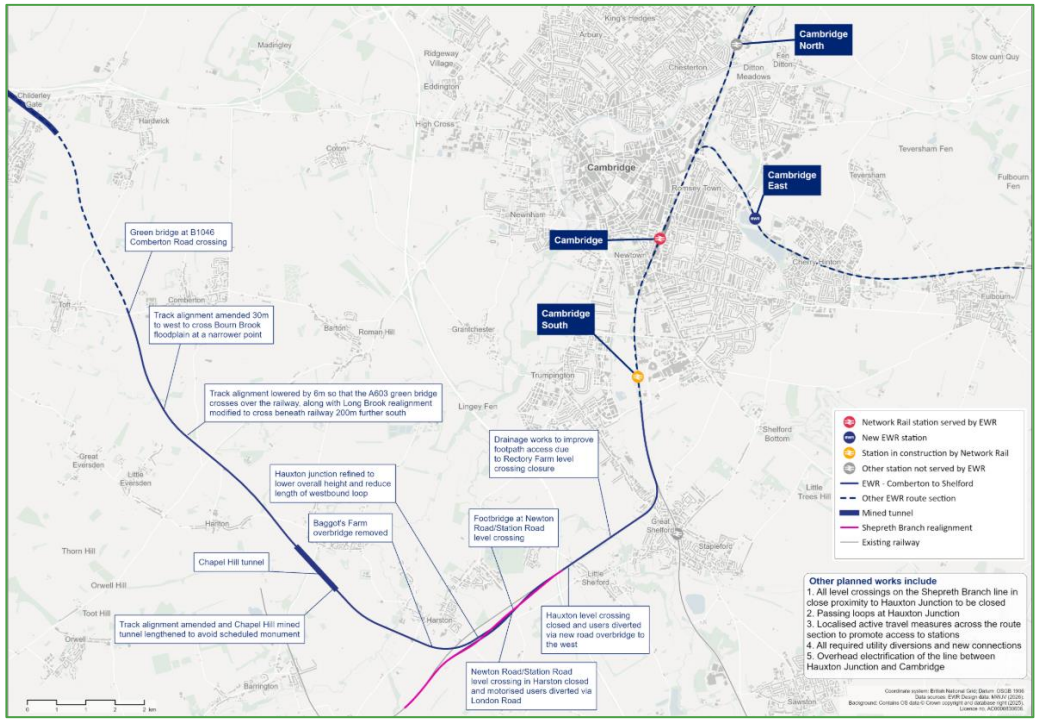
The updated proposals retain the overall route through Cambourne but include local refinements to the rail alignment to respond to the revised station location and environmental constraints.

The railway is slightly lowered in places and adjusted horizontally to reduce impacts on nearby features, including watercourses and landscape designations. These changes also influence the design and location of bridges, diversions and crossings along the route.

Passing loops are retained but have been repositioned to align with the new station location, improving operational efficiency while maintaining freight and passenger capacity.

Overall, the revised alignment reflects a more coordinated approach, integrating the railway, station, highway network and active travel connections while reducing environmental and landscape impacts compared to earlier proposals.





Source: EWR Consultation May 2026

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Cambourne Growth Strategy Programme

EWR May 2026 Consultation

Key Differences from Previous Consultation

1. Station Location and Layout

- **Moved 700m west** compared to earlier proposals
- Now better aligned with A428 junction and future growth areas
- Reduced environmental impact as further from Knapwell Wood.

2. Station Access Design

- Shift from **footbridge with lifts/stairs → underpass**
- Improves permeability and more user-friendly step-free access

3. Active Travel Connectivity

- Shared-use bridge over A428 **moved 300m west**
- Greater emphasis on integrating with existing and planned routes
- Some **PRoW diversions simplified or shortened** (e.g. Yelling Bridleway 3 via new bridge)

4. Highway Strategy

- **Greater reliance on existing/re-aligned roads** (e.g. St Neots Road/Brockley Road) for both access and maintenance
- Removal of previously proposed **additional maintenance access tracks**

5. Rail Alignment and Structures

- Localised **lowering of rail embankments** in places
- Changes to crossings (e.g. loss of level crossing at West Brook, replaced by bridge)

6. Passing Loops

Relocated to reflect revised station position:

- Eastbound loop 700m further west
- Westbound loop 1.7km further east

7. Public Rights of Way and Crossings

Some previous proposals amended:

- Knapwell Footpath 5: from footbridge → **road bridge for all users**
- Knapwell Footpath 8: from bridge → **diversion via station underpass**

Overall trend towards **multi-user crossings**

8. Environment

- Increased focus on habitat connectivity through green bridges and planting, and flood mitigation and watercourse realignment
- Reduced land-take and ecological impact relative to earlier design

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Cambourne Growth Strategy Programme

EWR May 2026 Consultation

EWR 2026 consultation key transport proposals

The image illustrates the potential and proposed crossings delivered by EWR which will ensure the connection of Cambourne North with Existing Cambourne.

1. All mode crossing over EWR
2. All mode crossing over EWR
3. Pedestrian and cycle permeability under station
4. Pedestrian and cycle crossing considered essential
5. All mode crossing over EWR
6. Walking, wheeling, and cycling path between the A428 and EWR

It should be noted that a crossing over EWR in the vicinity of Cambourne West is no longer proposed by EWR. Any crossing at this location would need agreement and funding from alternative sources. Further details of EWR proposals and options explored are included within the separate *Station Enhancement Study*.

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4 Spatial Framework

This chapter covers the design evolution responding to landscape and ecology, GBI and dark corridors. This includes a set of overarching key moves and development principles and guidance for land use, movement and open space on the site.

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Introduction

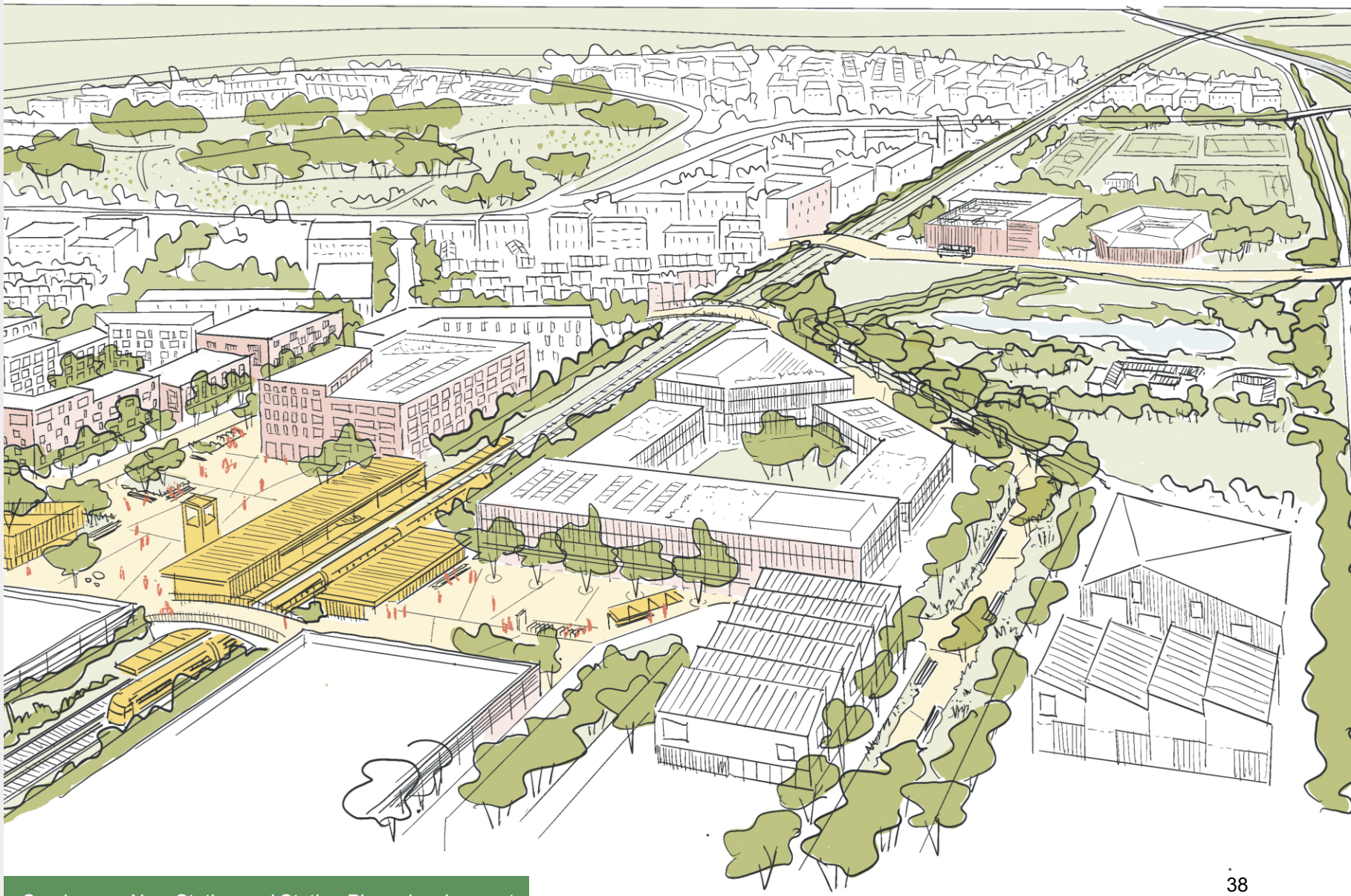
A future-proof framework

The arrival of East West Rail creates the opportunity for a step change in growth for Cambourne. By unlocking sustainable local and regional transport connectivity, EWR enables Cambourne to potentially grow to become the third largest urban agglomeration in the Combined Authority area. This growth needs to be optimised through planned, appropriately scaled expansion of Cambourne. The Spatial Framework lays out GCSP's preferred approach to expansion.

The following pages outline the principles established for the framework, as well as general guidance on how open space, movement, development and land use should be established in this future place.

For further detail on the step change in growth and sequencing of Cambourne's expansion , see *Stage 1 Spatial Framework Report - Appendix 1*.

For details on how the GBI approach integrates with adjacent sites, see the *GBI Spatial Framework Report Addendum*.



Cambourne New Station and Station Place development

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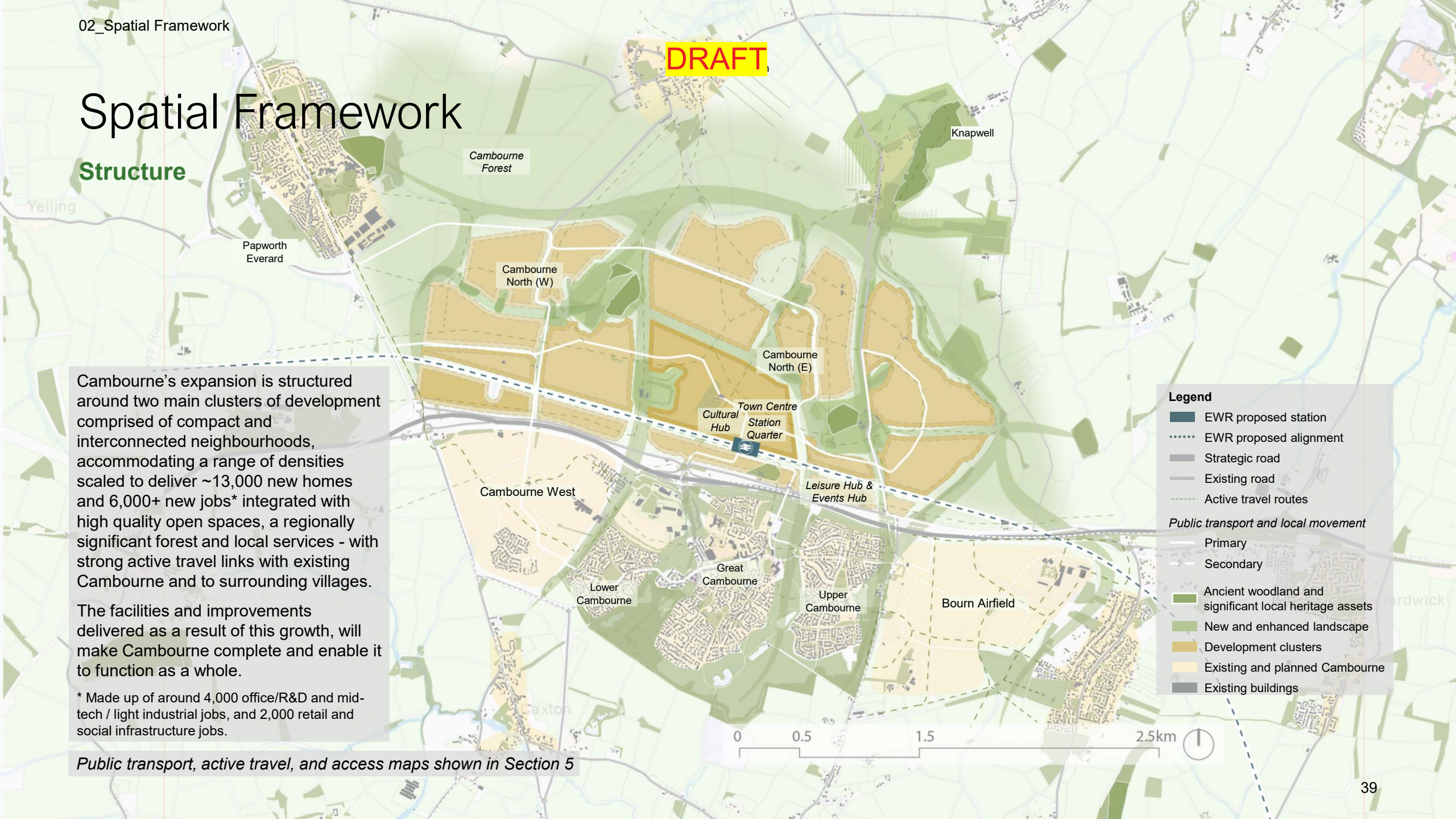
Spatial Framework

Structure



Cambourne's expansion is structured around two main clusters of development comprised of compact and interconnected neighbourhoods, accommodating a range of densities scaled to deliver ~13,000 new homes and 6,000+ new jobs* integrated with high quality open spaces, a regionally significant forest and local services - with strong active travel links with existing Cambourne and to surrounding villages.

The facilities and improvements delivered as a result of this growth, will make Cambourne complete and enable it to function as a whole.

* Made up of around 4,000 office/R&D and mid-tech / light industrial jobs, and 2,000 retail and social infrastructure jobs.

Public transport, active travel, and access maps shown in Section 5

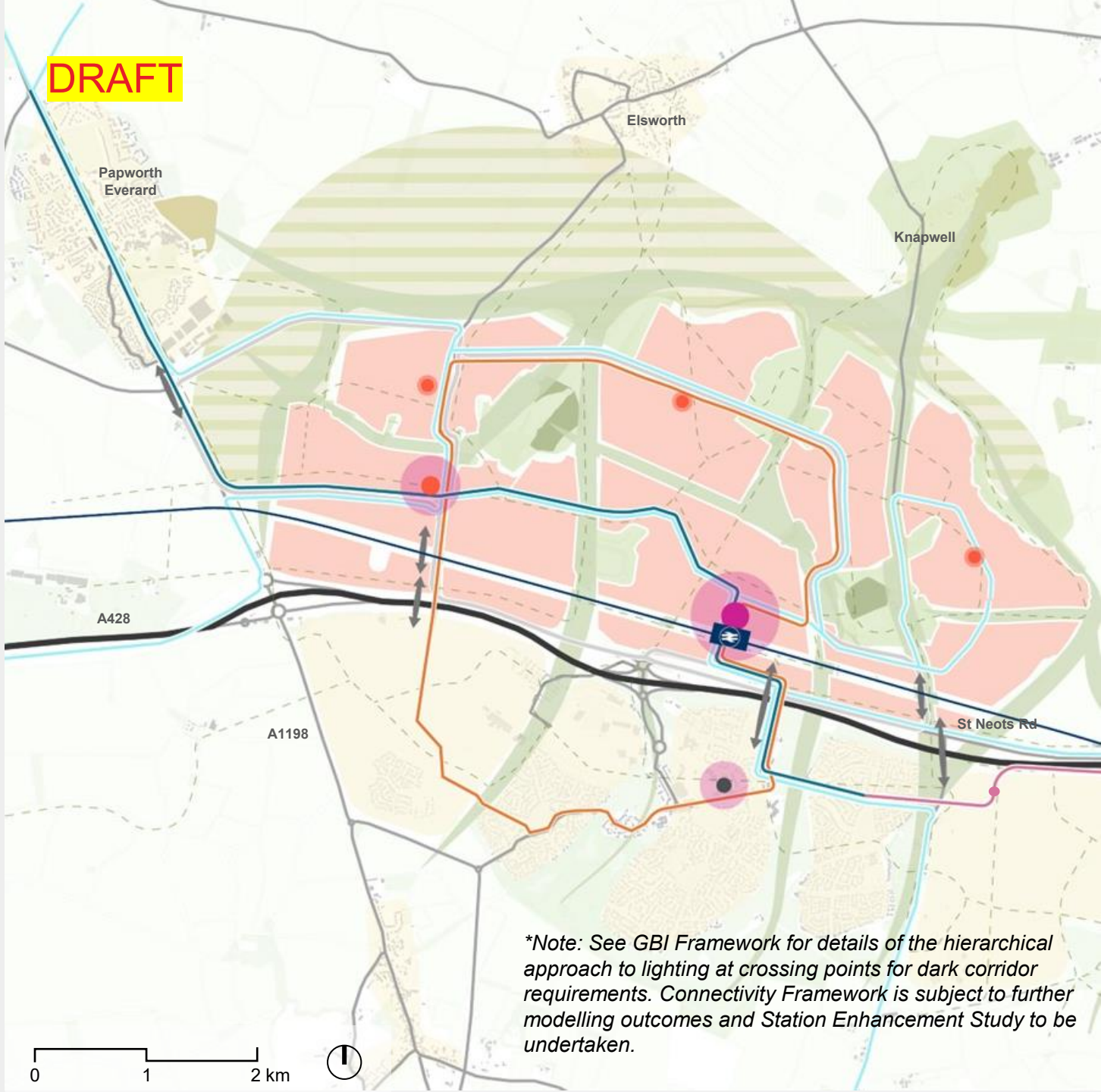
Connectivity

Framework principles and guidance

Cambourne's expansion will deliver enhanced connectivity within and between neighbourhoods and the town centre. Links to the railway station and activity centres will connect all new areas and severance of infrastructure corridors will be reduced by bringing existing and planned settlements together. This will ensure that the benefits of regional connectivity facilitated by a new EWR station and an extended High Quality Public Transport (HQPT) corridor are available to all. The A428 will also continue to play an important role in providing strategic highway connectivity.

