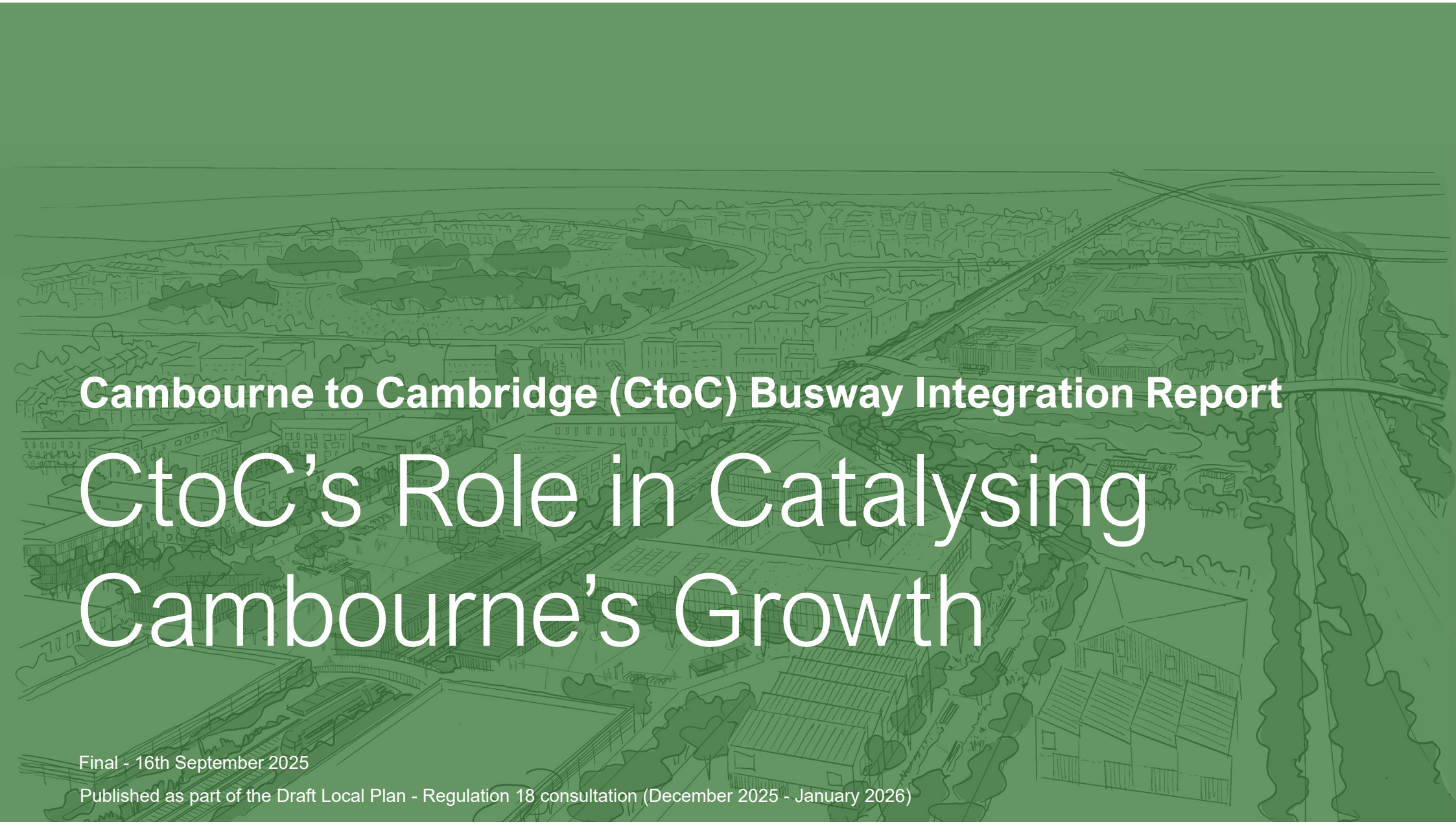


Cambourne to Cambridge (CtoC) Busway Integration Report

CtoC's Role in Catalysing Cambourne's Growth

Final - 16th September 2025

Published as part of the Draft Local Plan - Regulation 18 consultation (December 2025 - January 2026)

Contents

Purpose of this report

Cambourne Busway Integration Study

Cambourne is set to become the third largest community in the Cambridgeshire and Peterborough Combined Authority Area over the coming decades. High-quality public transport will be essential to supporting this growth in a sustainable, inclusive way. The proposed Cambourne to Cambridge (CtoC) Busway will play a vital role in connecting both existing and future development to key destinations in Cambourne and Cambridge, including employment areas, education, and healthcare.

However, the full benefits of the Busway will only be realised if it is fully integrated with the form and function of the evolving Cambourne settlement and with what has been set out in the Spatial Framework Strategy.

Failure to evolve the Busway alignment and stop locations to reflect desire lines in the growing settlement risks undermining its attractiveness. This, in turn, could reinforce car dependency. Integration with other proposed transport infrastructure such as East West Rail (EWR) is also essential to support sustainable travel choices.

This study sets out a vision for how a future Busway extension, over and above the proposals produced by Greater Cambridge Partnership, could and should be integrated with expanded Cambourne and aligned with the emerging Spatial Framework growth ambitions. It explores the connectivity challenges, identifies key integration opportunities and route options, and makes recommendations for delivering a well-integrated and future-proofed Busway.

Illustrative Cambourne station quarter

Statement of ambition

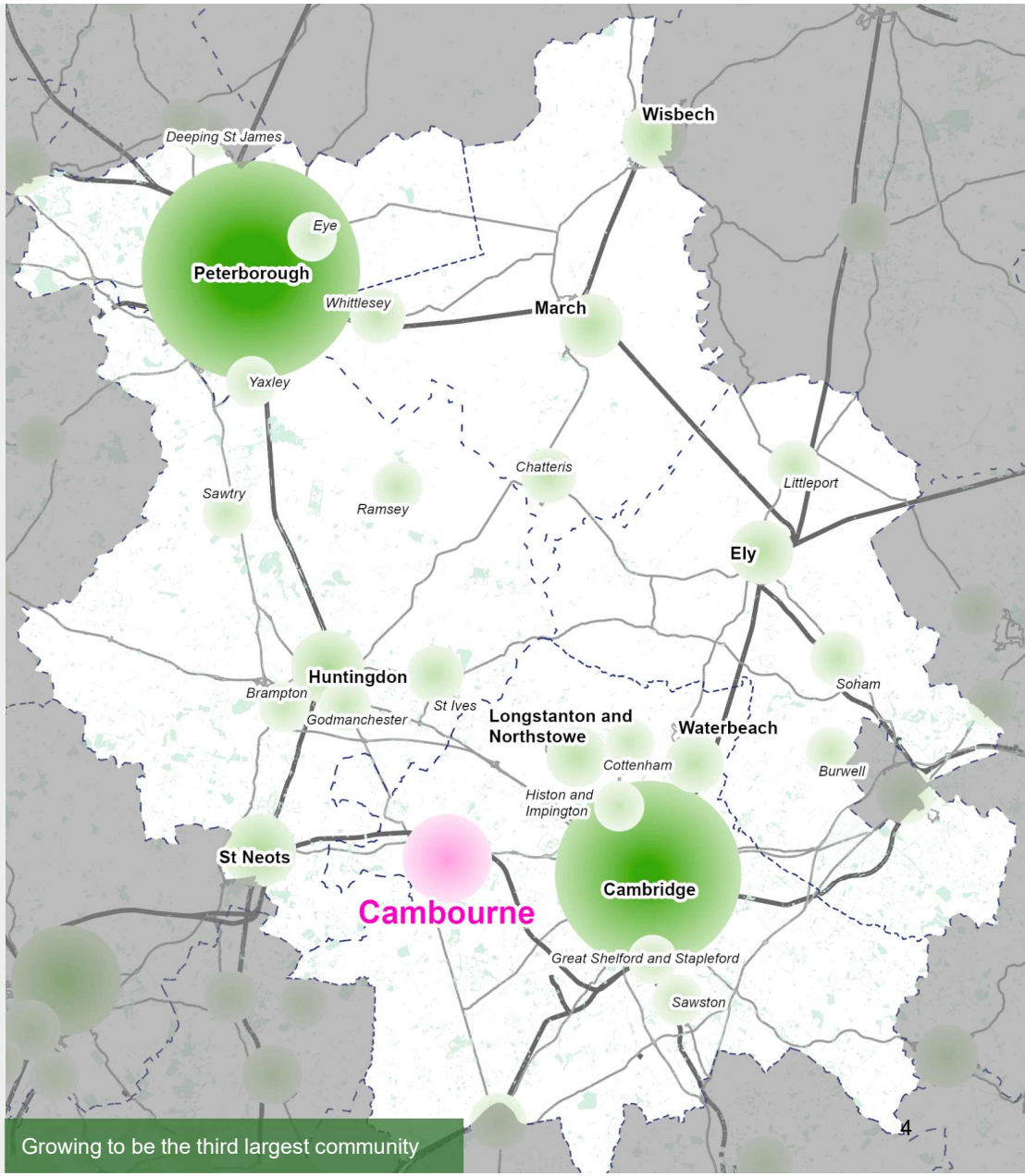
The Busway's role in Extended Cambourne

As Cambourne grows into a major settlement within the Oxford to Cambridge Arc, integrated transport must sit at the core of its spatial strategy. While EWR will provide vital strategic connections across the region, the CtoC Busway will be central to shaping local connectivity, movement patterns, and place identity.

The vision for the Busway extension is that it will be fully embedded within Cambourne's Spatial Framework - helping to organise development, concentrating density and activity in highly-connected places, define neighbourhoods, and support the creation of vibrant places. Stops will be located within walkable neighbourhoods, providing access to civic, commercial, and community destinations, and forming part of a wider network of mobility hubs and an interchange with EWR.

By connecting new and existing communities through sustainable modes, the Busway will promote active and inclusive travel. Its design will ensure direct walking and cycling links, minimal severance, and integration with green infrastructure and public realm improvements — supporting health, accessibility, and a high quality of life.

If delivered and integrated effectively, the Busway can help unlock thousands of new homes and jobs, enabling Cambourne to develop as a unified, low-carbon town supported by strong public transport connections.



Existing CtoC proposals

Why a Busway and what will the service provide?

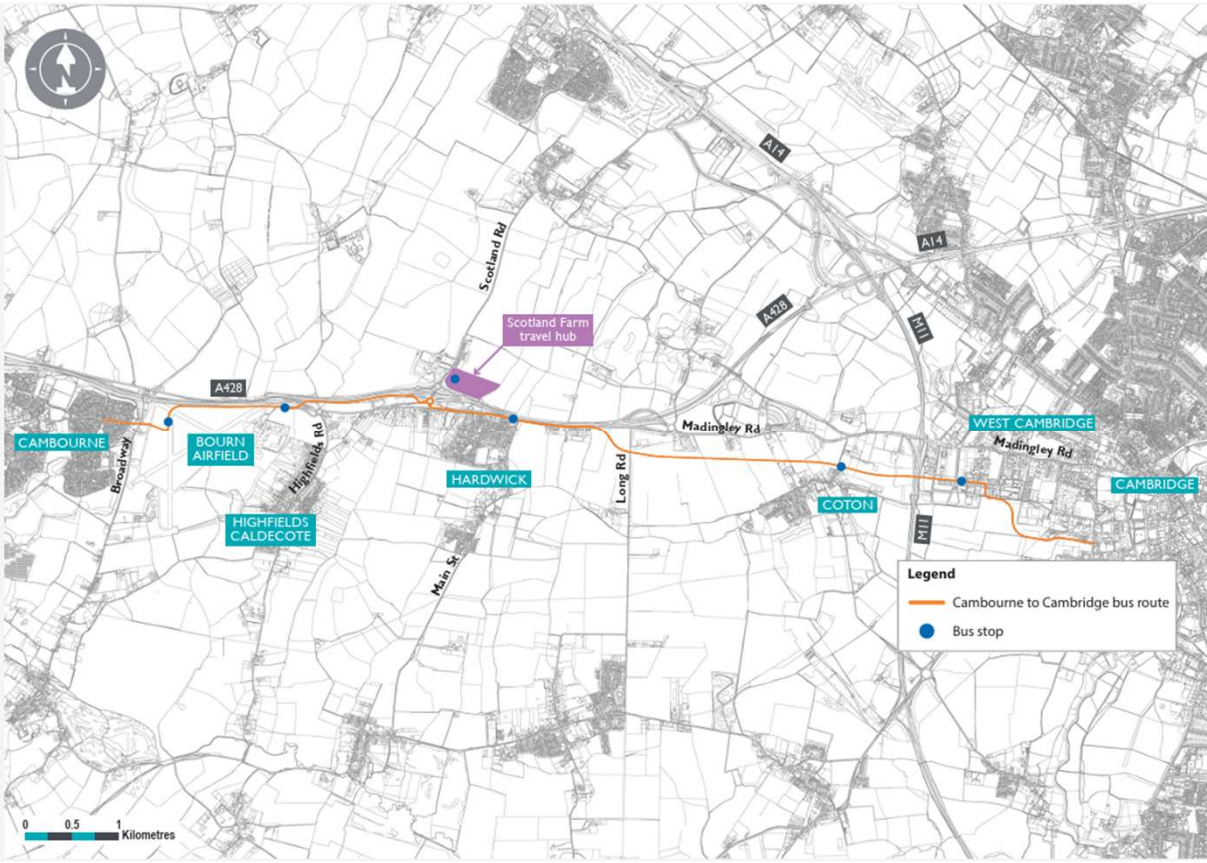
Alongside, the levels of growth indicated in the Spatial Framework Strategy, there are existing approved plans for thousands of new homes and jobs coming forward in and around Cambourne, including:

- **Cambourne West** – 2,350 houses
- **Bourn Airfield** – 3,500 houses and
- **West Cambridge** – 383,300 square metres for employment

A Busway at this location builds on the success of other Busways serving Cambridge, both in supporting growth and providing alternative, sustainable choices to driving between Cambourne and Cambridge.

The new route (indicated in the adjacent image) is proposed to provide a reliable, frequent and easy 'turn up and go' service stopping at a number of locations, including Cambourne, Bourn Airfield, Scotland Farm travel hub, Hardwick,, Coton, West Cambridge and the city centre. It is currently expected to provide up to eight buses per hour in each direction, with direct services to key locations including:

- **Cambourne to Cambridge city centre, station, and Biomedical Campus**: Every 10 minutes (six buses per hour).
- **Cambourne to Cambridge Biomedical Campus via M11**: Every 30 minutes (two buses per hour).



1

Sustainable Cambourne

This section summarises the role the busway will play in developing a sustainable Cambourne.