Cambourne connectivity will prioritise:

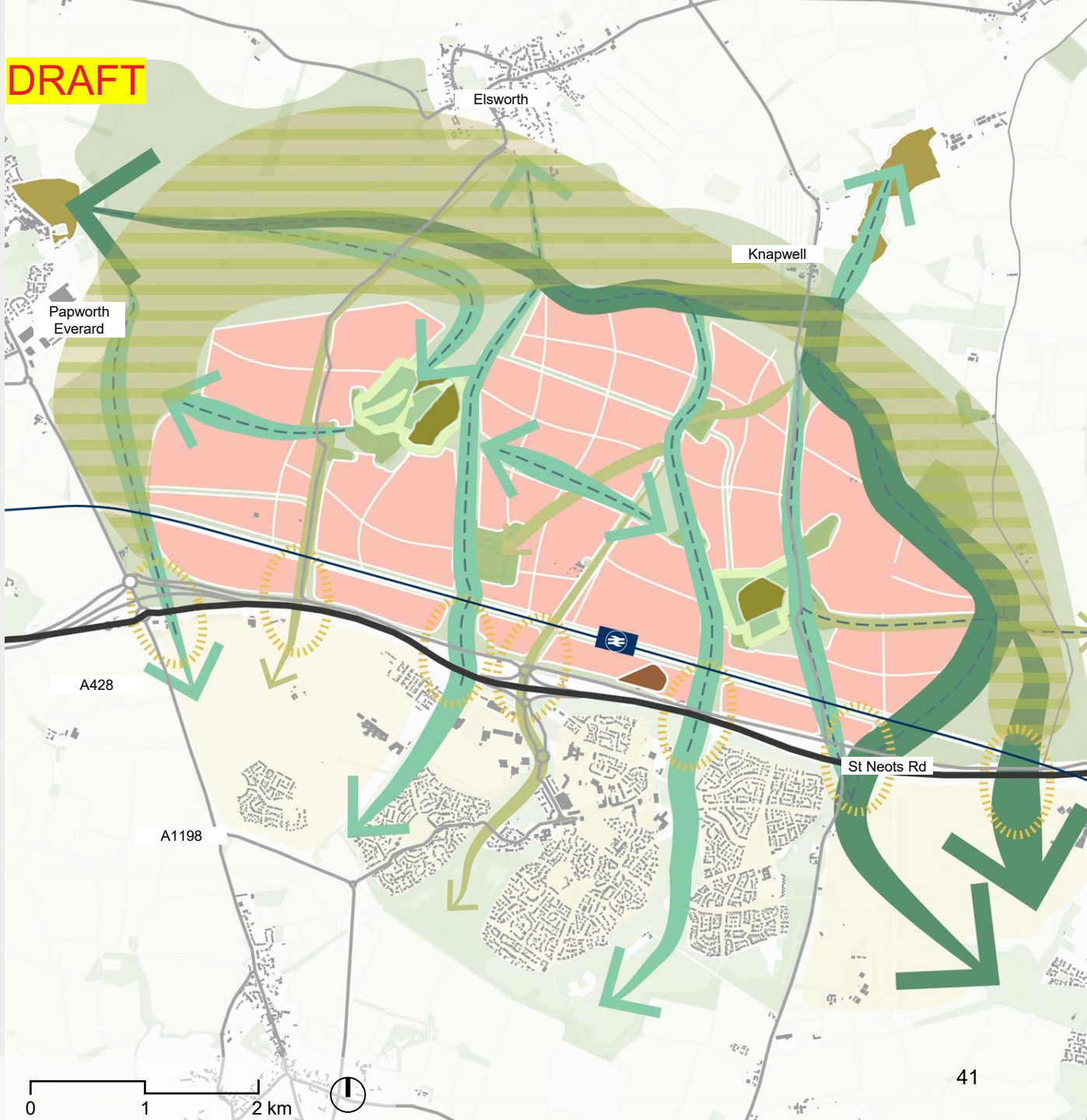
- Access to services and amenities, including green/open spaces for both existing and new residents, as well as surrounding villages. Connections will also be respectful of landscape linkages and where appropriate, lighting impacts will be mitigated to respect dark corridor designations.*
- Active travel provision and networks to link neighbourhoods and villages to the station, new town centre services and jobs.
- Integrated rail and station assets with well-planned public spaces, jobs, and leisure opportunities centred around a multimodal interchange.



Note: See GBI Framework for details of the hierarchical approach to lighting at crossing points for dark corridor requirements. Connectivity Framework is subject to further modelling outcomes and Station Enhancement Study to be undertaken.

Landscape

Framework

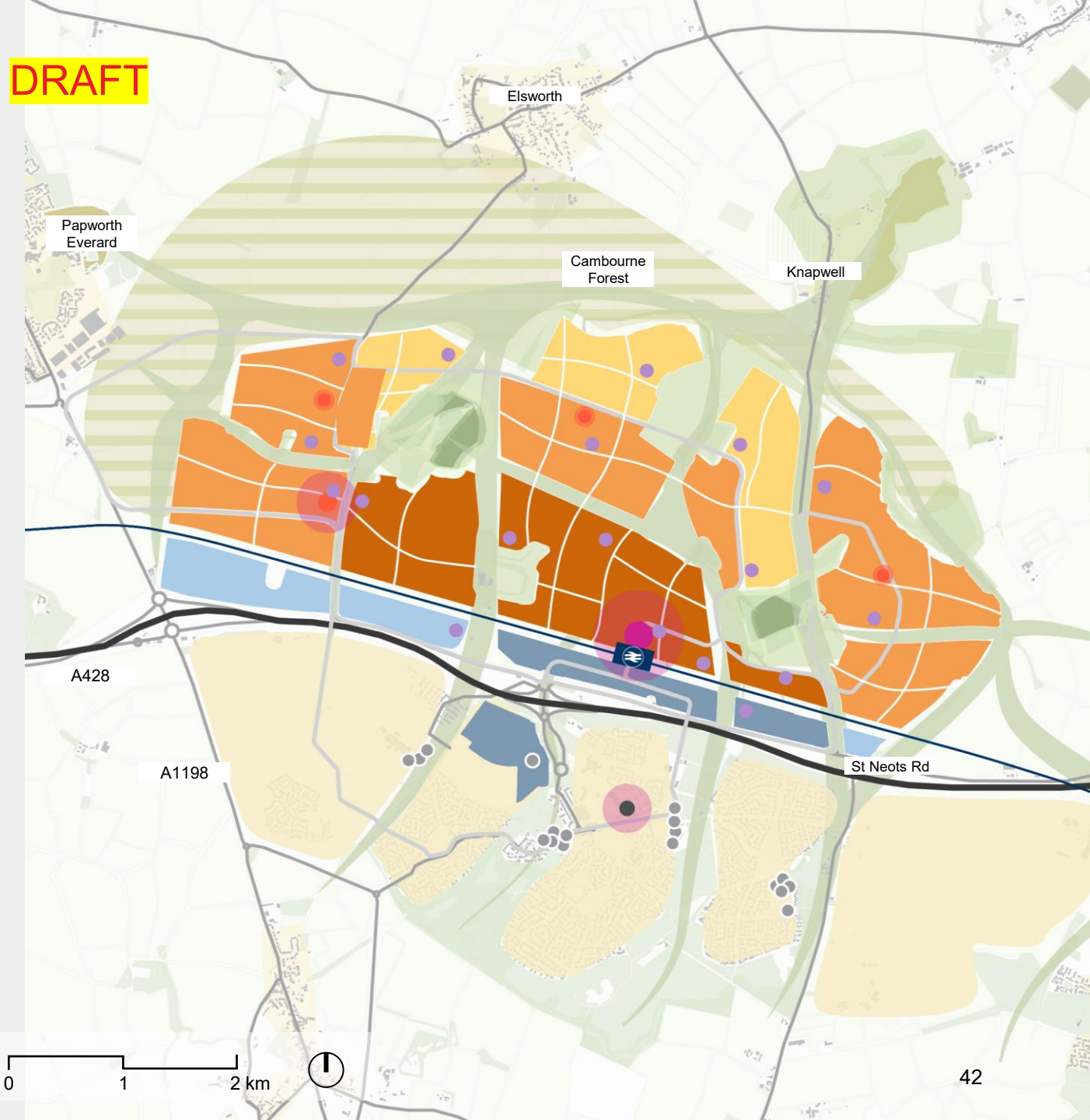


Legend

- Ancient woodland
- Proposed expansion and buffer to Ancient woodland
- Existing green areas
- *Ecological protection and enhancement corridors*
- Primary green linkages
- Secondary green linkages
- Tertiary green linkages
- Dark corridors
- Proposed Green Arc
- Proposed crossings
- Development clusters
- Existing and planned Cambourne

Land Use

Framework



Legend

- Existing town centre
- Town centre
- Local centre
- Neighbourhood centre
- Existing community facility
- Proposed community facility
- Predominantly high density / mixed use (60-70 dph)
- Predominantly mid & high density residential (45-70 dph)
- Predominantly mid & low density residential (35-60 dph)
- Predominantly Workspace / commercial
- Predominantly Future Workspace / commercial
- Flexible working space
- Existing and Planned Cambourne
- Proposed green linkages
- Proposed green arc

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5 Transport strategy

This chapter sets out the transport strategy for the for the illustrative Stage 2 spatial framework. This builds on the transport principles set out in the Stage 1 Transport Vision and Principles report

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Cambourne Growth Strategy Programme

Transport strategy

Overview

This section sets out the Stage 2 transport proposals for Cambourne North, developed in response to Regulation 18 consultation feedback, Stage 2 stakeholder engagement, EWR consultation, and the design development process.

The following pages set out the transport strategy which builds on the Stage 1 *Transport vision and principles report* to address the key themes raised including:

- **Strategic and local public transport** – EWR and CtoC HQPT proposals provide a layered public transport offer, responding to concerns about the realism and coverage of proposed services and the need for credible alternatives to car travel
- **North–south connectivity and bus network expansion** – Potential additional bus routes address gaps in connectivity to surrounding villages and key destinations, responding to consistent feedback that plans must look beyond east–west corridors
- **Active travel strategic network** – Additional strategic cycle connections have been identified to complement the planned LCWIP network, strengthening walking and cycling links to neighbouring settlements in response to calls for safer, continuous active travel routes
- **Highway access and movement management** – Access junctions and modal filters at northern boundaries address concerns about congestion, rat-running through villages, and the need for resilient access arrangements
- **Construction access management** – Designated construction routes using the strategic road network address concerns about HGV impacts on local communities and surrounding settlements
- **Resilience** – The transport strategy needs to have sufficient flexibility to adapt as major rail and bus infrastructure is constructed and Cambourne North is delivered in a phased manner which evolve over time.
- **Monitor and Manage approach**– Cambourne North's development will need to be monitored with ongoing management to ensure that travel behaviours and vehicular traffic generation can continue to be supported as growth is delivered.

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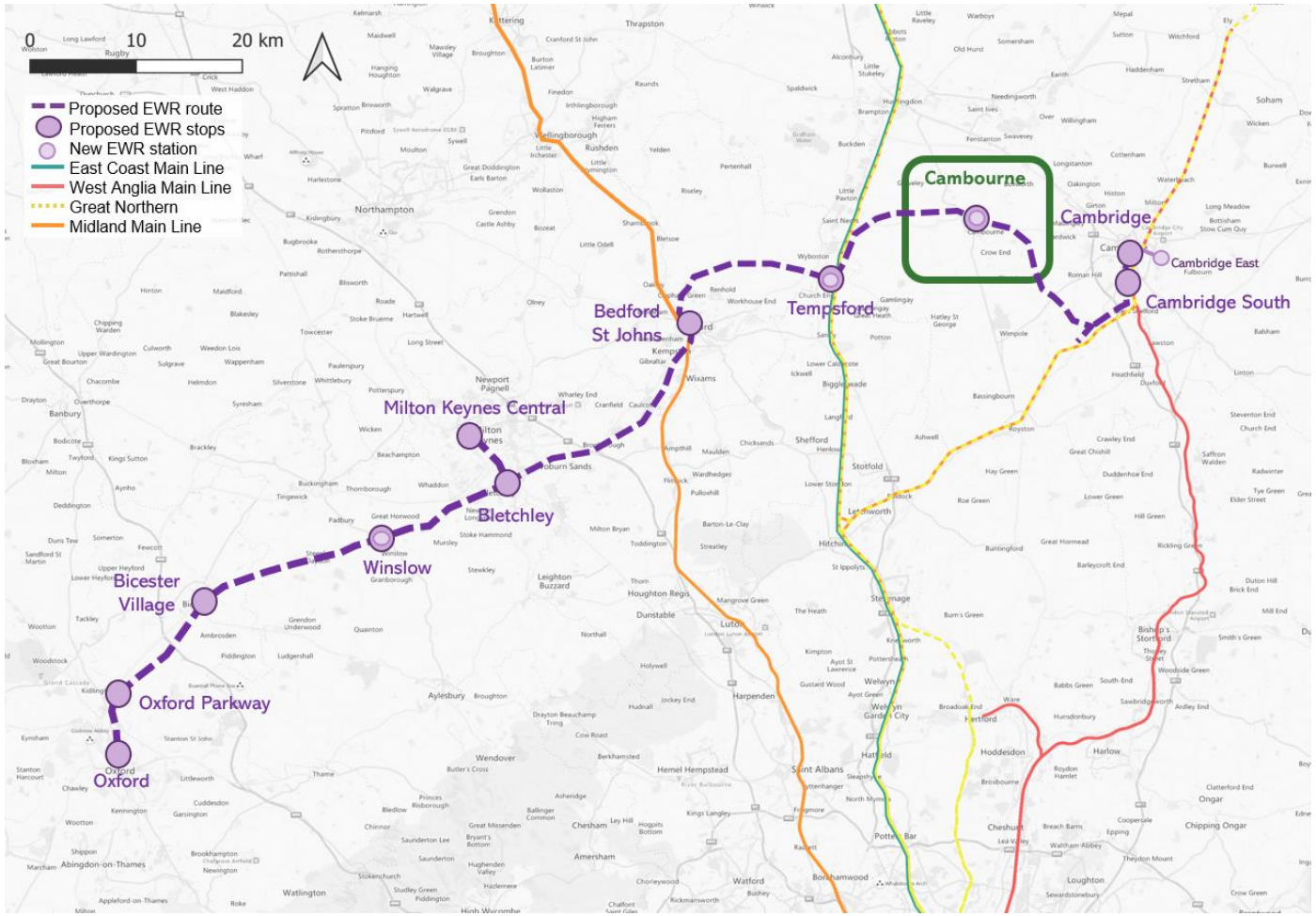
Transport strategy – Public transport

Cambourne Growth Strategy Programme

EWR

EWR will provide strategic connectivity beyond Cambridge, linking Cambourne to a wider network of regional centres across the Oxford–Cambridge corridor including the Cambridge Biomedical Campus, Cambridge Science Park and the planned Cambridge East development, as well as strengthening connections to Bedford, Milton Keynes, Oxford and Tempsford, identified by Government as the location for a new town of up to 40,000 homes, planned around a new EWR interchange station with the East Coast Main Line.

By providing direct rail access to major employment, education and housing growth areas, EWR will expand the range of destinations accessible from Cambourne and support sustainable travel choices. The scheme will improve regional connectivity, increase access to jobs and services, and help integrate Cambourne within the wider economic geography of the Oxford-Cambridge Growth Corridor.