The connectivity challenge

Existing network constraints and trip budgets

Future development and growth in and around Cambridge is currently constrained by significant transport capacity limitations. The current transport network is characterised by congested highways connecting Cambourne to Cambridge and surrounding areas, putting the network under severe pressure at peak times. Further development and growth risks exacerbating the current congestion issues, particularly on radial routes into Cambridge.

Strategic highway modelling undertaken by Cambridgeshire County Council in support of the emerging Greater Cambridge local plan has identified that due to current network constraints, growth at Cambourne will be subject to a vehicular trip budget, effectively placing an upper limit on the volume of vehicular traffic that can be generated by any development in this location, without adversely impacting network performance. To support sustainable growth, Cambourne's spatial and transport strategies must be tightly integrated, prioritising mode shift away from car dependency.

A key enabler of development at Cambourne is the delivery of the CtoC Busway. An extension of the Busway into Extended Cambourne, supported by a range of mobility hubs and high-quality walking and cycling links, active travel corridors, and enhanced first/last-mile connections will be required to deliver a sustainable development which satisfies the identified trip budget. This will also require the support of seamless integration with the proposed East West Rail (EWR) services which will combine with CtoC to provide a fast, reliable public transport corridor to Cambridge and key employment hubs.

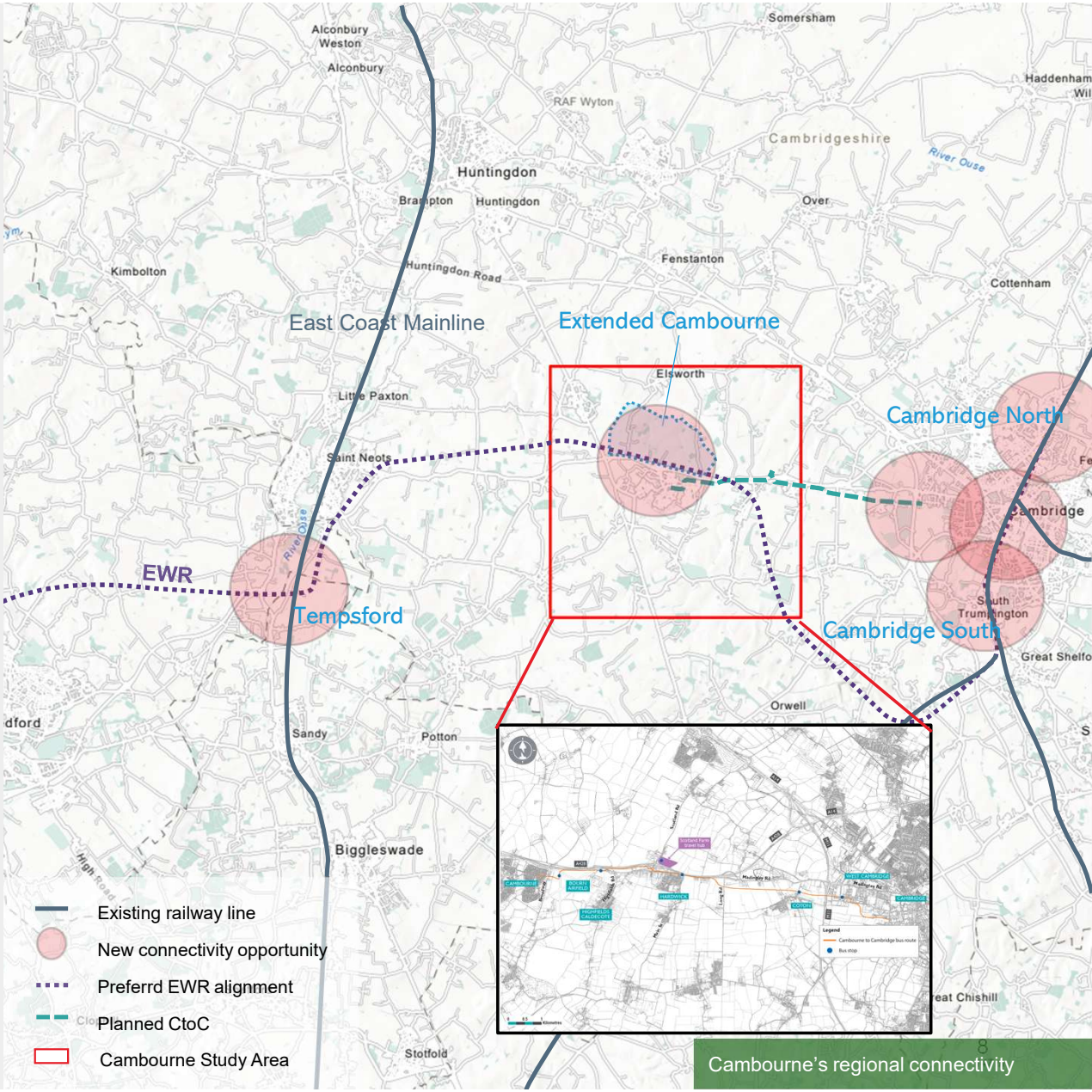
Busway opportunity

Regional connectivity

A dedicated Busway is essential to support the significant planned growth around Cambourne, particularly given the existing transport constraints in the area. The current reliance on the congested highway network into Cambridge poses a major barrier to sustainable development. A busway provides a strategic solution by offering a high-capacity, congestion-free corridor that can accommodate the increased travel demand without adding pressure to the road network.

The Busway will enable fast and reliable public transport connections between Cambourne and key employment and education hubs along the route to Cambridge. With higher frequency and greater flexibility than rail options, it offers an attractive alternative to car use for daily commuters, residents, and employees in the area.

The Busway will have the potential to serve surrounding villages that are not connected to the rail network, such as Papworth Everard, Elsworth and Knapwell. By providing these communities with fast and reliable access to Cambridge, the busway enhances transport inclusivity and reduces car dependency in rural areas, helping to deliver a more equitable and sustainable transport offer across the region