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Cambourne Growth Strategy Programme

Transport strategy – Public transport

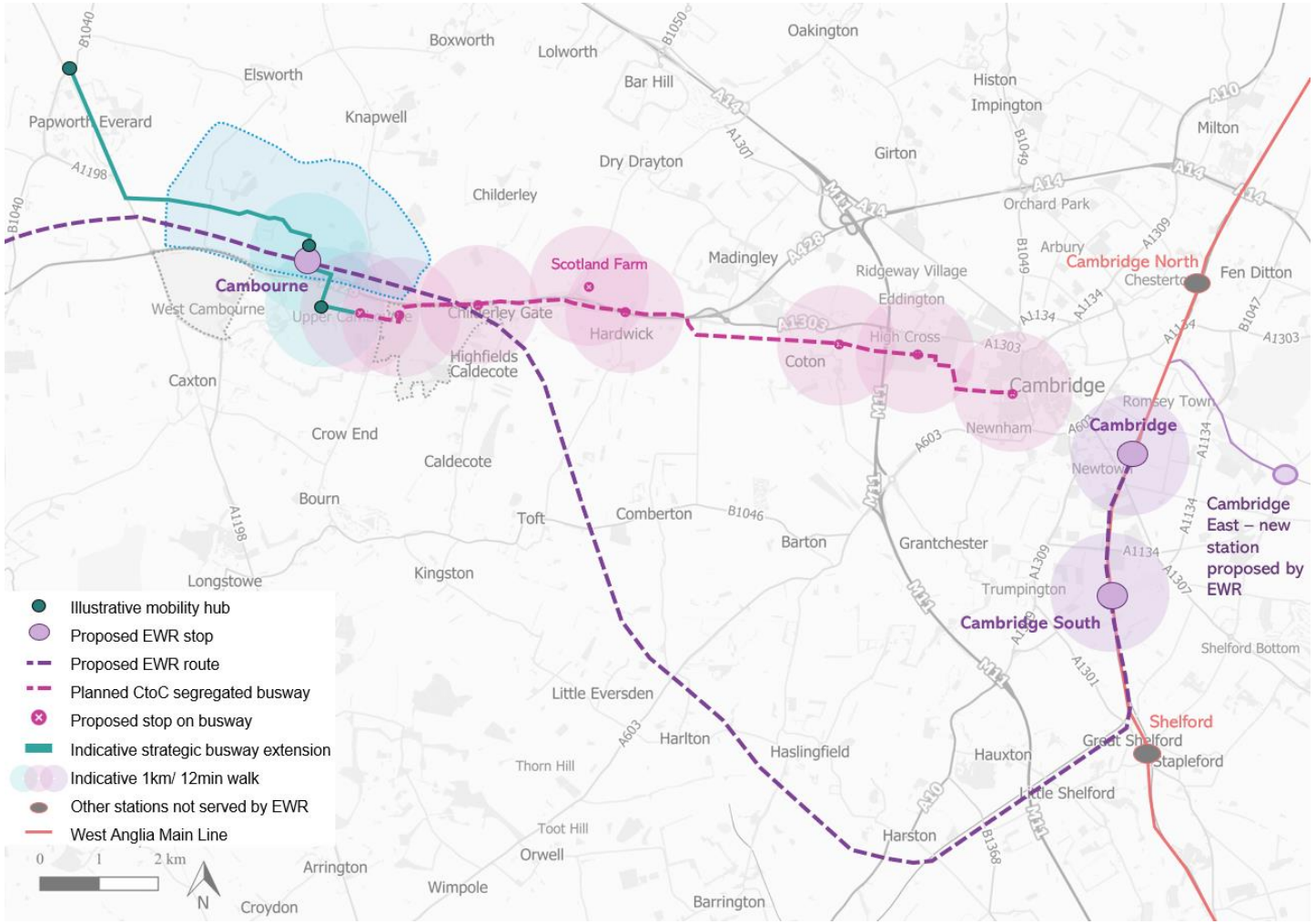
EWR and CtoC HQPT corridor with extension

Both the CtoC HQPT and EWR provide connections to Cambridge, but they serve different parts of the city and different travel needs and are therefore complementary.

The CtoC HQPT delivers a high-frequency, local and sub-regional connection into west and central Cambridge, serving intermediate settlements and key employment and education destinations including Cambourne Business Park, Cambridge West, the city centre and areas along the busway corridor. It supports shorter to medium-length trips and provides strong accessibility for locations not directly served by the rail network. Importantly, the CtoC HQPT is expected to be delivered ahead of EWR, providing an initial high-quality public transport service to support early phases of development.

EWR provides a strategic regional connection, linking Cambourne to a wider rail network and broadening access to destinations beyond Cambridge, including Cambridge East, Bedford, Milton Keynes and Oxford. By connecting Cambourne to a wider range of employment, education and growth locations, EWR will expand the number of destinations accessible by public transport and support longer-distance regional journeys.

Together, these proposed transport movement corridors provide a layered public transport offer, widening travel choice, strengthening resilience, and supporting mode shift away from the private car.



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Cambourne Growth Strategy Programme

Transport strategy– Public transport

Potential additional bus routes

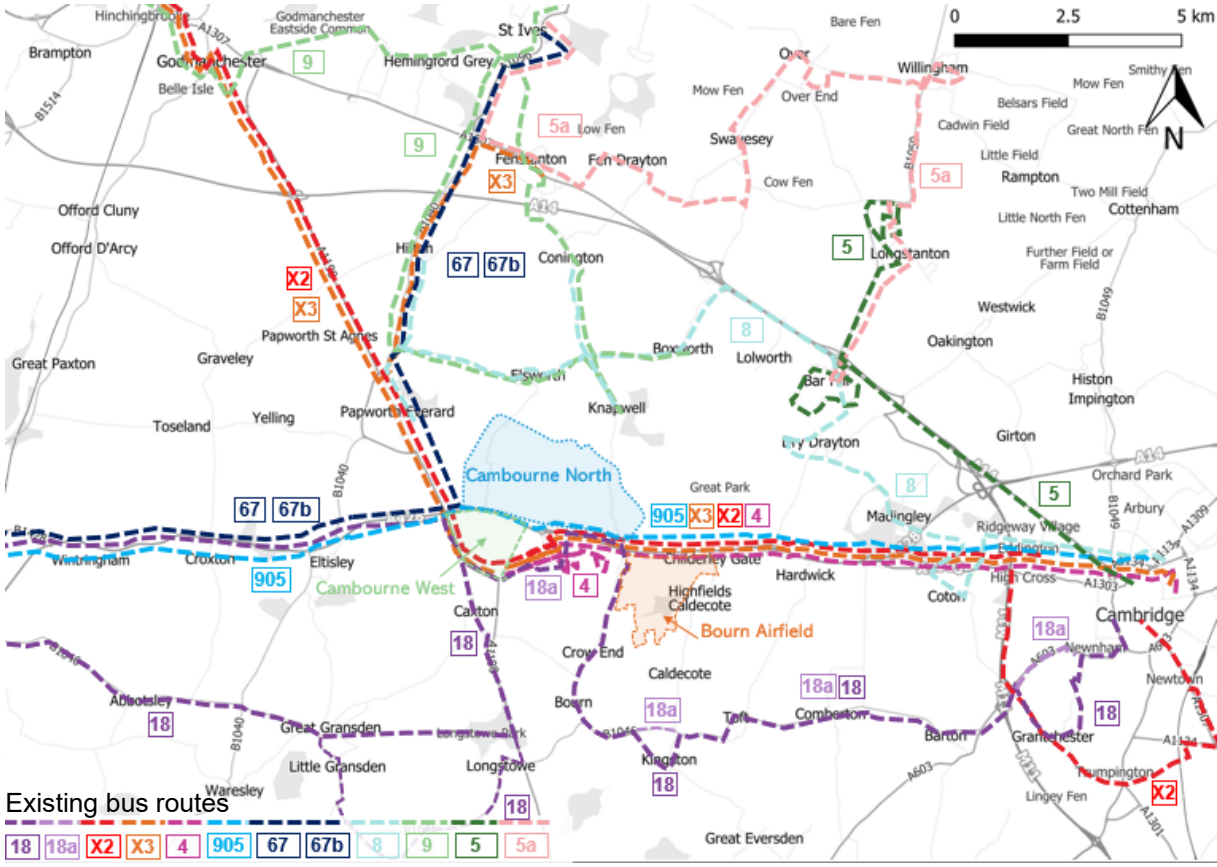
The existing bus network serving Cambourne, surrounding villages and key regional destinations has been mapped including existing service frequencies to identify gaps in connectivity and level of service.

Building on this, a set of potential additional bus routes has been identified. These routes are intended to address gaps in north–south connectivity and improve access between surrounding villages, Cambourne North, and key regional destinations, including the proposed EWR station. The potential routes have been identified to better serve villages that currently have limited or indirect public transport links to Cambourne, and to provide more direct, legible, higher frequency connections to make bus a realistic option for more journeys.

Potential routes between Cambourne North and St Neots, Huntingdon, St Ives, Longstanton/ Northstowe, and Royston would complement the existing bus network and better connecting surrounding villages to EWR station and new centres at Cambourne North.

A local bus loop linking Cambourne North with existing Cambourne has also been identified to provide a high-frequency local connection between existing Cambourne, Cambourne West and Cambourne North to help spread the benefits of growth to new and existing residents and support sustainable travel choices.

It should be noted that any bus services provided will be subject to bus operator viability assessments and appropriate funding mechanisms. The routes identified would provide broad geographical reach and can flexibly be incorporated within the spatial framework to provide an appropriate level of service and coverage in each development stage.



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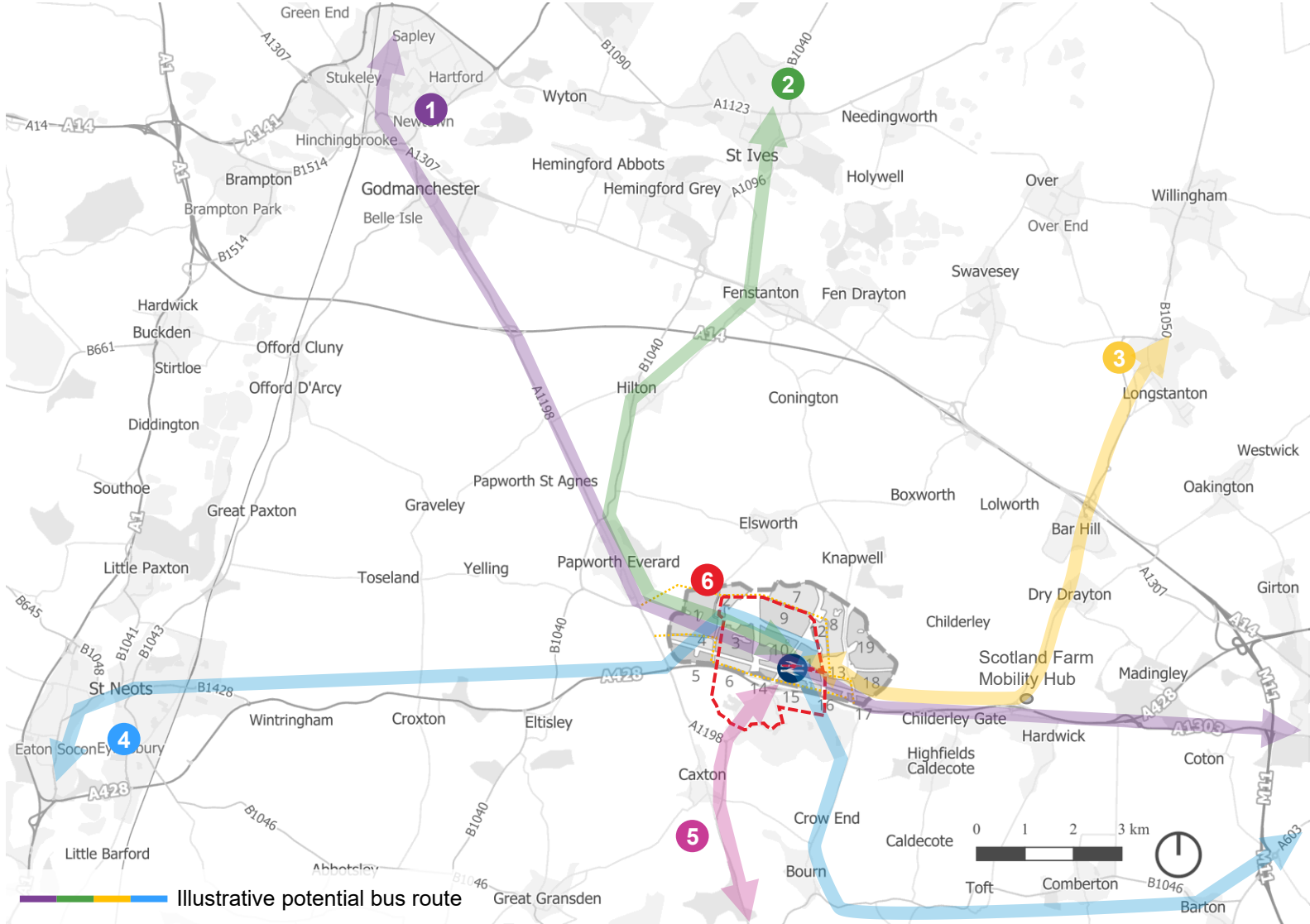
Transport strategy – Public transport

Cambourne Growth Strategy Programme

Illustrative additional bus routes explored

1. Huntingdon to Cambridge via Cambourne North and Scotland Farm mobility hub: This route compliments existing route X2/X3. Access to Cambourne North via A1198.
2. St Ives to Cambourne North via Fenstanton, Conington, and Elsworth. This route complements existing route 9 which runs from Huntingdon to St Ives via Elsworth, Knapwell and Boxworth but does not serve Cambourne. There are currently no routes that connect the villages to the north of Cambourne (Conington, Elsworth, Boxworth, Knapwell) to Cambourne.
3. Northstowe to Cambourne Station via Bar Hill, and Dry Drayton. There are no existing routes between Longstanton and Cambourne.
4. St Neots to Cambridge via Cambourne North: This route compliments existing route 905 and 18.
5. Cambourne North (EWR) to Royston
6. Cambourne Shuttle bus to connect existing Cambourne, Cambourne West, and Cambourne North.



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Cambourne Growth Strategy Programme

Transport strategy– Public transport

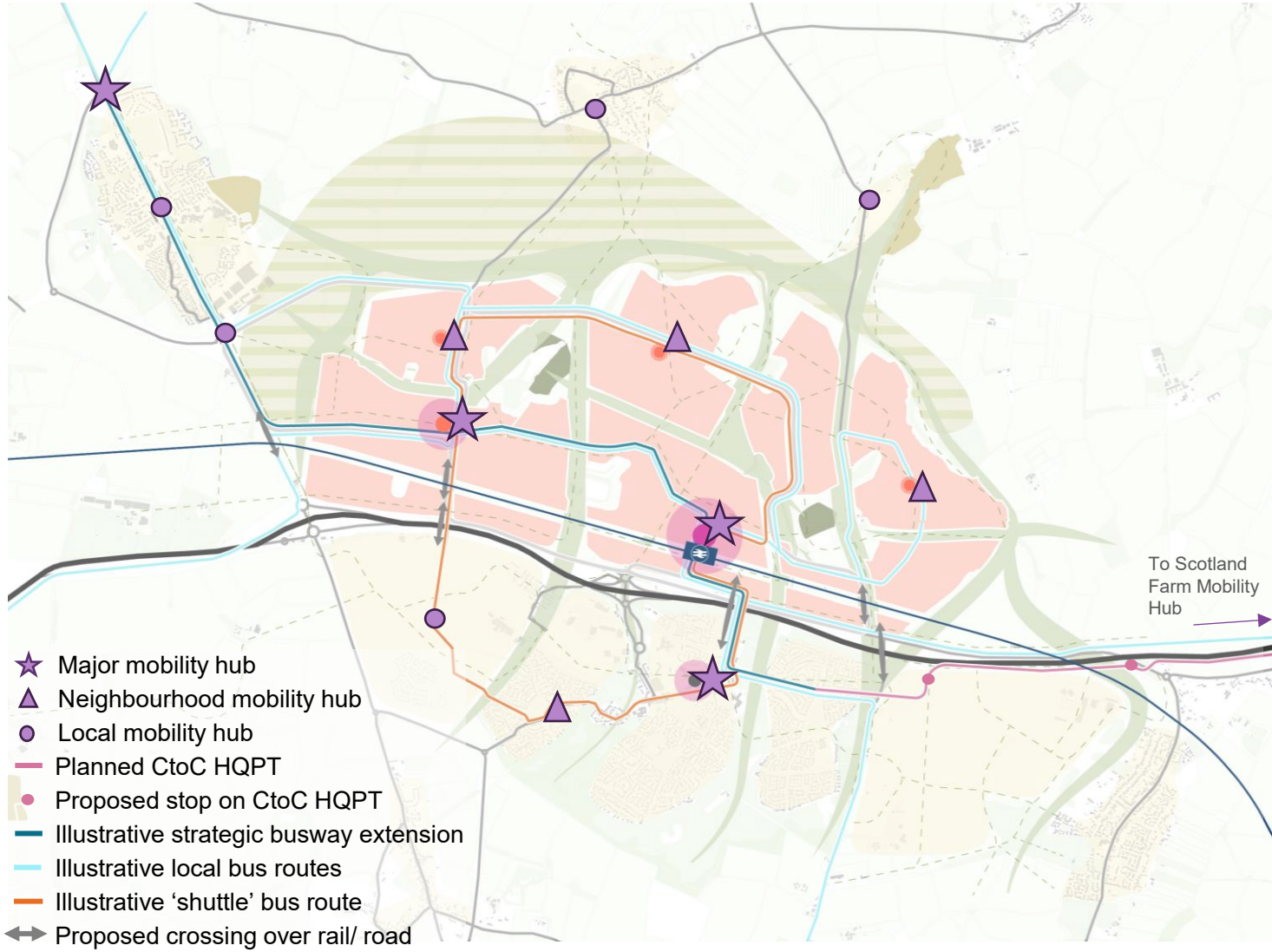
CtoC HQPT corridor and Mobility Hubs

The Stage 1 Transport Strategy established a **hierarchy of mobility hubs** to support the CtoC HQPT and wider public transport network across Cambourne and surrounding settlements. These hubs are intended to provide seamless interchange between walking, cycling and public transport, with scale and facilities responding to local context and role.

The hierarchy comprises:

- **Local mobility hubs**, providing basic facilities and connections to the wider network;
- **Neighbourhood mobility hubs**, located at key centres and integrating with active travel routes to support local access; and
- **Major mobility hubs**, including the Cambourne EWR station and existing Cambourne, acting as key interchange points within the network.

This approach remains unchanged at Stage 2 and continues to inform the emerging Spatial Framework, with further detail to be refined as proposals progress and delivery and phasing are better defined.



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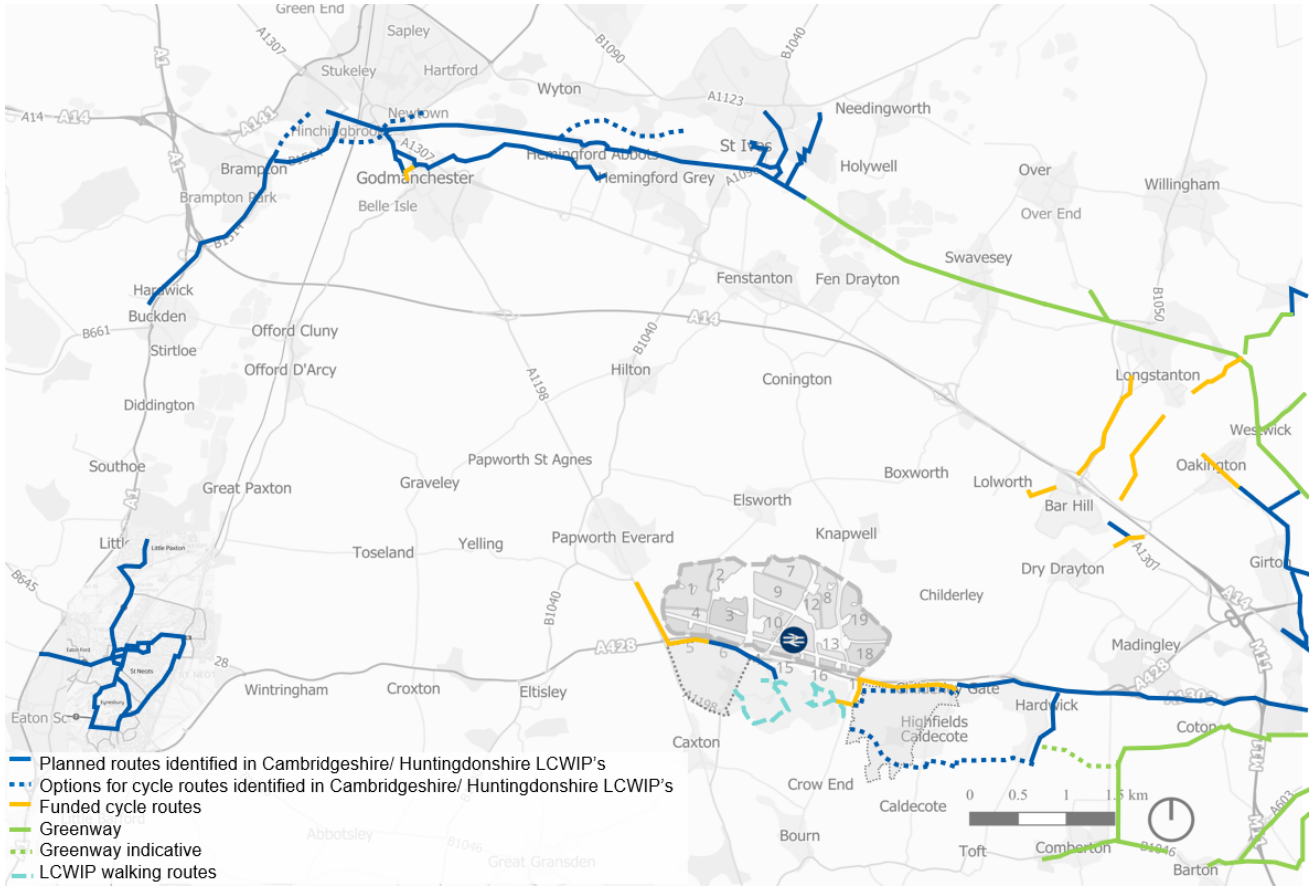
Cambourne Growth Strategy Programme

Transport strategy– Active travel

Planned walking and cycling connections

Building on Stage 1, a wider review of existing and planned walking and cycling infrastructure was undertaken. This focused on the Local Cycling and Walking Infrastructure Plan (LCWIP) routes identified by Cambridgeshire County Council which set out priority corridors for investment in active travel. The mapped LCWIP network identifies several strategic and local routes that would improve cycling and walking connectivity within Cambourne and nearby settlements.

While the LCWIP routes deliver key links, there are locations where routes are indirect or incomplete and do not fully deliver a connected active travel network to and from Cambourne. The proposed network therefore identifies a series of additional strategic and local links to provide direct, coherent, attractive safe and comfortable routes between Cambourne and key destinations. Some of these routes have the potential to interact with the Strategic Road Network and are therefore indicative at this stage, with detailed design and delivery requiring further assessment and coordination with National Highways.



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Cambourne Growth Strategy Programme

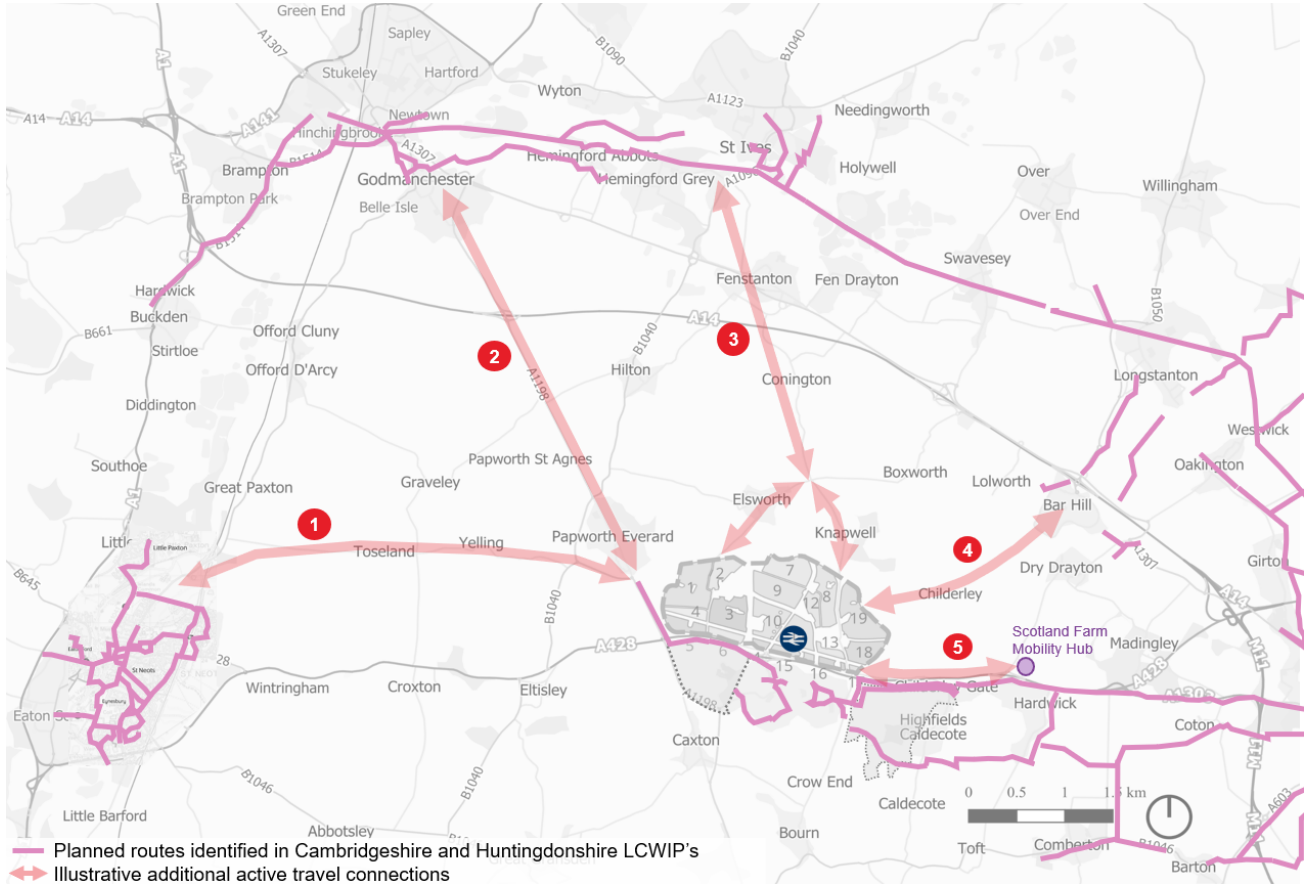
Transport strategy – Active travel

Potential additional cycle connections

To address these gaps, four potential additional strategic cycle connections have been identified, alongside the planned connection to Scotland Farm Mobility Hub. These routes are intended to complement the planned LCWIP network by extending and connecting existing corridors, rather than duplicating them. Together, they would strengthen north–south and east–west connectivity, improve access to Cambourne North, and create clearer, more legible links to neighbouring settlements and regional destinations.

The proposed connections also seek to integrate with other planned infrastructure, such as the Caxton Gibbet junction improvements and existing and illustrative green infrastructure. Where possible, the routes align with desire lines identified through stakeholder engagement and reflect opportunities to use quieter roads, greenways or segregated infrastructure to maximise comfort and safety. Routes will require detailed coordination with National Highways.

Overall, the LCWIP routes and the additional proposed cycle connections form a coherent, connected active travel network. This network is intended to support everyday local trips, provide realistic alternatives to the private car for longer journeys where feasible, and ensure that Cambourne North, the EWR station, and CtoC HQPT corridor are accessible by high-quality walking and cycling routes from both existing Cambourne and surrounding villages.



1. Potential strategic route to St Neots
2. Potential strategic route to Huntingdon along A1198
3. Potential strategic route to St Ives via Elsworth / Knapwell
4. Potential strategic route to Bar Hill via Childerley
5. Active travel connection to Scotland Farm mobility hub

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Cambourne Growth Strategy Programme

Transport strategy – Highway access

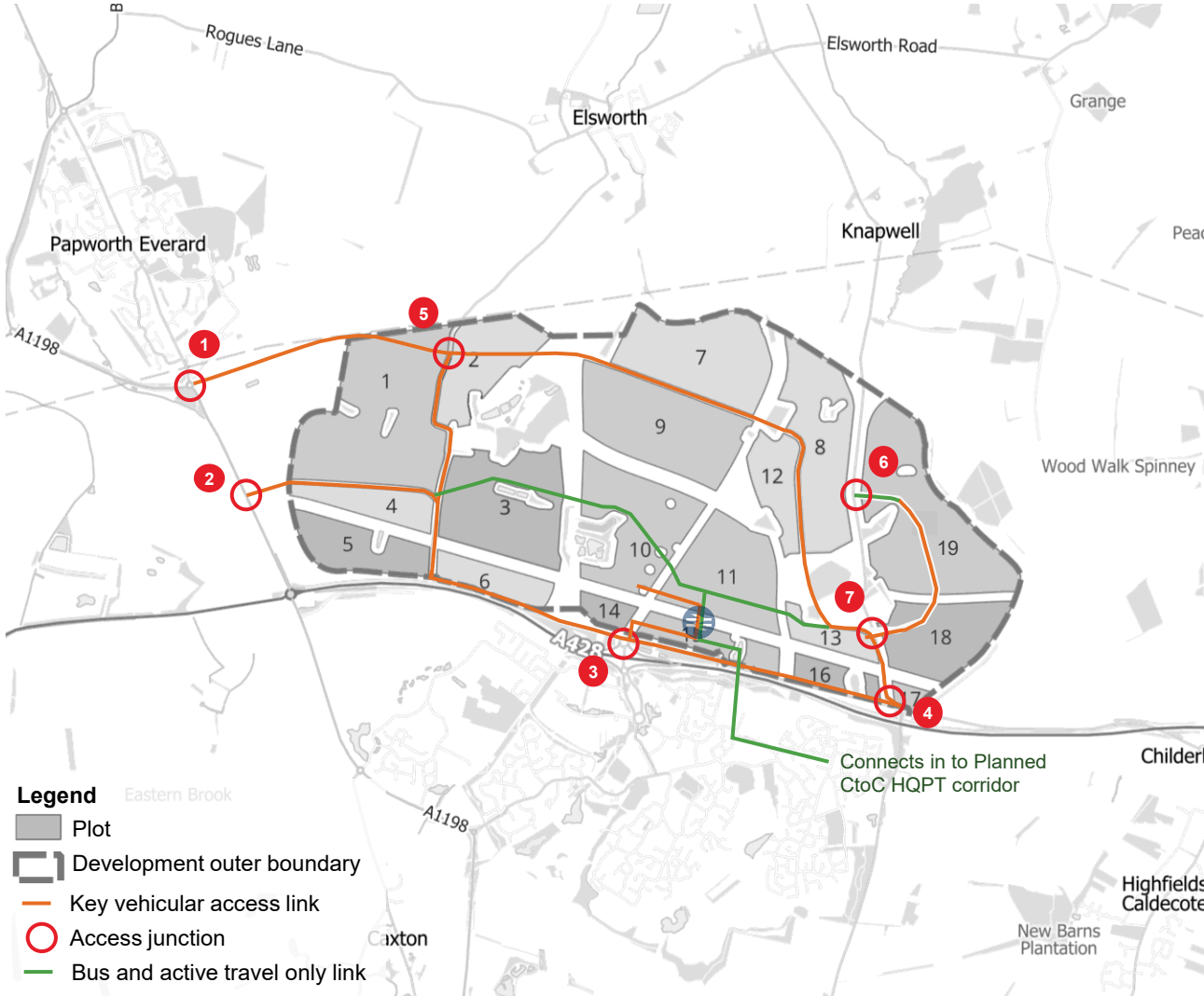
Access junction and internal routes

In line with the Stage 1 spatial framework, four main access junctions onto the strategic highway network have been identified to serve Cambourne North with two accesses via A1198 (junctions 1 and 2), direct access to the A428 (junction 3) and via existing connections to St Neots Road at junction 4 and on to Broadway.

Junctions 5, 6 and 7 should include modal filters and other movement restrictions to limit or prevent rat-running through villages to the north. This creates opportunity for attractive active travel routes to be provided through the villages of Elsworth and Knapwell **with non-local traffic** directed to strategic routes on A1198 and A428.

Within Cambourne North, internal routes for general traffic minimise crossing of key ecological corridors whilst maintaining access to plots with a bus and active travel only corridor running through the centre of the site to help make trips by sustainable modes attractive and convenient.

Access junctions and internal routes are indicative and subject to design development and the completion of detailed modelling.



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Transport strategy – Car Parking

Cambourne Growth Strategy Programme

Overview

Controlling the provision of car parking at Cambourne North will be a critical lever in shaping travel behaviour. A vision-led, evidence-based approach is required, which will be key to achieving the transport vision enabling sustainably walkable neighbourhoods to be delivered.

Overarching Policy - Vision-led Parking Provision Standards

The level of car parking provision should be determined through alignment with the transport strategy principles, aligning with a vision-led, context-sensitive approach, taking account of the varying connectivity by walking, cycling and public transport across the site and the need to minimise car dependency.

The need for car parking should be robustly demonstrated through a Transport Assessment and how this contributes towards maximising sustainable mode shares, the following indicative residential guidelines should be followed:

- In the most connected areas with **high accessibility** to public transport options (such as in the vicinity of the EWR station, CtoC stops and mobility hubs parking should seek to be a maximum of 0.5 spaces per dwelling.
- For areas of **moderate accessibility**: a maximum of 1.5 spaces per dwelling
- For areas of **low accessibility:** maximum of 2.5 spaces per dwelling

Car Parking Design and Layout

The design and layout of Parking should prioritise streets as places and focus on delivering public realm, so it should be located away from primary frontages and provided In courts, car barns, or consolidated structures. Parking will be designed and located to support high quality place-making, ensuring that streets are people-focused rather than vehicle-dominated.