Cambourne's regional connectivity

Scale of opportunity

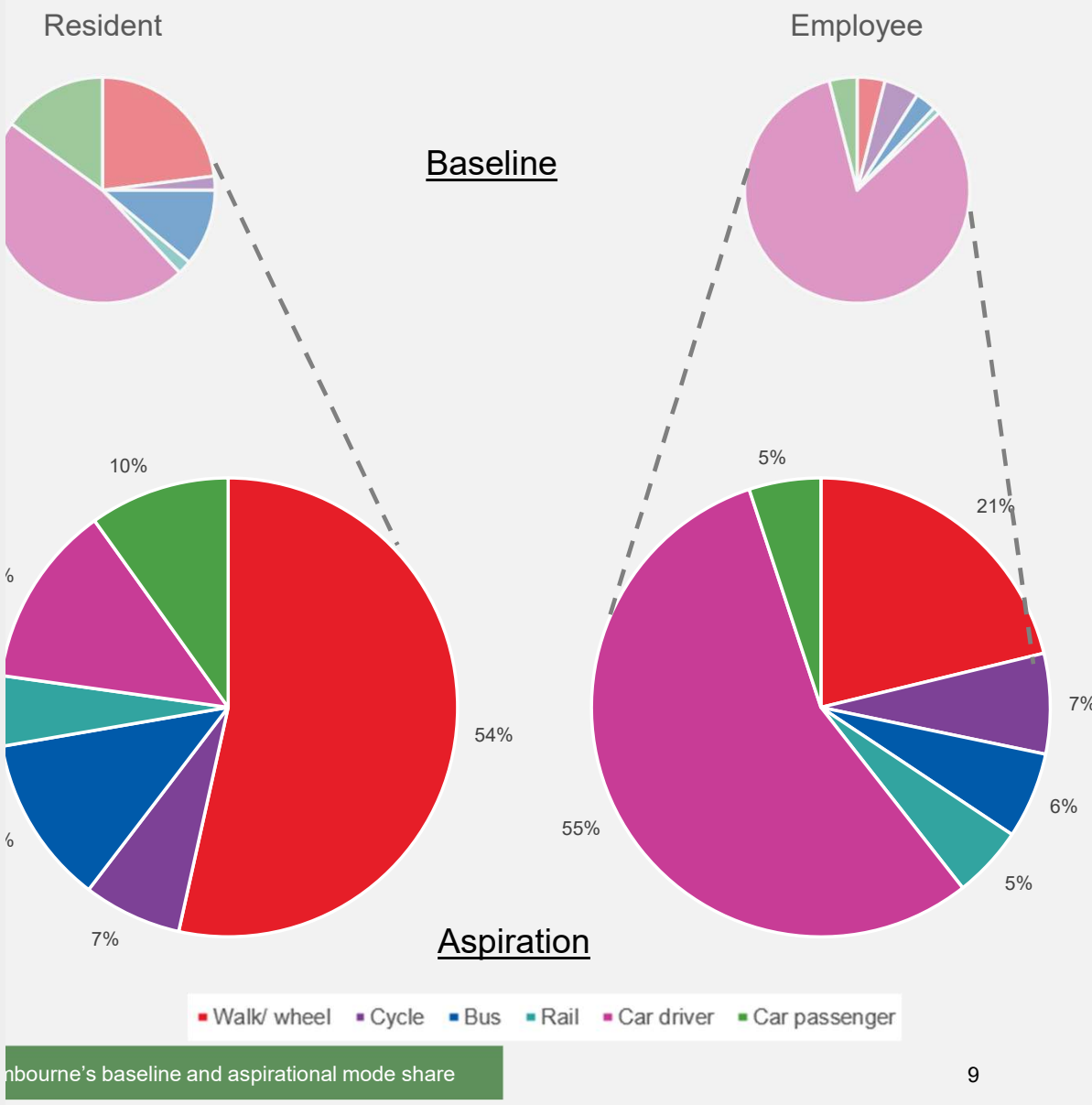
Busway demand

The Busway is a key element of the need to deliver significant modal shift towards more sustainable travel options. By intercepting trips at source, before they enter the congested highway network, it helps reduce overall vehicular volumes and supports increased use of public transport, not just from the Extended Cambourne, but also from existing Cambourne and surrounding settlements and villages.

The figures opposite illustrate the potential changes in mode share for Extended Cambourne that could be achieved (compared to the existing mode share in the area) following the delivery of the CtoC busway, East West Rail services from the new station, and a high-quality active travel network. This is based on our Travel Demand model, more details on the assumptions around this can be found in the Transport Strategy report.

Under aspirational mode share assumptions, external bus trips are estimated at approximately **700–980** during peak hours for the development of 13,195 dwellings and 5,851 jobs. This total includes journeys on both the CtoC Busway and the wider local bus network.

Based on existing Census data travel to work patterns, 60% of peak hour trips are destined for Cambridge and areas further east, the CtoC Busway is expected to carry approximately **420–590 peak-hour passengers**. This highlights its critical role in supporting sustainable commuting and relieving pressure on the highway network.



mbourne's baseline and aspirational mode share

Busway extension journey times / frequency

Cambourne Growth Strategy Programme

Busway operation proposals to support Extended Cambourne

We have taken an estimate of the potential number of people that could be accessing the Busway from Extended Cambourne during a peak hour and attributed these to routes into Cambridge. It should be noted at this time that only includes potential demand from Extended Cambourne Spatial Framework and not existing Cambourne.

Busway Extension length (Extended Cambourne to Cambridge)	Approx. 21km	Approx. 21km
Journey time (Extended Cambourne to Cambridge)	25 mins*	25 mins*
Estimated peak hour demand (pax) from Extended Cambourne	420 - 590	420 - 590
Bus capacity	60 	90 (including standing) 
Proposed frequency (buses per hour)	7 - 10	5 - 7
Proposed frequency	Every 6 – 9 mins	Every 9 – 12 mins

* Speed assumed to be similar to between Cambourne to Cambridge

2 An Integrated Network

This section summarises key opportunities for integrating the Busway into the Spatial Framework for Extended Cambourne.