Phasing and Futureproofing

Car parking provision should have consideration to the future phasing and delivery of public transport services. Development proposals should avoid over-provision in early phases where this would lock in car dependency and unsustainable travel behaviours.

Car parking should also be capable of being repurposed over time through such mechanisms as being converted to development plots, green space, or mobility hubs.

Where residential car parking is provided, spaces should include active EV charging provision and in communal and employment settings, parking should include a significant proportion of active charge points and passive provision for future expansion.

Proposals should provide appropriate disabled parking in accordance with national guidance.

Management and Controls

Proposals must include a Parking Management Plan covering, on-street parking controls, resident parking permits mechanisms for allocation and monitoring of spaces alongside robust enforcement strategies that prevent overspill parking into surrounding communities, such as existing Cambourne. Enable adjustment of parking supply over time.

To enable adjustment of parking supply over time, monitoring and management of utilisation will be required to periodically review parking provision where appropriate recommend revised provision, which should be controlled through planning obligations or conditions.

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Cambourne Growth Strategy Programme

Transport strategy – Construction access

Recommended construction access routes for Cambourne North

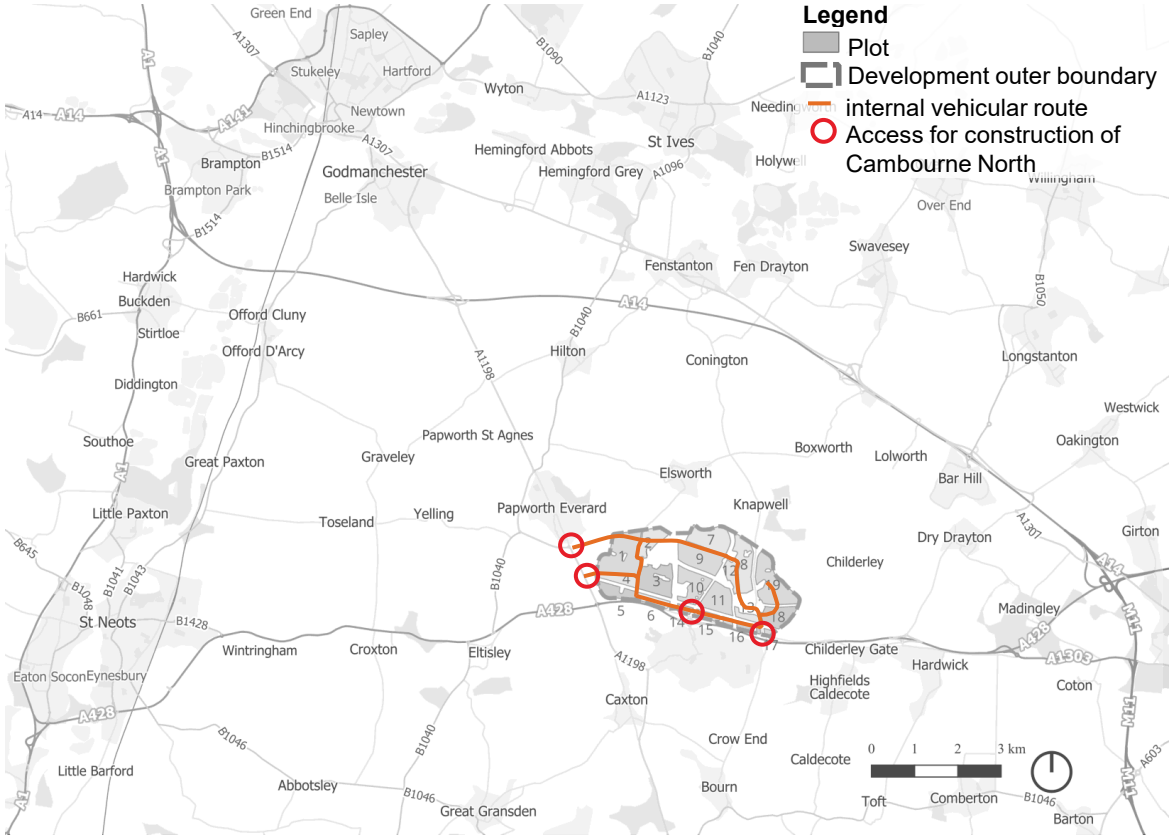
Construction vehicles travelling to and from the Cambourne North site will follow designated routes using the strategic road network to minimise their impact on local communities.

Vehicles approaching from the south and east will use the A428 dual carriageway, exiting at the Caxton Gibbet roundabout before heading north on the A1198 towards the site. Vehicles arriving from the north will travel south along the A1198 directly to the site access.

By keeping construction traffic on these major routes, the aim is to avoid HGV movements through Cambourne village, surrounding settlements, and unsuitable local roads. Drivers will be required to follow approved routes at all times, and signage will be provided at key points to guide vehicles.

As more formal planning is undertaken, local policies should be complied with and a formal Demolition and Construction Environmental Management Plan (DCEMP) or similar will be required to secure agreements around construction vehicle routing.

Where relevant, National Highways will be engaged in the preparation of the Construction Traffic Management Plan (CTMP) to agree construction routing, manage potential impacts on the Strategic Road Network, and consider measures to avoid peak commuter periods and address any abnormal load movements.



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Cambourne Growth Strategy Programme

Transport strategy – Resilience

Managing uncertainty

The delivery of CtoC and EWR are major infrastructure moves that will be delivered in the longer-term.

To realise the opportunities they present for Cambourne North, early delivery phases must align to a clear vision for the future, but retain the flexibility to adapt and respond to design, delivery and political challenges and well as fluctuations in market confidence and potential delays.

Travel behaviours will therefore evolve as transport networks, shops, schools and other services and facilities develop over time. Early development phases will look and feel very different to later ones, but a clear vision will ensure that impacts are managed appropriately at each stage, so that the full benefits of CtoC and EWR can be captured over time.

The resilience of the A428 and wider Strategic Road Network will be a key concern for National Highways. Extended Cambourne must therefore minimise car-based trips by prioritising investment in high-quality sustainable transport networks with the capacity to support growth and reduce pressure on surrounding villages, junctions, and local roads.

More detailed transport modelling will need be undertaken to establish varying levels of development scenarios which will require differing levels of supporting transport infrastructure.

The construction of EWR and CtoC has potential to introduce additional severance over several years which also needs careful consideration with regards to railway construction access, phasing, and impact on the quality of any early phase development at Cambourne North.

The transport strategy illustrates several highway access locations with connections to the major/ strategic road network offering flexibility for construction access during the phased construction of both EWR and CtoC extension. Phased construction will therefore need careful alignment and co-operation to consider the potential for high-quality development in early phases of delivery at Cambourne North.

It is therefore important the development proposals brought forward will need to monitor and manage transport related effects and behaviours and ensure a flexible, long-term strategy is embedded to respond and manage uncertainty.

National Highways will remain engaged throughout the delivery of the programme to help ensure that the transport strategy responds appropriately to changing travel patterns, network conditions and emerging evidence, in line with the principles set out in DfT Circular 01/2022.

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Transport strategy - Monitor and manage

Cambourne Growth Strategy Programme

A flexible framework

As stated previously, any development proposals that come forward at Cambourne North are likely to be delivered over a long timeframe, which brings inherent uncertainty around the timing of supporting infrastructure, the rate and form of build-out, and the influence of other growth occurring within the local and regional context.

As such, a monitor and manage approach is proposed to form central requirement development at Cambourne North in order to maximise the effectiveness of the policies and proposals set out in this strategy and to allow it to be adjusted if future issues are identified. This reflects the principle that a monitor and manage approach is needed where outcomes will evolve over time and where mitigation should be capable of being refined in response to observed conditions, rather than being fixed entirely at plan making stage.

For Cambourne North, this means linking the phasing of development to a structured programme of monitoring and evaluation, focused in particular on traffic flows across the surrounding highway network and changes in mode share over time. Monitoring would allow the assumptions made to support this strategy to be tested as successive phases of development come forward, including in relation to the extent to which travel demand is influenced by the delivery of infrastructure such as the Cambourne to Cambridge HQPT and the EWR station. Many of the proposals and mitigation measures identified within this strategy will therefore require further refinement and investigation with GCSP, Cambridgeshire County Council, EWR and National Highways as the site progresses.

In practice, this would enable different forms of mitigation to be implemented at different points in time, with some measures brought forward if congestion increases and growth is realised more quickly than expected, and others deferred, refined or replaced where sustainable travel uptake performs better than forecast.

This is consistent with best practice and approaches where trigger points (such as a trip budget) and related mitigation requirements may be revised following monitoring, modelling and agreement through appropriate governance processes.

A monitor and manage framework for Cambourne North should therefore establish a series of development and transport triggers against which performance can be assessed at regular intervals. These triggers should not relate solely to development quantum, but also to the real-world effects of development on network performance and travel behaviour.

Where outcomes diverge from those identified within this strategy, further investigation should be undertaken to identify the most appropriate response, with priority given to measures that support the uptake of sustainable travel, and with highways interventions treated as a last resort. This would provide a robust and flexible basis for delivery, reducing uncertainty by ensuring that mitigation is both proportionate and responsive to actual conditions, while also ensuring that infrastructure provision remains aligned with the evolving role of strategic interventions such as the CtoC HQPT and rail connectivity as they become operational.

Appropriate governance and funding arrangements should be established to ensure that monitoring, review and any required mitigation measures are deliverable, enforceable and capable of being implemented when agreed trigger thresholds are reached.

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6 Strategy testing

This chapter provides a summary of transport modelling undertaken in Stage 2 to test the Transport Strategy

Transport modelling

Overview

First principles assessment
A detailed first principles trip generation assessment has been undertaken to refine and build upon the initial Stage 1 work. Using updated development assumptions and supporting evidence, the assessment has been used to inform design development, provide an independent sense-check of strategic transport modelling outputs, and establish an understanding of anticipated external vehicular trip generation and associated trip internalisation. Further details of the first principles assessment are provided in this chapter.

Strategic transport modelling
Strategic transport modelling has been undertaken using the Cambridgeshire and Peterborough Combined Authority Model (CaPCAM) to assess the transport implications of development at Cambourne North, within the context of planned regional growth up to 2046. Further details of the strategic transport modelling are provided in this chapter.

Trip budget
An initial draft trip budget for Cambourne North of 2,500 two-way vehicle trips (for the peak highway period) was set by initial modelling runs undertaken CCC. This was inferred from trips generated through previous strategic modelling exercise using the previously adopted CSRM2 model. This initial trip budget will be superseded by the outputs coming from the most recent CaPCAM model runs.

Local junction modelling
Local junction assessments have not been undertaken as part the stage 2 work. Initial access junction layouts have been identified to accommodate CaPCAM forecast demand. Off site identified through the strategic modelling.

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First principles assessment

Introduction to MoDES

MoDES, or Modal Demand & Externalisation of Settlements, is an Arup tool which forecasts multimodal travel demand at settlements, alongside the degree to which the demand is 'internal' and 'external' by different transport modes. For our initial assessment for Cambourne North, MoDES has been used to forecast **total external car trips** generated by the settlement during peak hours to assist with the initial development of the transport strategy.

Total travel demand has been forecast from the development mix (the number of dwellings, the mix of those dwellings, the number of jobs, and the scale of logistics land uses) drawing on data from the TRICS database.

Total internalisation and externalisation has been forecast based on the scale of the 'centre' and associated retail and community uses (such as schools) and the relationship between the number of jobs and the number of workers within the settlement, informed by observed relationships from Census data (2011).

Total travel demand has then been **disaggregated into multiple separate journey purposes** with reference to the National Trip End Model (NTEM) and the National Travel Survey (NTS).

A **baseline travel demand mode share for each journey purpose** has been informed by data from existing Cambourne (MSOA South Cambridgeshire 020) from NTEM and Census, as well as by the forecast level of internalisation. Census data has helped to set a locally specific baseline forecast for work journeys, and the relationship between the NTEM and NTS-derived work mode share and the locally specific Census work mode share, has been analysed to inform adjustments to the mode shares for other journey purposes. This results in the creation of a site-specific baseline mode share and outturn number of trips. The resulting baseline forecast of the number of external car trips generated by development Cambourne North was validated against surveys of 19 existing settlements, which allowed a confirmation and benchmarking that gives confidence of the MoDES base trip forecasts.

A **vision-based travel demand mode share for each journey purpose** is determined with reference to different land use and policy scenarios, as described overleaf. Propensity to walk is derived from the shape and size of the development, alongside the distance between each part of the development and the 'centre', drawing on relationships derived from the NTS. Rather than assuming a monocentric urban form, this was calculated separately for two large-scale neighbourhoods in Cambourne North (the western plots 1-6 and eastern plots 7-19), with the weighted average used to reflect walkability for the entire settlement. Propensity to travel by car is defined by the residual trips not made by other modes.

The forecast **internalised demand from resident workers** is aligned to the forecast internalised demand to jobs within the settlement to ensure balanced 'trip ends'.

Internalisation and externalisation by purpose and mode is forecast based on the anticipated mix of uses within the settlement, the level of physical and operational transport infrastructure provided for each mode within and beyond the settlement and always controlling to total internalisation and externalisation forecast at the start of the forecast process.

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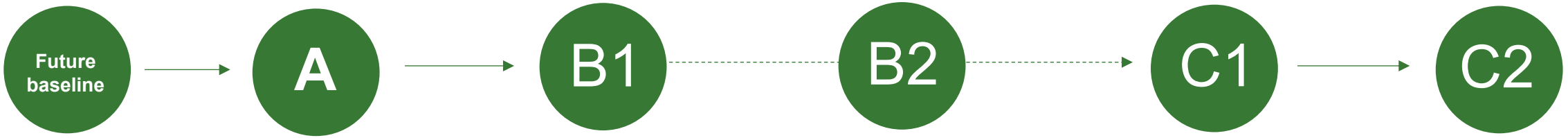
Cambourne Growth Strategy Programme

First principles assessment

MoDES vision-led scenarios



Future baseline

As described in the previous slide, a future baseline models the new settlement of Cambourne North without the introduction of new public transport infrastructure. As such, physical settlement characteristics reflect those of Cambourne North, yet with the prevailing travel patterns of Existing Cambourne. This accounts for the settlement's expected number of dwellings, jobs, and schools, alongside the fact that all neighbourhoods are walkable.

Future baseline with public transport enhancements

Scenario A models Cambourne North with 'natural' travel patterns arising from the illustrative settlement mix, the proposed settlement shape, and the proposed and illustrative public transport infrastructure (EWR, CtoC, greater local bus provision), but without policy interventions to discourage car travel.

This draws on Ely and Sawston as benchmark locations.

Trip end restriction at Cambridge

Scenario B1 builds on Scenario A by adding the effect of possible regional transport policy interventions to restrict commuter car driver trip ends to/from Cambridge, driving a shift to the proposed public transport infrastructure. Interventions could include non-residential parking restraint in Cambridge or road user charging.

Resident mode share was calculated by reducing car trips to Cambridge by 50%, considering origin-destination Census patterns. This draws on Kidlington as a benchmark.

Inward employee mode share is shifted compared with Scenario A through the application of non-residential parking restraint in Cambourne.

Enhanced trip end restriction at Cambridge

Scenario B2 extends Scenario B1 by excluding 100% of resident commuter car trips to/from Cambridge, as per 2011 Census origin-destination patterns. This effectively doubles the restraint applied in Scenario B1. It also doubles the inward employee trip restraint compared with Scenario B1.

This degree of restraint/shift extends beyond observed benchmarks and is unlikely to be realistic in terms of a simple shift, but equivalent outcomes may be achievable through a combination of ambitious regional transport and spatial planning policies, beyond what has been achieved elsewhere previously.

Shift in commute distribution to Cambridge

Scenario C1 builds on Scenario B1 by adding the effect of possible regional spatial planning policy interventions in the Cambridge area to redistribute work locations for resident commuters. Interventions could include higher jobs growth compared with households in Cambridge.

Total resident commuter trips to Cambridge are assumed to increase by 30% compared with Scenario B1, as a 'reasonable judgement'.

Employee mode share is unchanged from Scenario B1.

Shift in commute distribution to Cambridge + Tempsford / EWR westward

Scenario C2 builds on Scenario C1 by adding the effect of possible regional spatial planning policy interventions elsewhere on the EWR corridor to redistribute work locations for resident commuters.

This assumes significant jobs growth to the west of Cambourne accessible by rail.

Total resident commuter trips to Tempsford or EWR westward are assumed to increase to half of the number of rail trips to Cambridge in Scenario C1, all of which are made by rail, as a 'reasonable judgement'.

Employee mode share is unchanged from Scenario B1.