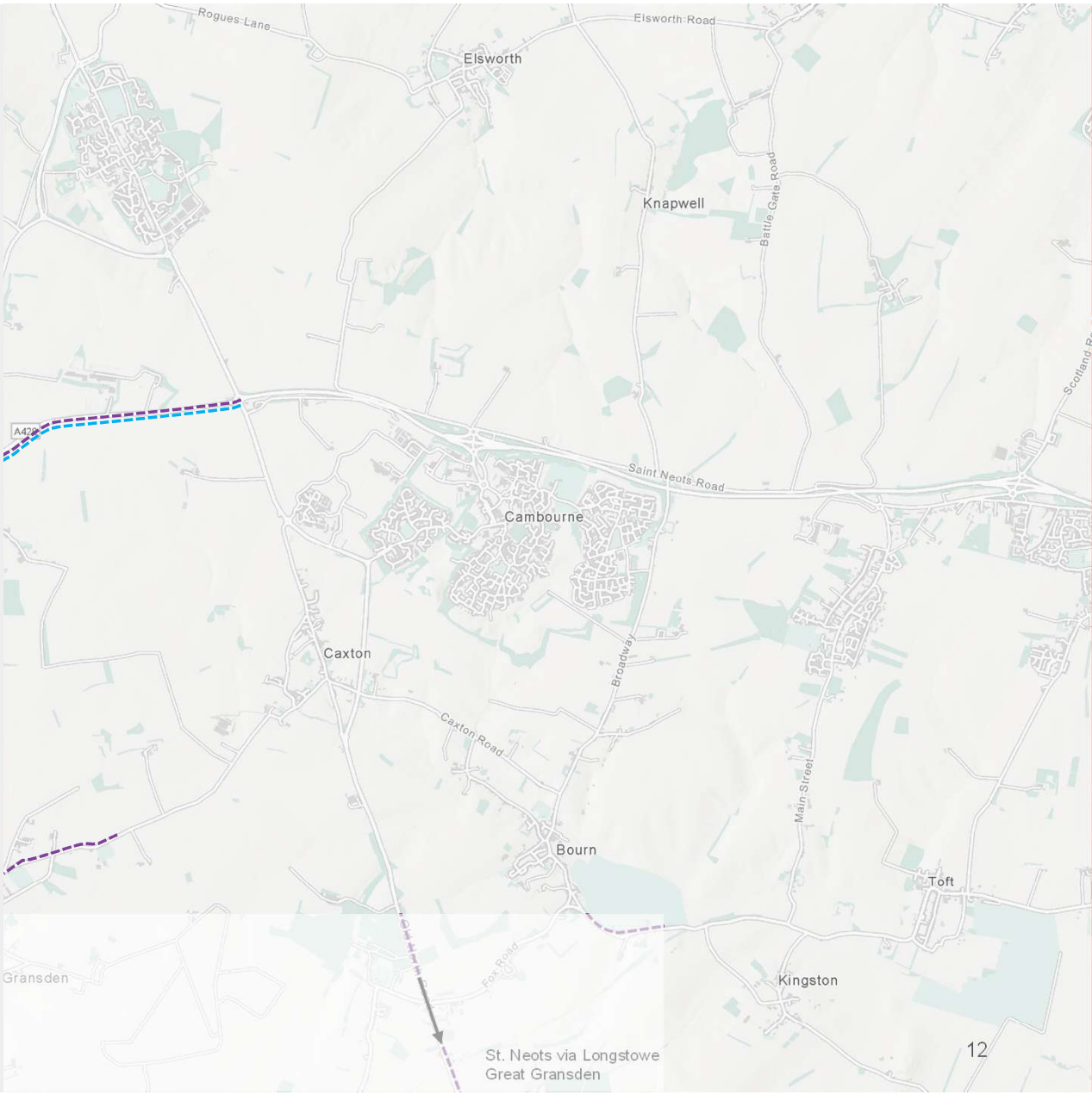
Existing Cambourne

Spreading the benefits of the Busway

The proposed CtoC Busway, as set out in the current TWAO application, will connect consented development at Bourn Airfield and the east of Cambourne to West Cambridge. However, it is equally important that the benefits of the Busway are shared with existing communities across the rest of Cambourne.

As part of this study, we have explored the potential to extend the Busway and introduce complementary (non-busway) routes within existing Cambourne, to better connect existing residents and local centres. This would help improve access to public transport for current residents and better connect local centres, schools, and community facilities — enabling more people to make every day journeys sustainably.

Whilst there has been some safeguarding for busway extension within existing Cambourne it is likely that slower, on-street provision will be needed to serve existing Cambourne to the west, as extending faster segregated infrastructure would impact existing development. Various options will be reviewed in Section 3 of this report.

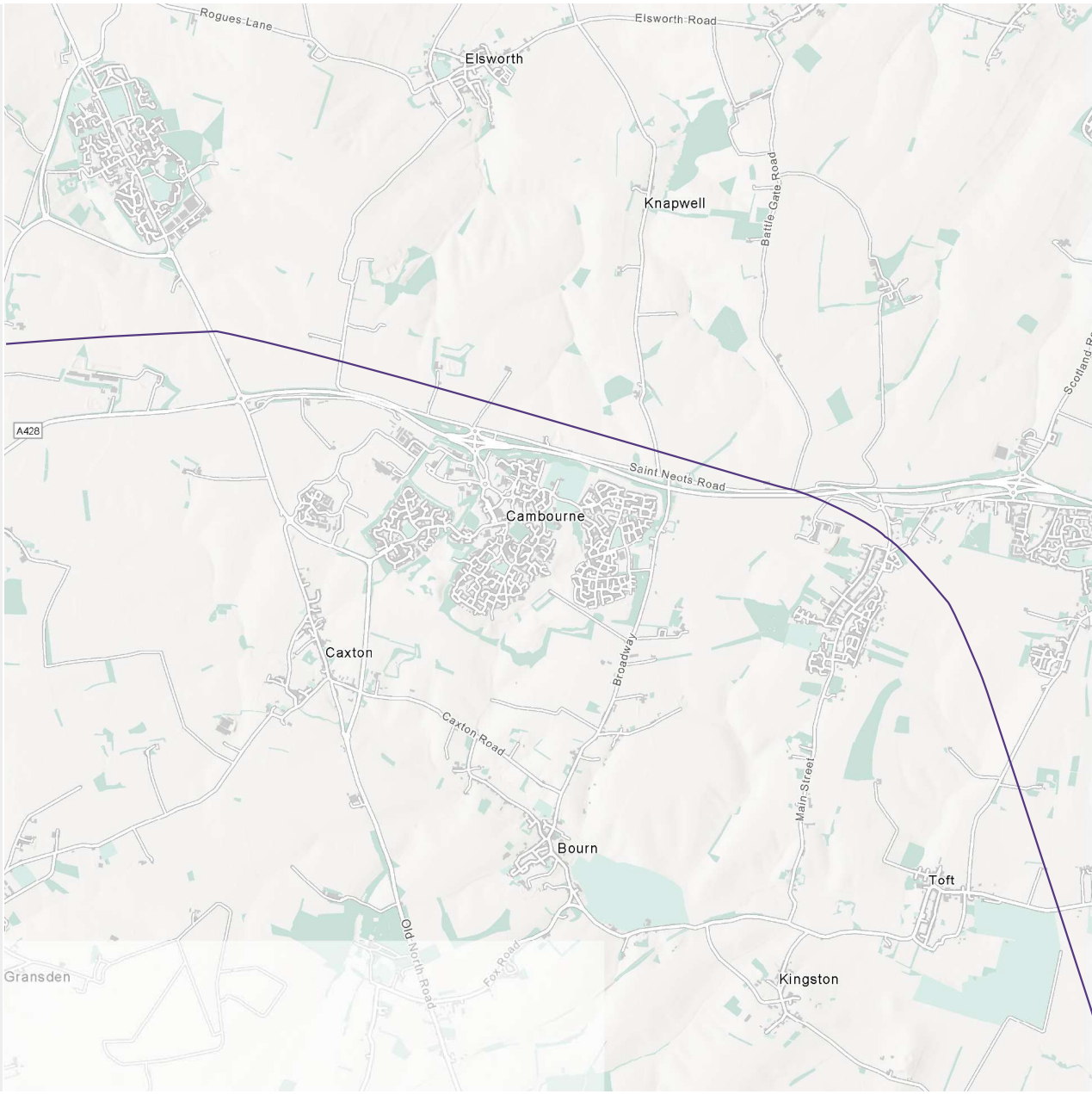


Integrating Cambourne

Potential for new connections

As part of our work for the Spatial Framework we have identified five crossing locations over the A428 and EWR alignment, which are a combination of existing and newly proposed, to support future busway connections and connectivity between existing and expanded Cambourne. These include existing and new opportunities and are critical to ensuring connectivity across Cambourne as it expands. These are subject to EWR design and delivery of crossings, as well as co-ordination with Cambourne West. Flexibility is needed to provide connections throughout development phases. Through our work to determine the optimum levels of connectivity and integration we have sought to maximise connectivity by sustainable modes and sure alignment with previous modelling assessments.

1. A428 Caxton Gibbet junction all mode crossing, currently being upgraded to a dumbbell arrangement by National Highways. This would provide a north-south connection to and from Cambourne West to Papworth Everard but would not provide a direct link with Extended Cambourne.
2. Potential pedestrian/cycle and bus connection over A428 and EWR, subject to integration with Cambourne West consented masterplan. This connection could integrate the new Cambourne West development with Extended Cambourne.
3. Existing A428 dumbbell junction all mode crossing, with potential for a new all mode crossing of EWR alignment to provide busway connection and vehicular access to Extended Cambourne. This crossing provides a strategic central public transport spine and allows integration with existing Cambourne.
4. Pedestrian and cycle crossing planned to be delivered over EWR, St Neots Road and A428, with no access for general traffic. There is potential to incorporate public transport/busway access along a new alignment to integrate with Spatial Framework, to be delivered by both EWR/ Extended Cambourne. By restricting access for general traffic, sustainable transport becomes the desirable option to access the station quarter and integrate with existing Cambourne.
5. The existing all-mode crossing at Broadway would be extended and improved to form a new all-mode bridge over EWR, maintaining strategic access from the east and integrating with Cambourne's northern expansion.