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Cambourne Growth Strategy Programme

First principles assessment

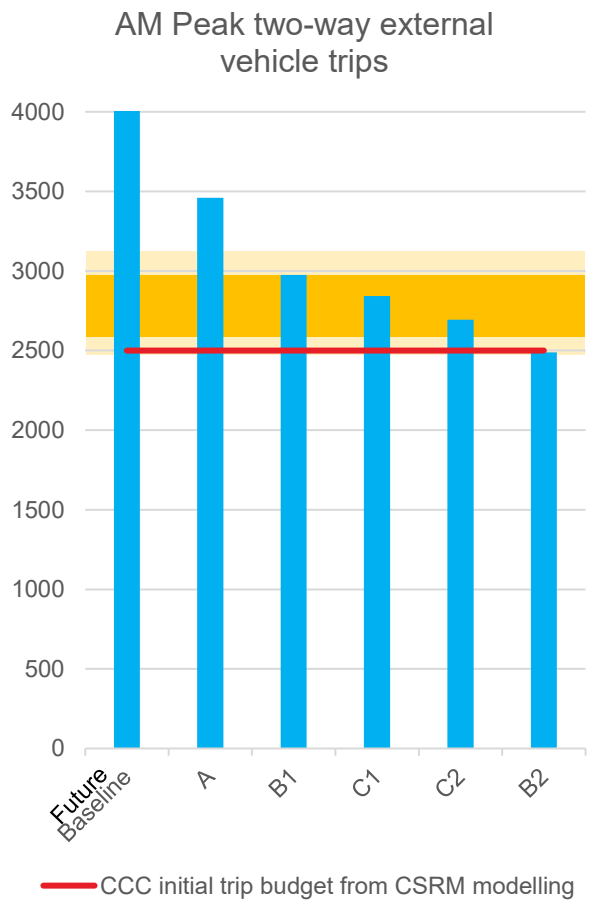
MoDES summary of findings

The first principles assessment shows one combination of measures which could be applied to achieve the initial trip budget identified for the stage 1 spatial framework based on adjustments to existing travel patters. It should be recognised that different combinations of measures could be applied and there will likely significant changes to future travel patterns resulting from the delivery of EWR and associated large scale development in Cambridge to the east, and stations to the west including at the proposed new town at Tempsford.

A range of 2,700-2,900 external car trips represents a credible and achievable number of external car trips from Cambourne North which reflects reference benchmarks, if supported realistic external policy interventions enabling 'good growth'.

Note that the external car trips which are presented here relate to Cambourne North only. Some of these external trips are to/from existing Cambourne and as such some trips will have very limited spatial impact.

A demand of 2,500 is within the scope of possible outcomes from the central forecasts presented for Scenario B1, C1 and C2. This will be subject to the level of ambition contained within regional transport and land use policy interventions. Such policies may also affect not only new development but also existing journeys, particularly within existing Cambourne with potential to create headroom in the highway network for additional trips.



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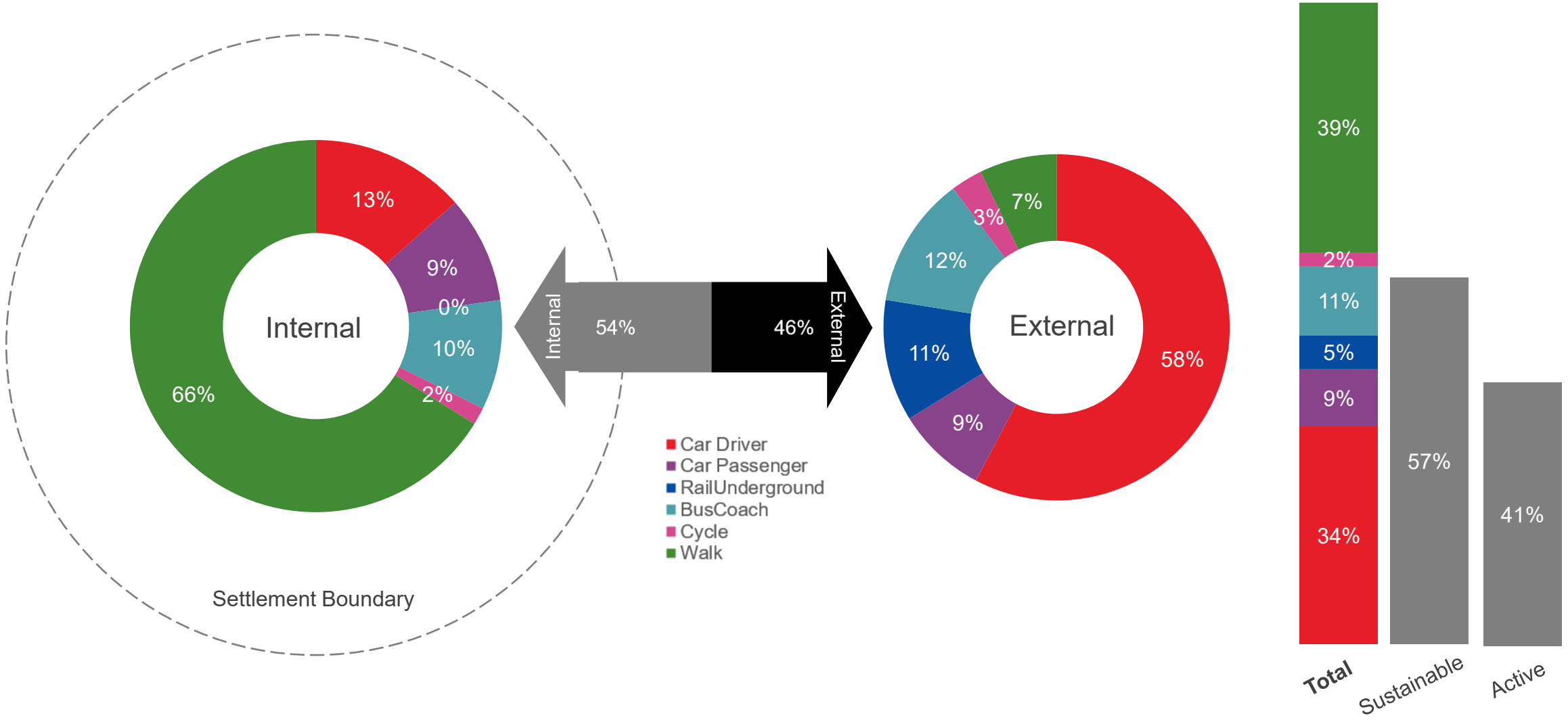
Cambourne Growth Strategy Programme

First principles assessment

MoDES future baseline resident & employee mode shares - AM peak



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Cambourne Growth Strategy Programme

Strategic transport modelling

CaPCAM

The **Cambridgeshire and Peterborough Combined Authority Model** (CaPCAM) is a transport planning tool developed by Cambridgeshire County Council (CCC) to help decision-makers understand how people travel across the Cambridgeshire and Peterborough region. It **simulates travel behaviour** for all major modes of transport — including car, bus, rail, walking, and cycling — so that proposed changes to roads, public transport services, housing developments, or transport policies can be tested before they are implemented. The model covers the entire Combined Authority area, with particular detail for Cambridge, Peterborough, and key strategic corridors, and represents a typical weekday in 2023.

CaPCAM draws on a **wide range of real-world data** to build an accurate picture of how people travel today. These include mobile phone travel data, traffic counts, public transport timetables and passenger numbers, Census population and employment figures, and national travel survey statistics. The model also accounts for practical factors that influence travel choices, such as parking availability and charges, public transport fares, road congestion, and the quality of walking and cycling routes.

The model produces **forecasts of travel demand** and traffic flows across the region's road and public transport networks. This allows planners to assess the likely effects of new infrastructure schemes, housing or commercial developments, changes in parking policy, or improvements to bus and rail services. It also provides information on journey times, mode shares (i.e. the proportion of journeys made by car, bus, rail, walking, or cycling), and can feed into wider assessments of carbon emissions and transport sustainability.

The CaPCAM **2023 baseline** represents a typical working weekday in spring 2023, chosen to reflect post-Covid travel patterns across Cambridgeshire and Peterborough. It includes the region's full road network, all scheduled bus and rail services, Park & Ride sites, walking and cycling routes, parking charges and capacity constraints, and population and employment data at a local level — all **calibrated against real-world data including** traffic counts, passenger numbers, and journey times to ensure it provides a reliable foundation for testing future transport schemes, development proposals, and policy changes.

How is CaPCAM being used?
CaPCAM is being used to assess the **transport impacts of Cambourne North** to **inform the development of a package of mitigation** to align with a trip budget identified by CCC to demonstrate how development at Cambourne North can come forward without severe impacts on future transport networks with a focus on weekday peak hours.

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Cambourne Growth Strategy Programme

Strategic transport modelling

CaPCAM – future year assessments

The CaPCAM 2046 Reference Case represents the region's expected future transport conditions, combining planned housing and employment growth from Local Plan allocations across six planning authorities along with committed transport infrastructure.

- Cambridge City
- South Cambridgeshire
- East Cambridgeshire
- Huntingdonshire
- Fenland
- Peterborough City

On the demand side, it includes around 53,700 new dwellings and 54,300 new jobs drawn from each local authority's development pipeline — only sites rated "near certain" or "more than likely" are included - in line with guidance set out by DfT - , along with windfall allowances, meaning growth exceeds national forecasts.

On the supply side, the Reference Case includes over 40 committed transport schemes: major highway improvements such as the A428 Black Cat to Caxton Gibbet dualling and the A47 Wansford to Sutton dualling; new rail infrastructure including Cambridge South station and the relocated Waterbeach station; public transport and Park & Ride schemes such as Cambourne to Cambridge (CtoC) with a new high-frequency bus route between Scotland Farm and the city centre, the Waterbeach to Cambridge North busway, Cambridge South West Travel Hub, and Eastern Access; plus a network of Greenway cycling routes connecting surrounding villages to Cambridge. East West Rail is not included in the Reference Case scenario.

The model forecasts increased car travel demand driven by lower vehicle operating costs and higher public transport fares (including removal of the bus fare cap), with longer average car trip lengths, reduced bus patronage overall, and significant rail growth — particularly at Peterborough, March, and the new Cambridge South station.

CaPCAM 2046 Cambourne North 'Do Nothing' Scenario

The CaPCAM 2046 reference case has been adapted as the future baseline for assessment of development at Cambourne North by:

- Removing any pre-existing growth assumptions at Cambourne North,
- Adding Cambourne to Cambridge High Quality Public Transport corridor (CtoC HQPT) as enabling infrastructure, and
- Adding East West Rail proposals as an essential catalyst for development at Cambourne North.

It should be noted that the inclusion of Huntingdonshire, Fenland and Peterborough City Local Plan growth is not directly related to the allocation of Cambourne North within GCSP and so inclusion of this wider growth is considered to overstate background traffic growth demand and would be better suited to consider these wider impacts through sensitivity testing.

Similarly, Cambourne North is one allocation within South Cambridgeshire forming part of the GCSP Local Plan allocations. As such, assessment of Cambourne North over and above, rather than part of, the assessment of local plan sites is considered to overstate the impacts specific to Cambourne North.

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Cambourne Growth Strategy Programme

Strategic transport modelling

CaPCAM – future year assessments

CaPCAM 2046 Cambourne North 'Do Minimum' Scenario
The 'Do Minimum' scenario builds on the 'Do Nothing' scenario by including the Cambourne North stage 1 spatial framework development schedule (as the Stage 2 schedule was not fixed at the time of model development).

Highway access junctions at Cambourne North were 'unconstrained' in this scenario to highlight where vehicular traffic wants to route without constraint. This represents the starting point for the development of a package of interventions to mitigate localised and wider impacts and inform access junction layouts.

CaPCAM 2046 Cambourne North 'Do Something' Scenarios
Three incremental packages of interventions have been developed through incremental testing through CaPCAM 'Do Something' scenarios. This has allowed consideration of the model response in each iteration to inform information refinement.

Further details of the three 'Do Something' scenarios are provided in the separate *Cambourne North Stage 2 transport modelling report.*

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Cambourne Growth Strategy Programme

Transport modelling

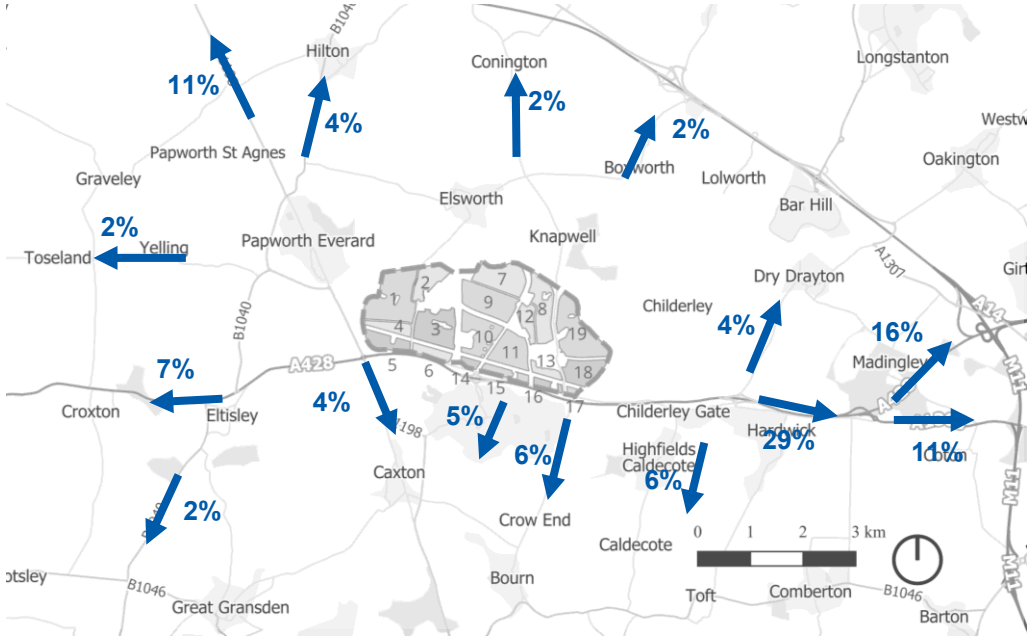
CaPCAM output summary – Highway trip assignment

DS2 AM Peak inbound and outbound

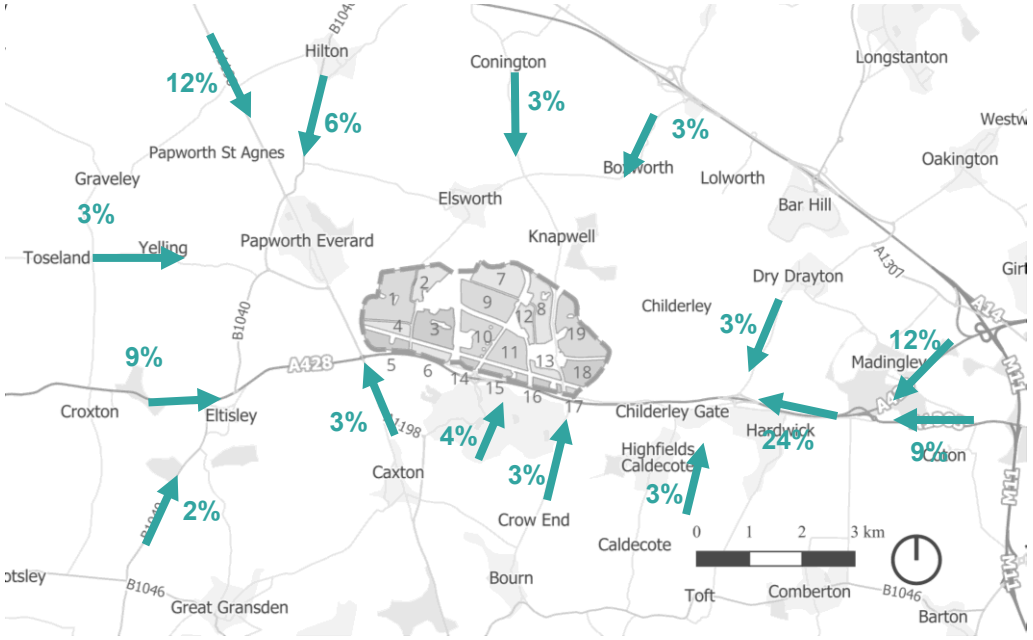
Further details of the three ‘Do Something’ scenarios are provided in the separate *Cambourne North Stage 2 transport modelling report.*

Note: All results are WIP at this stage provided for information only, comments welcome

DS2 AM Peak outbound



DS2 AM Peak inbound



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Cambourne Growth Strategy Programme