EWR Integration

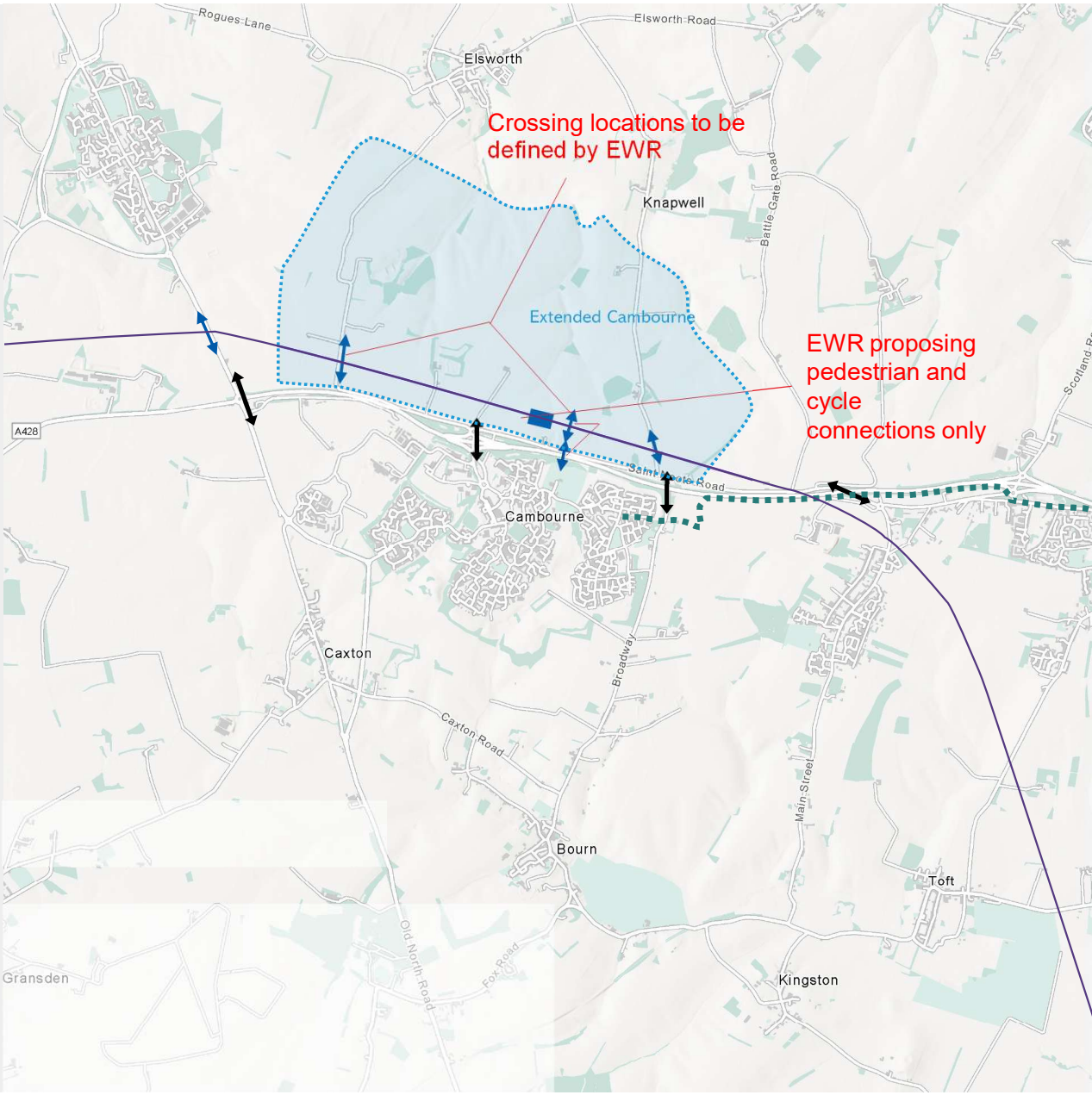
How integration with EWR can support CtoC

The government has published the route for EWR between Bedford and Cambridge including new stations at Tempsford, Cambourne and Cambridge South.

EWR will provide wider regional connectivity but does not yet have planning consent and is not expected to be operational until mid 2030s. An extended Busway therefore provides opportunity to support sustainable travel to a new local centre early in the development lifecycle of Extended Cambourne. This will help to complement the benefits of EWR, once it is delivered. It should be noted that future work will need to assess what quantum of development can be delivered prior to EWR being delivered.

It is important that early in the lifecycle of Expanded Cambourne that investment is made in bus infrastructure, which will support the development of nearby civic, commercial, and community uses, setting the foundation for a walkable and well-connected town.

The future station will offering a seamless interchange between bus, rail, walking and cycling, and will be a key focus of activity. The design and delivery of crossings to address severance caused by EWR also present opportunities to improve connectivity and integrate existing and Extended Cambourne.



Station Integration

Complementing the Busway

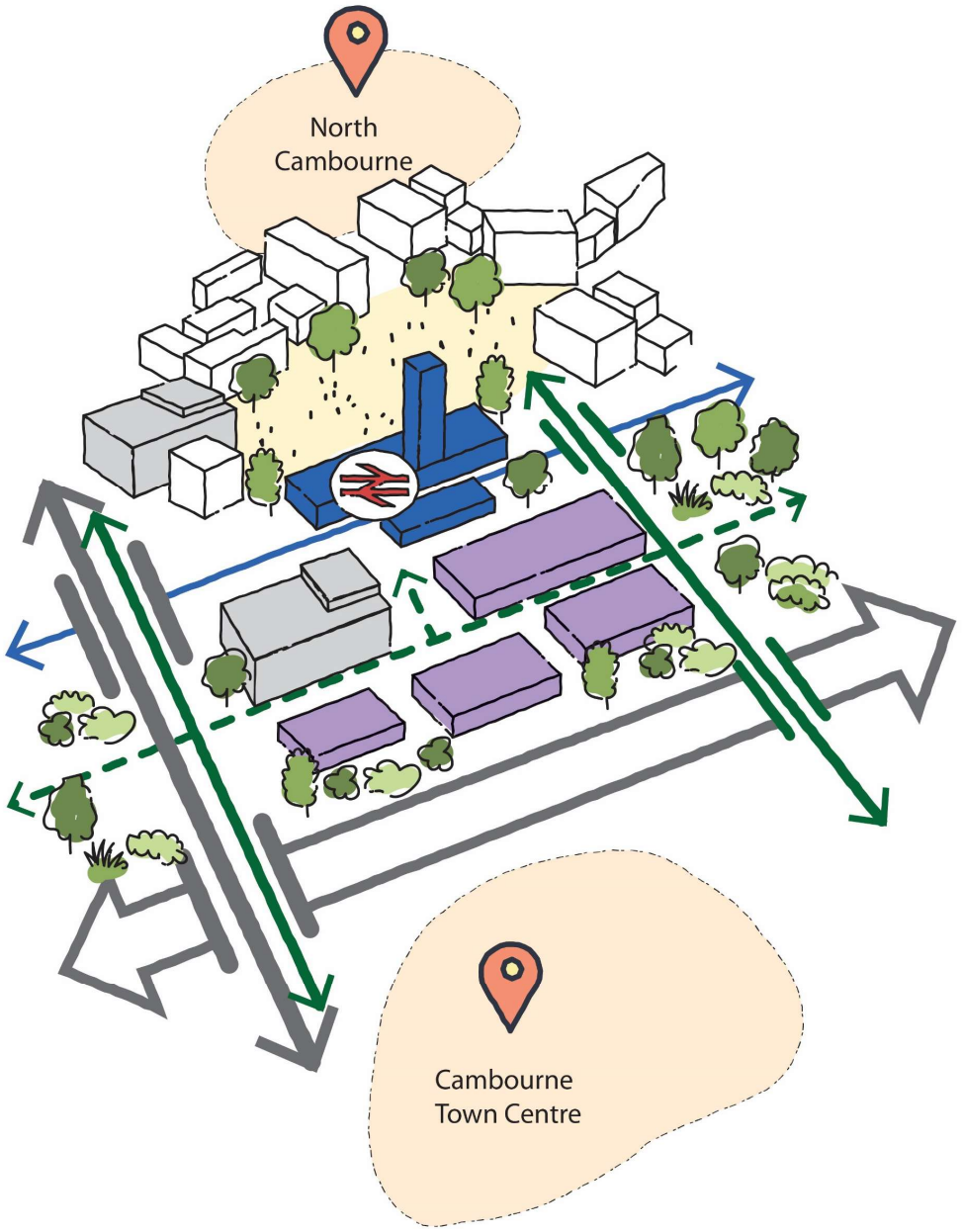
An extended CtoC and will complement and enhance EWR by:

- Connecting the entirety of Extended Cambourne to the EWR station and further afield Cambridge city centre with potential for onward interchange via other modes, providing resilience to EWR was also providing feeder routes into the station to boost patronage and access via sustainable modes.

- Connecting to Cambridge South, the Biomedical Campus and Cambridge station via EWR, along with stations at Tempsford and Bedford to the west.

Our team is working with EWR to develop a Mobility hub at the proposed Cambourne station. This hub will help provide seamless interchange and mode switching between rail, bus and active travel - making it easier for existing and future residents to travel sustainably.

The layout and design of the interchange areas will develop over time and a station design will need to be carefully considered to maximise opportunities to deliver a best-in-class hub.



3 Busway Route Options

This section outlines the long-listed Busway extension route options that have been considered

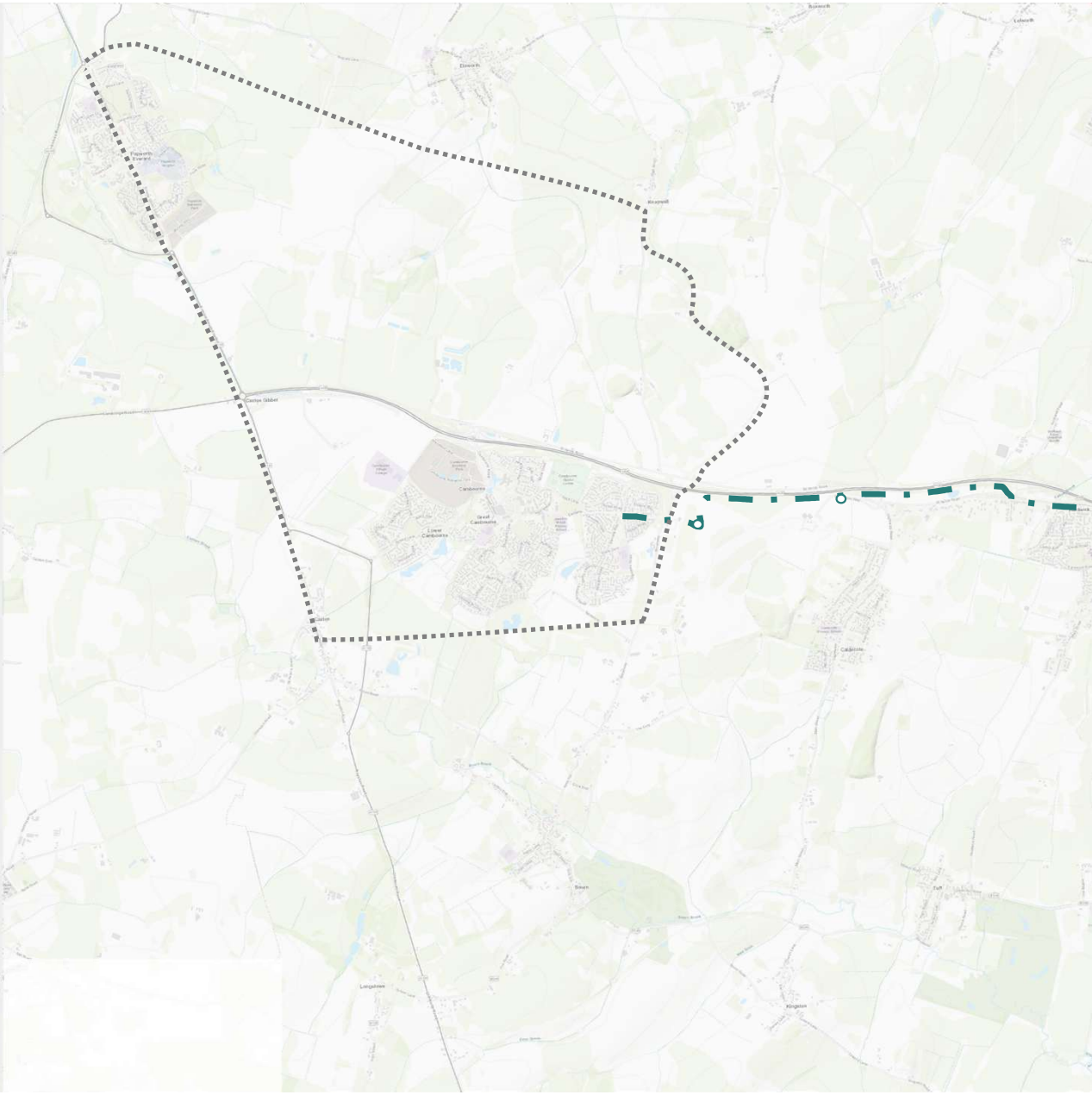
Busway Route Options study area

Study area for option generation

The adjacent map shows the study area that has been considered for route options. All future route options are contained in this area and the routes themselves vary between running on street in mixed traffic, and dedicated Busway.

The study area itself encompasses all of the developed area of Cambourne along with the area to the north of the A428, where the proposed East West Rail (EWR) station will be located, and includes the village of Papworth Everard.

As a result, this approximately 7 square mile area captures Cambourne's current built-up area along with the bulk of Cambourne's future infrastructure expansion and development.