Transport modelling

CaPCAM output summary – traffic flows

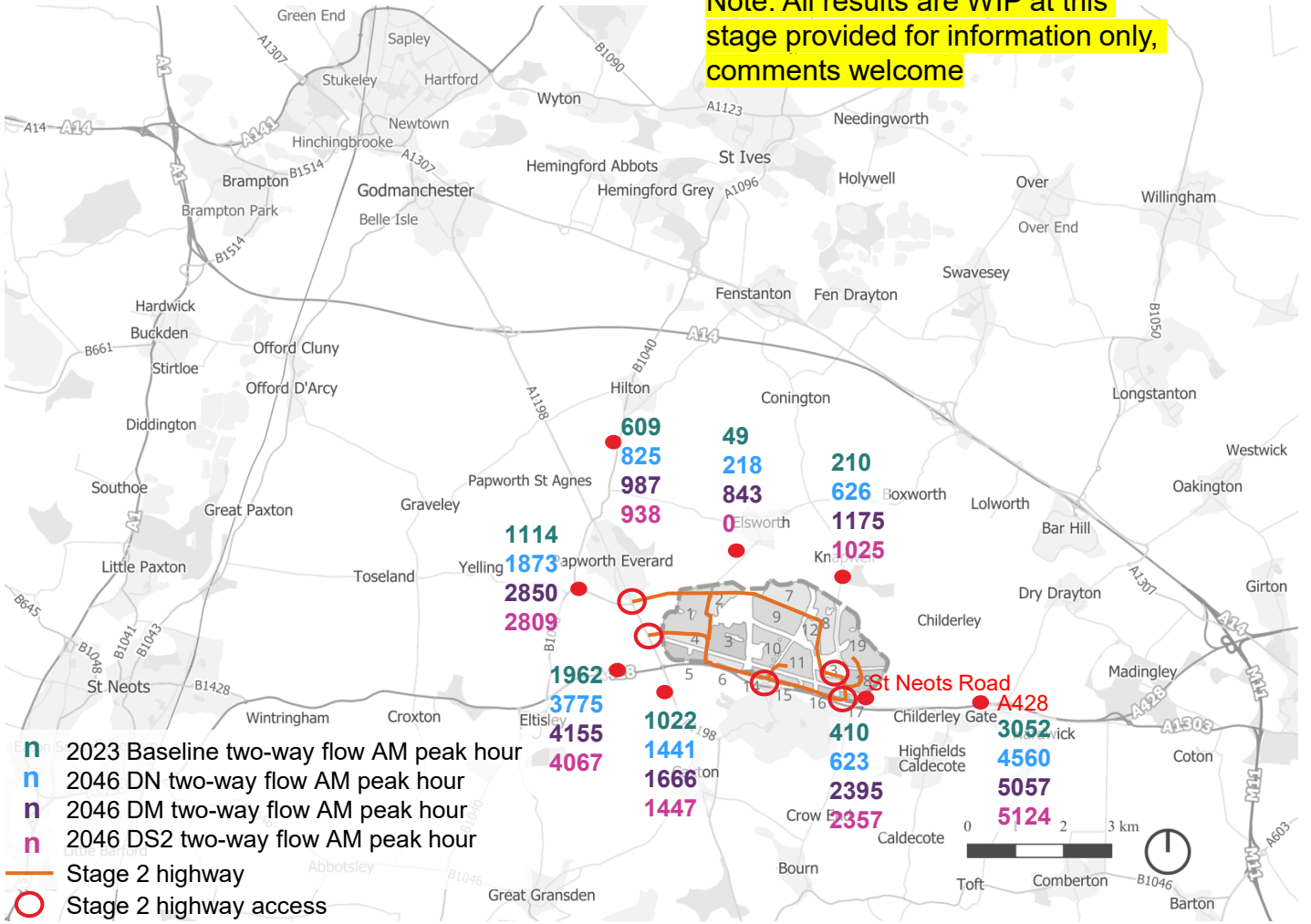
CaPCAM output summary:

- 2023 Baseline
- 2046 DN
- 2046 DM
- 2046 DS2 [to be replaced with DS3 outputs when available]

- Early outputs show that CN external car trips modelled in CaPCAM are significantly higher than the first principles assessment and initial trip budget identified in Stage 1. Final reporting will present 2023 baseline, 2046 DN and 2046 DS3 with trip generation in line with the revised initial trip budget.

Further details of the three 'Do Something' scenarios are provided in the separate *Cambourne North Stage 2 transport modelling report.*

Note: All results are WIP at this stage provided for information only, comments welcome



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Cambourne Growth Strategy Programme

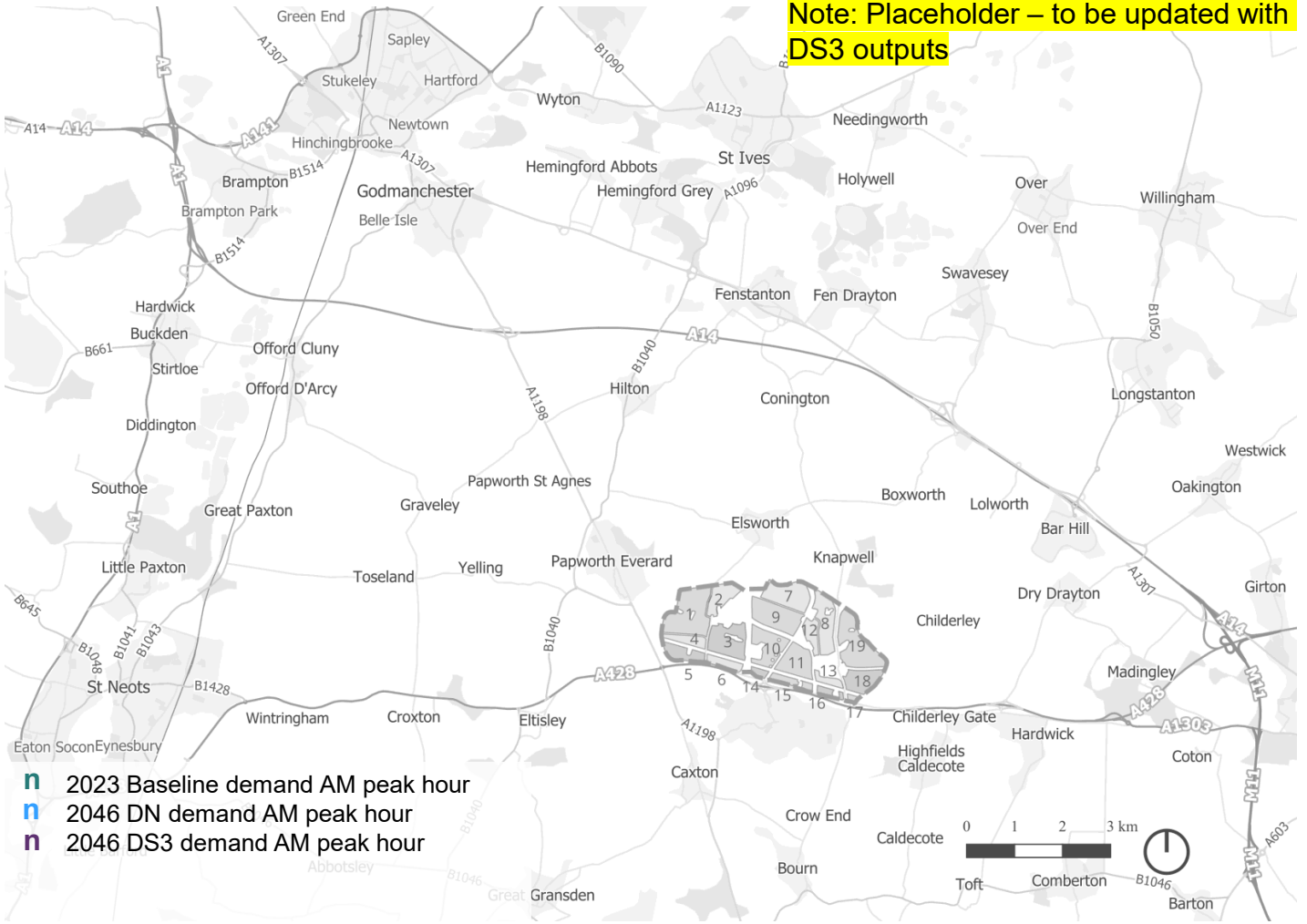
Transport modelling

CaPCAM output summary – PT demand

CaPCAM output summary:
- 2023 Baseline
- 2046 DN
- 2046 DS [awaiting DS3 outputs]

Further details of the three 'Do Something' scenarios are provided in the separate *Cambourne North Stage 2 transport modelling report.*

Note: Placeholder – to be updated with DS3 outputs



n 2023 Baseline demand AM peak hour
n 2046 DN demand AM peak hour
n 2046 DS3 demand AM peak hour

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Cambourne Growth Strategy Programme

Initial trip budget

For consideration going forward

Note: to be reviewed/ updated once DS3 outputs are available.

The CaPCAM strategic transport modelling shows that I the DS2 modelled scenario the highway network can accommodate peak hour two-way trip generation of c.7,000 vehicles at Cambourne North. However, modelling outputs show some wider network redistribution that needs to be assessed in terms of suitability for additional traffic in conjunction with local junction assessment of key junctions.

The first principles assessment demonstrates how existing travel patterns could respond to transport interventions identified for the stage 2 spatial framework at Cambourne North and incremental policy shifts at varying levels of ambition. This showed that c.4,000 peak hour two-way vehicle trips could reasonably be achieved based on the number of dwellings, jobs, and schools set out in the stage 2 spatial framework if delivered in line with walkable neighbourhood principles. This could therefore be considered as a reasonable initial trip budget for Cambourne North with potential for further refinement as the delivery programmes of key public transport interventions (CtoC and EWR) increase in certainty and wider transport policies are defined.

Further sensitivity testing and local junction assessments will be needed to refine any initial trip budget to reflect key transport interventions in each development phase at planning application stage.

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7 Proof of concept

This chapter summarises transport interventions identified in the transport strategy and associated junction performance. Further technical details of transport modelling are included within the separate Transport modelling report.

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Proof of concept

Introduction

Note: Chapter subject to ongoing transport modelling

This chapter pulls together the proposed transport interventions that support growth at Cambourne North and provides a summary at site, local and wider off-site mitigation measures as reflected in associated CaPCAM strategic transport modelling 'Do Something' scenarios.

A high-level illustrative form of junction/ junction mitigation is then identified supported by local junction assessment to demonstrate that the transport strategy is operationally achievable as appropriate for plan making but noting that the exact location/ form of junction will be subject to later confirmation and agreement at the planning application stage.

Further engagement and design development will continue to take place with EWR, National Highways and Cambridgeshire County Council to Local Plan examination.

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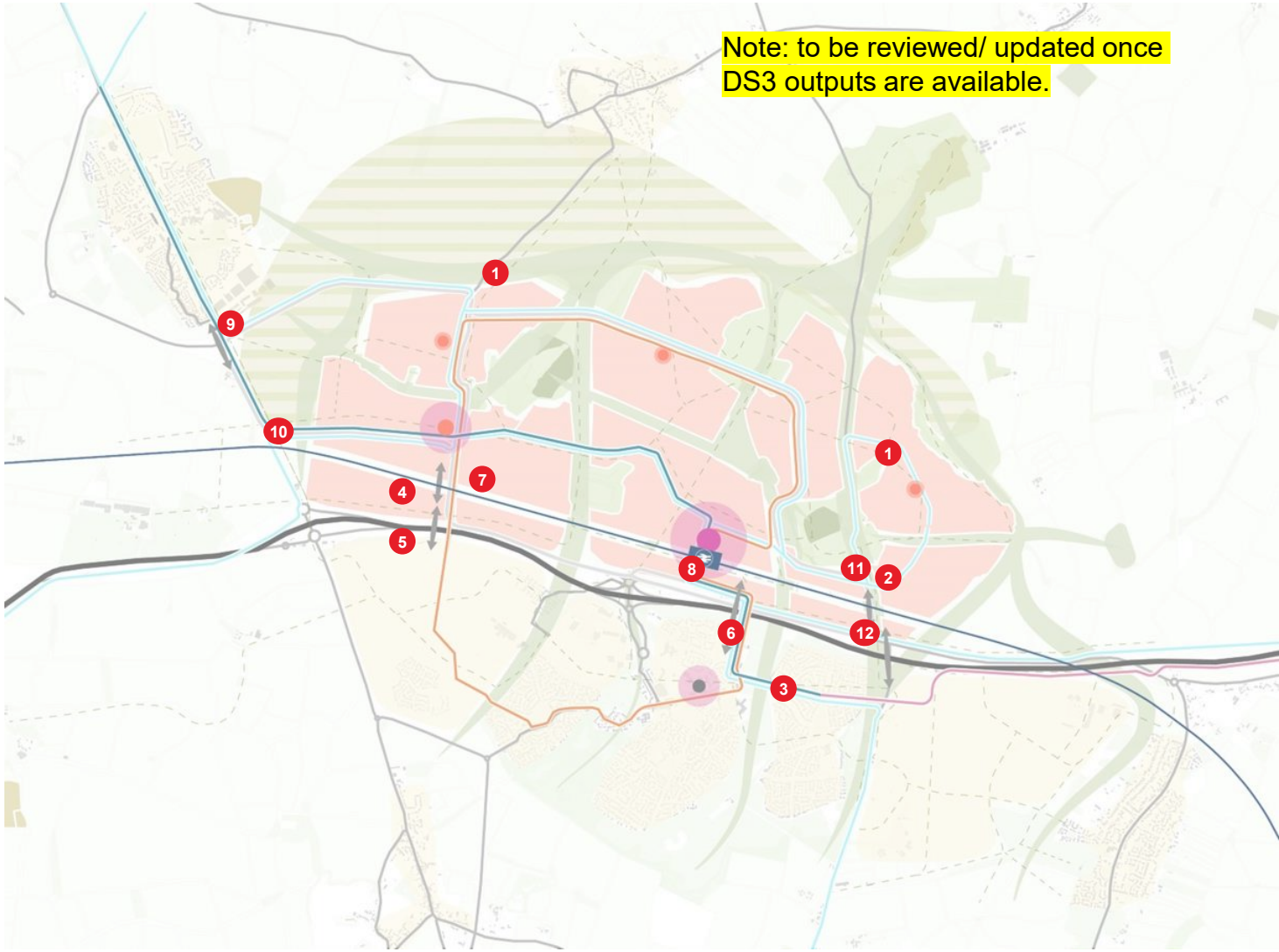
Transport interventions summary

Cambourne Growth Strategy Programme

On-site interventions

1. Modal filter on Brockley Road to Elsworth and to the east of Knapwell Road to restrict traffic through villages
2. Restricted vehicle turning movements to/from CN via Knapwell High St to the north
3. Extension of CtoC to EWR station
4. All mode crossing over EWR and then Papworth Everard
5. Ped/cycle and bus connection into Cambourne West subject to integration with Cambourne West masterplan
6. Ped/cycle and bus connection over A428
7. New bus loop between existing Cambourne, EWR station and Cambourne North
8. Ped/cycle and bus connection under EWR station with all-mode connection between Cambourne A428 junction and town centre plots to the north of EWR.
9. A1198 access roundabout
10. A1198 access signalised T junction
11. Knapwell High Street access T-junction
12. St Neots Road access T junction



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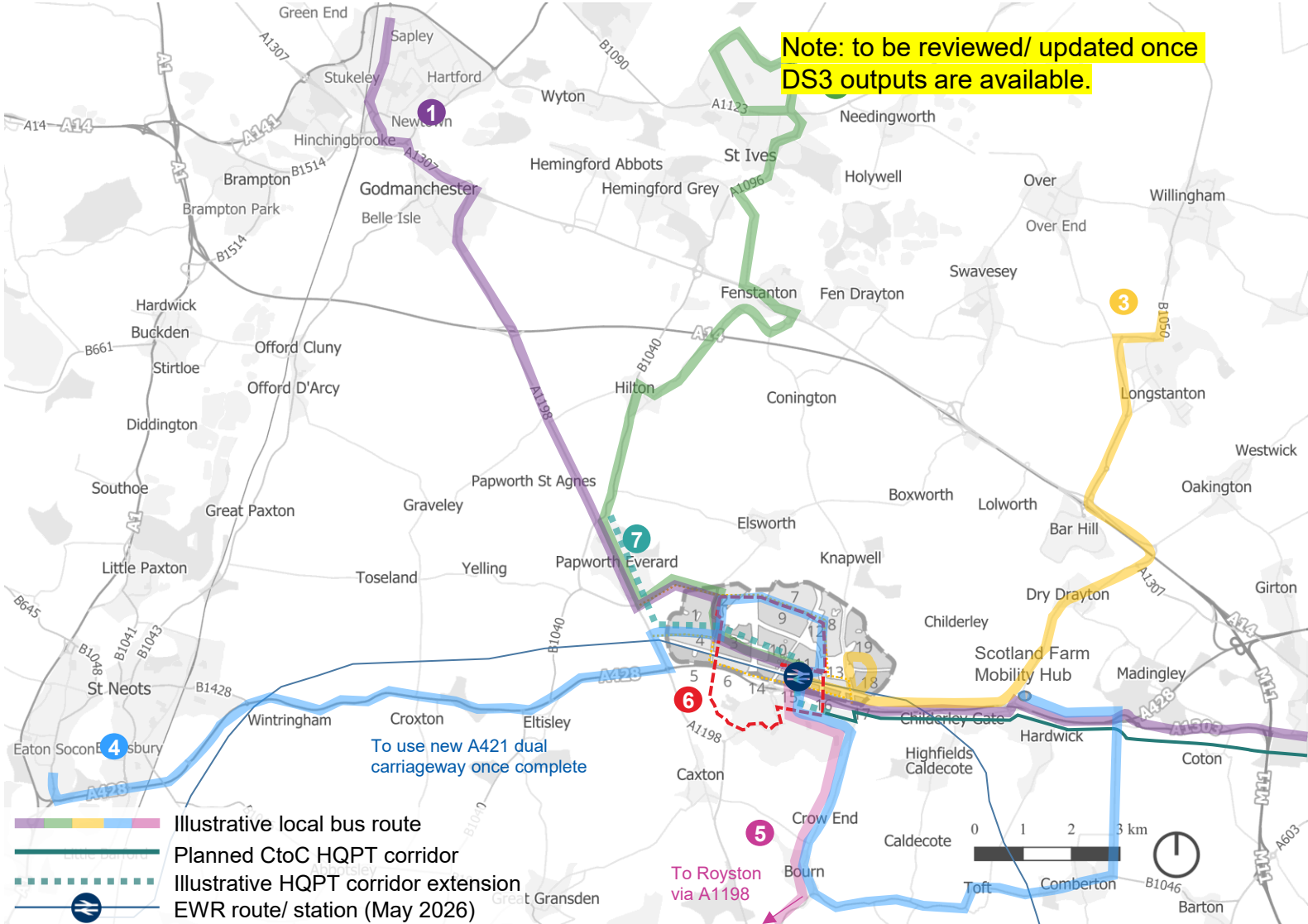
Transport interventions summary

Cambourne Growth Strategy Programme

Local interventions

1. Huntingdon to Cambridge via Cambourne North and Scotland Farm mobility hub: This route compliments existing route X2/X3. Access to Cambourne North via A1198.
2. St Ives to Cambourne North via Fenstanton, Conington, and Elsworth. This route compliments existing route 9 which runs from Huntingdon to St Ives via Elsworth, Knapwell and Boxworth but does not serve Cambourne.
3. Longstanton to Cambourne Station via Bar Hill and Dry Drayton. There are no existing routes between Longstanton and Cambourne.
4. St Neots to Scotland Farm via Cambourne North: This route compliments existing route 18/ 18A.
5. Cambourne North (EWR) to Royston on A1198 via Arrington
6. Cambourne Shuttle bus to connect existing Cambourne, Cambourne West, and Cambourne North.
7. Extension of CtoC through Cambourne North and Papworth Everard



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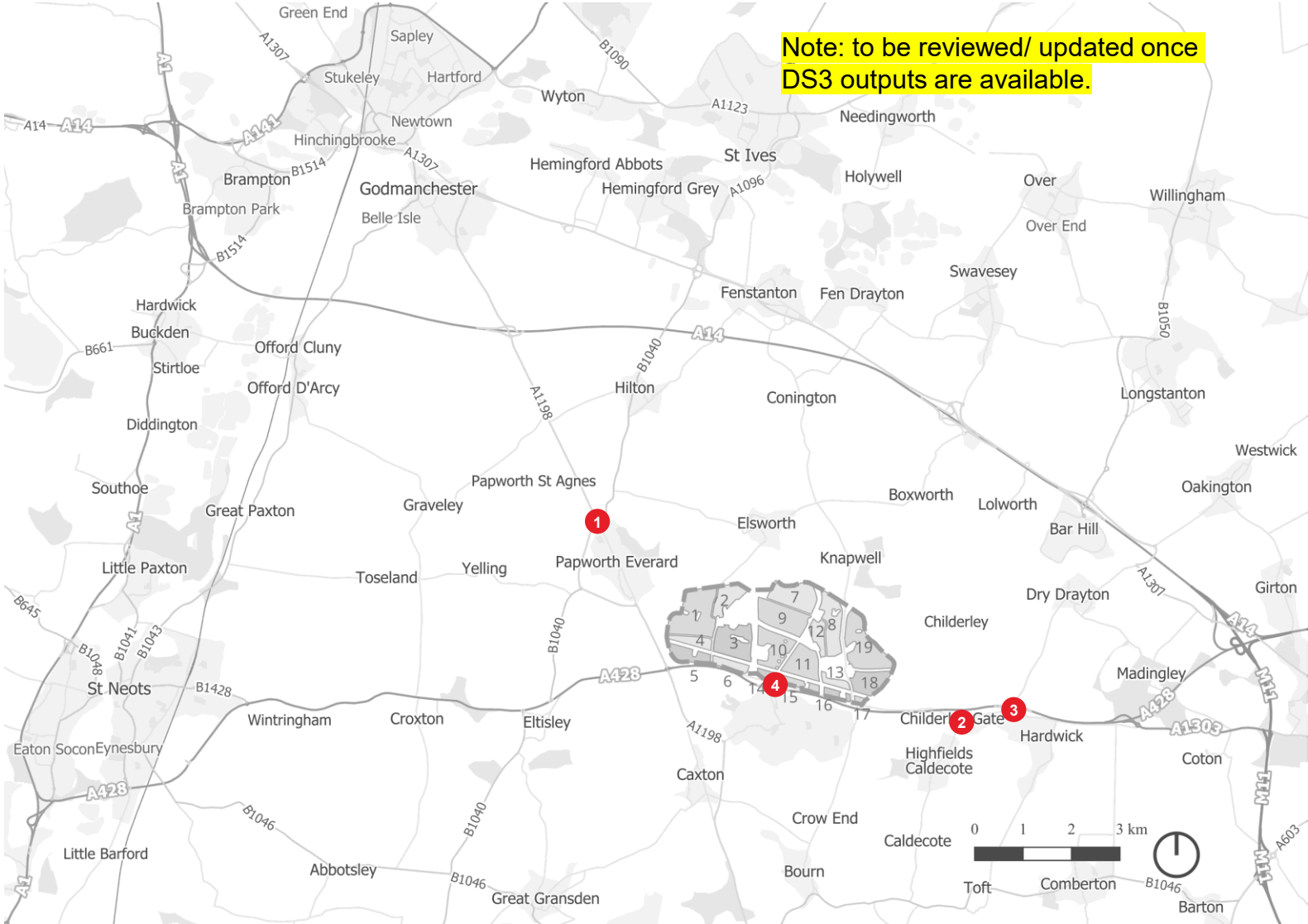
Cambourne Growth Strategy Programme

Transport interventions summary

Wider off-site highway mitigation

1. Papworth Everard roundabout
2. St Neots Rd/ Highfields Road roundabout
3. St Neots Road/ Scotland Road roundabout
4. Replacement of existing dumbbell arrangement with full grade separated junction (EWR proposal)



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Proof of concept – Highway access

Cambourne Growth Strategy Programme

Indicative form of access

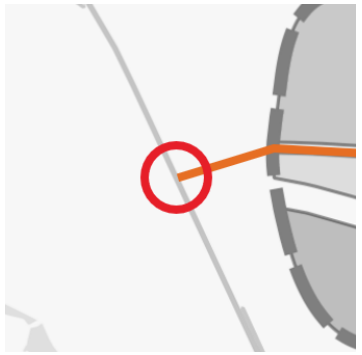
Placeholder: High level form of junction to be identified in reviewing CaPCAM DS3 model outputs with assessment to demonstrate it is operationally achievable but to note that the exact location/ form of junction will be subject to later confirmation and agreement at the planning application stage. Junctions need to align with EWR proposals and discussed with NH where appropriate.

1

Additional arm on existing roundabout.
One lane in each direction.
Roundabout is currently not signalised.

RFC:

2



Signalised
existing A

RFC:

3

St Neots Road/ A228 roundabout.

RFC:

4

Upgrade
junction t
junction b
Road and Knapwell High Street.

RFC:

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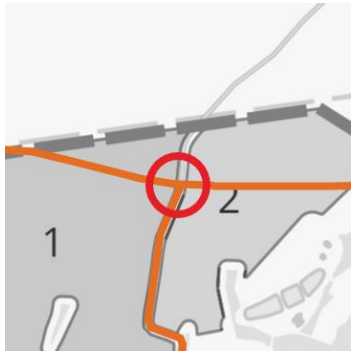
Proof of concept – Highway access

Cambourne Growth Strategy Programme

Indicative form of access

5



Signalised roundabout on existing road (to be upgraded) and new access route, two lanes in each direction.

RFC:

6

T junctio
Knapwel
lane in e

RFC:

Placeholder: High level form of junction to be identified in reviewing CaPCAM DS3 model outputs with assessment to demonstrate it is operationally achievable but to note that the exact location/ form of junction will be subject to later confirmation and agreement at the planning application stage. Junctions need to align with EWR proposals and discussed with NH where appropriate.

7

Signalised T junction with existing Knapwell high street, one lane in each direction.

RFC:

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Proof of concept — Highway mitigation

Cambourne Growth Strategy Programme

Off-site highway mitigation

1

Junction 1 description

RFC:

2

Junction 2 description

RFC:

3

Junct

RFC:

Placeholder: High level form of junction to be identified in reviewing CaPCAM DS3 model outputs with assessment to demonstrate it is operationally achievable but to note that the exact location/ form of junction will be subject to later confirmation and agreement at the planning application stage. Junctions need to align with EWR proposals and discussed with NH where appropriate.

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8 Phasing and funding

Initial consideration of phasing and funding sources to be developed further through a subsequent Infrastructure Development Plan

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Cambourne Growth Strategy Programme

Indicative funding sources and sequence

To be developed further through the Infrastructure Delivery Plan

Indicative funding sources and indicative sequencing has been identified for transport interventions identified in the Cambourne North transport strategy and associated off-site highway mitigation to inform the Infrastructure Delivery Plan as part of the Delivery Strategy to follow the stage 2 work.

This outlines:

- **Enabling** – prior to completion of CtoC extension to EWR station location and associated structures to maintain access routes during EWR construction.
- **First phase growth** – Early phase development on completion of CtoC extension and early phase development during EWR operations.
- **Second phase growth** – later stage development maximising the development opportunity Cambourne North resulting from delivery of EWR.

It should be noted that funding sources and sequencing is indicative only at this stage and will require further development to Local Plan examination and beyond.

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Cambourne Growth Strategy Programme

Indicative funding and sequence

Transport interventions summary

Ref	Name	Description	Indicative priority	Indicative funding source	Sequence
1	Works on A428	Black Cat to Caxton Gibbet upgrade (under construction by National Highways)	Essential	National Highways	Enabling
2	Internal roads and access junctions	All internal roads including bus and active travel only links and access junctions	Essential	Developer	Enabling
3	Walking, Cycling and Public Transport Bridge	HQPT extension and ped/cycle link from planned CtoC terminus at Cambourne to EWR station.	Essential	EWR/ Developer Contribution/ CIL	Enabling
4	Modal filters	Modal filters and restricted turning movements to be provided to prevent 'rat-running' through villages to the north	Essential	Developer/ Developer contribution	Enabling
5	HQPT corridor extension to EWR station	Extension of CtoC HQPT from planned terminus in existing Cambourne to EWR station	Essential	Developer/ Developer contribution/ EWR	Enabling
6	All mode crossing over EWR	All mode crossings over EWR on: • A1198 • Knapwell High Street • St Neots Rd (connection between existing dumbbell junction and Brockley Road)	Essential	EWR	Enabling
7	Pedestrian and cycle permeability under station	Active travel routes underneath the station	Essential	EWR	Enabling
8	Walking and cycling connection over A428	Active travel connection from existing Cambourne over A428 to southern side of Cambourne Station	Essential	EWR	Enabling
9	Walking, wheeling, and cycling path between the A428 and EWR	Active travel connection between Cambourne West and Cambourne Station alongside A428	Essential	EWR	Enabling

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Indicative funding and sequence

Cambourne Growth Strategy Programme

Transport interventions summary

Ref	Name	Description	Indicative priority	Indicative funding source	Sequence
10	Bus loop	Bus loop linking existing Cambourne and Cambourne West with EWR station and Cambourne North	Essential	Developer / EWR	First phase growth
11	All-mode Bridge	Highway that can accommodate Public Transport, walking and cycling routes over EWR.	Essential	Developer Contribution	First phase growth
12	All mode connection beneath EWR station	Bus and active travel connection beneath EWR station to enhance integration with all mode access provided between the Cambourne junction with A428 and plots 10 and 11 to the north of EWR.	Essential	EWR/ Developer Contribution	First phase growth
13	Mobility hubs	Facilities to provide interchange with bus services. Largest provision at EWR station.	Essential	Developer	First phase growth
14	Car parking	Car parking including surface/ Multi-storey Car Parks / Car Parking Barns	Essential	Developer	First phase growth
15	HQPT extension from EWR station to Papworth Everard	Extension of CtoC HQPT from EWR station in Cambourne North through to the northern end of Papworth Everard	Essential	Developer contribution/ EWR	Second phase growth
16	Junction improvements	Junction improvements at the following locations: • A1198/ St Ives Road/ Ermine Street roundabout • St Neots Rd/ Highfields Rd roundabout • Neots Rd/ Scotland Rd roundabout	Essential	Developer contribution	Second phase growth
17	A428 Cambourne junction improvements	Improvements to existing dumbbell arrangement	Essential	EWR/ Developer contribution	Second phase growth
18	Walking, Cycling and Public Transport Bridge	Bus and active travel bridge over A428 connecting Cambourne North to committed development at Cambourne West subject to integration with existing masterplan	Desirable	Developer Contribution	Second phase growth

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9 Policy recommendations

High-level package of infrastructure and service interventions required to support the development.

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Policy recommendations

Cambourne Growth Strategy Programme

This section sets out a high-level package of infrastructure and service interventions required to support the development. The recommendations focus on establishing a connected, accessible and sustainable transport network, while allowing for further refinement through detailed design and stakeholder coordination.

Strategic Approach

The development is expected to develop and demonstrate:

- Proposals that clearly prioritise sustainable access (walking, cycling and public transport) as the primary means of travel through the design of the transport and movement networks
- Develop proposals that provide safe and legible connections, both within the site, and externally to provide key strategic links to surrounding communities and key destinations, that are fully accessible.
- Provide appropriate levels of new highway infrastructure to support necessary vehicle movements without encouraging unnecessary car use
- Deliver sustainable transport and highway mitigation both on- and off-site, recognising the wider network context.

Core Infrastructure Provision (On-site)

The development is expected to develop and demonstrate:

- A clear road hierarchy, including primary distributor routes, secondary streets and local access roads, which prioritise sustainable movement.
- Develop deliverable access to the strategic road network, subject to agreement and approval through coordination with relevant authorities.
- A series of walking and cycling routes, including segregated provision on key corridors and connections to adjacent developments and existing networks
- Provide strategic level links that overcomes severance (e.g. A428 and EWR alignment), including multi-modal connections to enable walking, cycling and public transport access to deliver a connected Cambourne.
- A network of mobility hubs to support interchange between modes and reduce reliance on private car use
- Car parking provision managed in a way that supports sustainable movement and efficient land use.

Public Transport Integration

The development proposals are expected to deliver:

- Bus infrastructure designed into the road and street network
- Integration with existing and planned public transport networks, including connections to Cambourne, surrounding settlements and EWR
- Potential for extension or diversion of existing services, and/or introduction of new routes, subject to further discussion with operators and authorities

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Cambourne Growth Strategy Programme

Policy recommendations

Off-site Mitigation

In addition to on-site provision, a package of off-site measures will be required to mitigate impacts on the wider network. Future development proposals will need to demonstrate how and when:

- Improvements will be made to existing junctions and corridors (including the A428 and local network) to mitigate impacts of the development where required
- Enhancements to walking and cycling connections beyond the site boundary to provide the opportunity to make longer-distance trips to surrounding settlements
- Public transport improvements, including service enhancements or supporting infrastructure to support greater uptake of the local bus network.
- Network management or demand management measures, where appropriate to avoid potential and unforeseen consequences and protect the rural nature of surrounding settlements.

The scope and scale of off-site mitigation will be refined through ongoing more granular assessment of particular locations on the transport network and stakeholder engagement.

Flexibility and Phasing

The precise form, location and scale of interventions will be confirmed through subsequent stages of design and modelling. The strategy is intended to remain flexible to respond to:

- Evolving design development and refinement of the on-site land uses
- Outcomes of transport modelling and assessment
- Stakeholder input, including local authorities and infrastructure providers
- Infrastructure delivery will be aligned with the phasing of development to ensure appropriate provision is in place as demand arises.

Future development proposals should adopt a vision-led approach to transport planning, consistent with the principles of DfT Circular 01/2022, prioritising sustainable travel choices, managing traffic demand and ensuring that impacts on the Strategic Road Network are addressed through a combination of mode shift, mitigation and phased infrastructure delivery.

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10 Next Steps

This chapter covers next steps to progress the Cambourne Growth Strategy Programme to the policy stage and beyond.

Next steps

Progressing from Spatial Framework to Policy

This Transport addendum report forms part of a Spatial Framework prepared to inform the preparation of an allocation in the Local Plan.

Further details of the next stages of work are set out in the accompanying *Cambourne spatial framework update* which includes:

- **Costing and Viability Testing**
- **Policy Drafting**

For transport, next steps will likely include:

- **Further technical evidence:** Further technical evidence will be needed to assess impacts at key locations. This will be undertaken in detail at the planning application stage. Further sensitivity testing is also likely to be required to be undertaken as appropriate for plan making prior to examination through continued engagement with transport stakeholders.
- Inputs to the **Infrastructure Delivery Plan**: Interventions identified within the transport strategy and transport modelling will be incorporated into an Infrastructure Delivery Plan. The approach to delivering growth at Cambourne North will need further development, including but not be limited to considerations of delivery vehicles, governance, stewardship and long-term management and maintenance of assets and community engagement.