Current public transport network

Overview of current public transport network

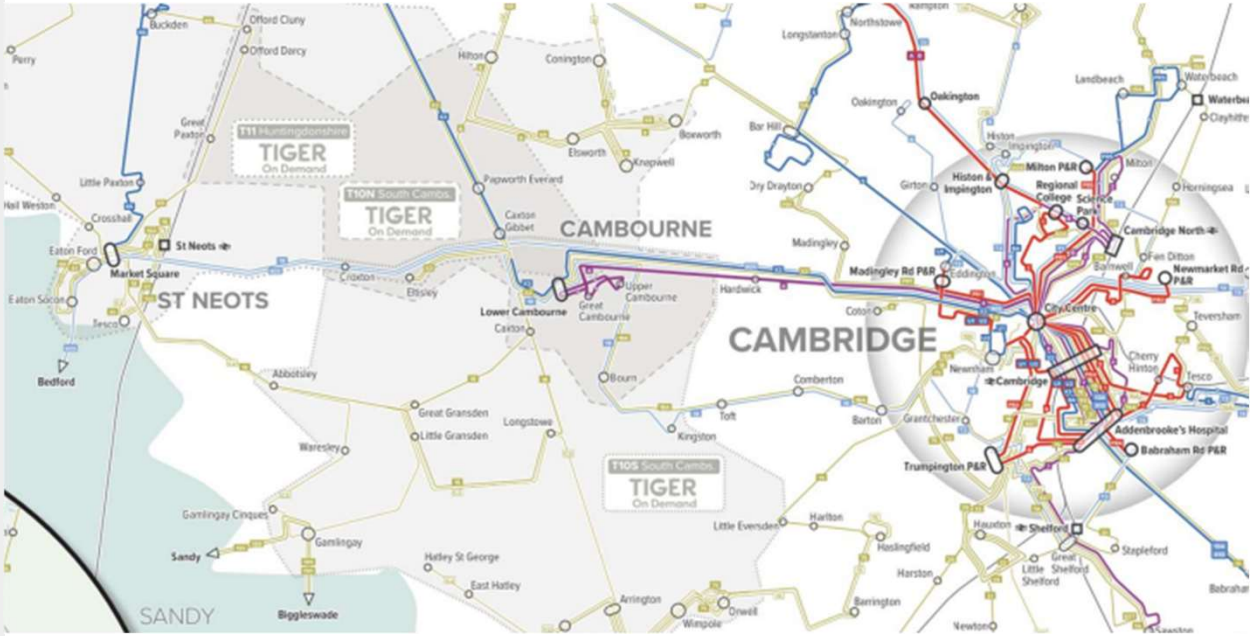
Cambourne has existing scheduled bus connections to neighbouring towns and villages.

The current bus network features services to the south of the A428 that connect Cambourne to Cambridge (14.5 km to the east), St Neots (14.5 km to the west) and Huntingdon (14.5 km to the north) in addition to local ‘Tiger on Demand’ zones.

The travel time to Cambridge by bus currently ranges between 30-60 minutes from the middle of Cambourne to the middle of Cambridge depending on the service taken and time of day. Equivalent drive times by car could be 25 – 45 minutes.

St Neots railway station is located 12 km to the west of the study area, with connections by bus (Service 18). The station is served by Thameslink and Great Northern trains which run between Peterborough in the north to London Kings Cross and Horsham in the south.

Thameslink run trains every 30 minutes in each direction while Great Northern (who manage the station) run commuter trains to London Kings Cross in the morning and out to Peterborough in the evenings with 30 minute headways



Current public transport network

Existing services and journey times

Service	Operator	Route	Frequency	Proximity of service to site location	Current access between service and site location for pedestrians	Journey time to Cambridge
4	Stagecoach	Cambourne – Cambridge	Every 20 minutes daytime from Monday-Saturday reducing to hourly in the evening. Hourly on Sunday.	The 4 service serves essentially all areas of Cambourne with stops spread across the town area but not to the north of the A428.	Pedestrian access in Cambourne is good due to the service running through many residential areas making it accessible. However, there are no stops near Cambourne on the north side of the A428 or in the new West Cambourne development.	36 mins
18/18A	Whippet	St Neots – Cambridge via Cambourne	Hourly Monday-Saturday increasing to every 30 minutes during peak hours and finishing in the evening. No service on Sunday.	The service runs from the west through the middle of Cambourne and on St Neots Road which is adjacent to the A428.	There is easy access to the service in the middle of Cambourne on main streets through built up areas. Pedestrian access decreases on the northern side of the A428 due to the physical severance and lack of stops. It also does not serve the West Cambourne development.	52 mins
X2	Whippet	Huntingdon – Cambridge via Cambourne	Two buses into Cambridge in the morning and three buses back to Huntingdon in the evening Monday-Friday. No weekend service.	Service runs through the middle of Cambourne adjacent to the town centre retail park.	Pedestrian access is good when looking at the route through Cambourne however there are only five buses per day which limits accessibility.	44 mins
X3	Whippet	Huntingdon – Cambridge via Cambourne	Half hourly during the daytime Monday-Friday decreasing to every hour later on. A shorter hourly service on the weekend.	Service runs through the middle of Cambourne adjacent to the town centre retail park.	Pedestrians have easy access in the centre of Cambourne. However, the service does not serve the new West Cambourne development.	22 mins

Proposed new service options

Busway Extension – Option Generation (1)

Our approach is designed to be consistent with Stage 1 of the transport appraisal process, as defined by DfT's Transport Appraisal Guidance (TAG). This incorporates:

- A clear understanding of the current situation in the study area, and how this is forecast to change in the future;
- A wide range of options being considered;
- An appropriate, documented assessment process undertaken to establish the preferred solution (or shortlist of options); and
- A thorough option generation process to ensure a robust audit trail showing the rationale for later discounting or taking forward certain options, which will be important at engagement and consultation stages of the scheme development.

The scheme and wider development objectives were initially defined before working to identify a long list of option alignments. During option generation we reviewed any previously considered solutions for the corridor extension before producing any additional or alternative options. To feed into the appraisal framework, all key features and influencing factors of each option were identified.

The option generation exercise focussed on developing a wide variety of route options which relate to the level of intervention, namely the level of segregation given to the mass transit system from general traffic. This directly impacts on the attractiveness of the system to transport users, but also add complexity in terms of costs, feasibility and impacts on the wider transport network.

Options have been presented as alignment diagrams supported by potential locations for more significant intervention such as junction upgrades, highway widening or bridge crossings. Through this process, we included:

- Broad route alignment;
- Indicative stop locations;
- Whether segregated Busway or on street running, defining levels of priority over other traffic;
- Accessibility/proximity to origins and destinations; and
- How each of the options would integrate with other existing or planned modes including heavy rail and local bus.

Proposed new service options

Busway Extension – Option Generation (2)

The longlist of route options was assessed using a Multi-Criteria Assessment Framework (MCAF) which is consistent with HM Treasury's Green Book guidance on the Five Case Model and the DfT Transport Appraisal Process. The MCAF tool provides the quantified evidence base for the option development and assessment and:

- Provides a comparative assessment of options;
- Recognises the extent of option development and the associated level of information available;
- Identifies the trade-offs between options; and
- Clearly sets out the assessment scores.

The long list was sifted using an assessment of option performance against quantified success criteria (functional metrics). The metrics were defined to align with the success criteria and objectives agreed in previous stages.

All criteria in the MCAF were unweighted in the initial assessment, except for ‘access to the proposed EWR station location’, as it was felt this was a key success factor for wider connectivity and network integration.

The best performing options are shown in the table here – Summarised as being those providing the most direct access to the EWR Station site from south of the A428, and a relatively direct route through the new development area.
Of the best performing options, options P and Q are shown to provide the greatest population accessibility.

Ref	Route name	Route description	Score
N	Monk Drive Busway	**Sections**: 1, 3, 4, 13, 40, 41, 44, 45	14
O	Extended Cambourne Direct	**Sections**: 1, 3, 4, 13, 40, 45, 55, 56, 58	14
P	Extended Cambourne Loop	**Section**: 1, 3, 4, 13, 40, 45, 56, 58, 59	14
Q	Extended Cambourne Half Loop	**Sections**: 1, 3, 4, 13, 40, 45, 55, 58, 59	14
A	Sterling Way	**Sections**: 6, 7, 40, 41, 42, 43, 44, 46	13

Extended Busway Routing

Overview of all route options

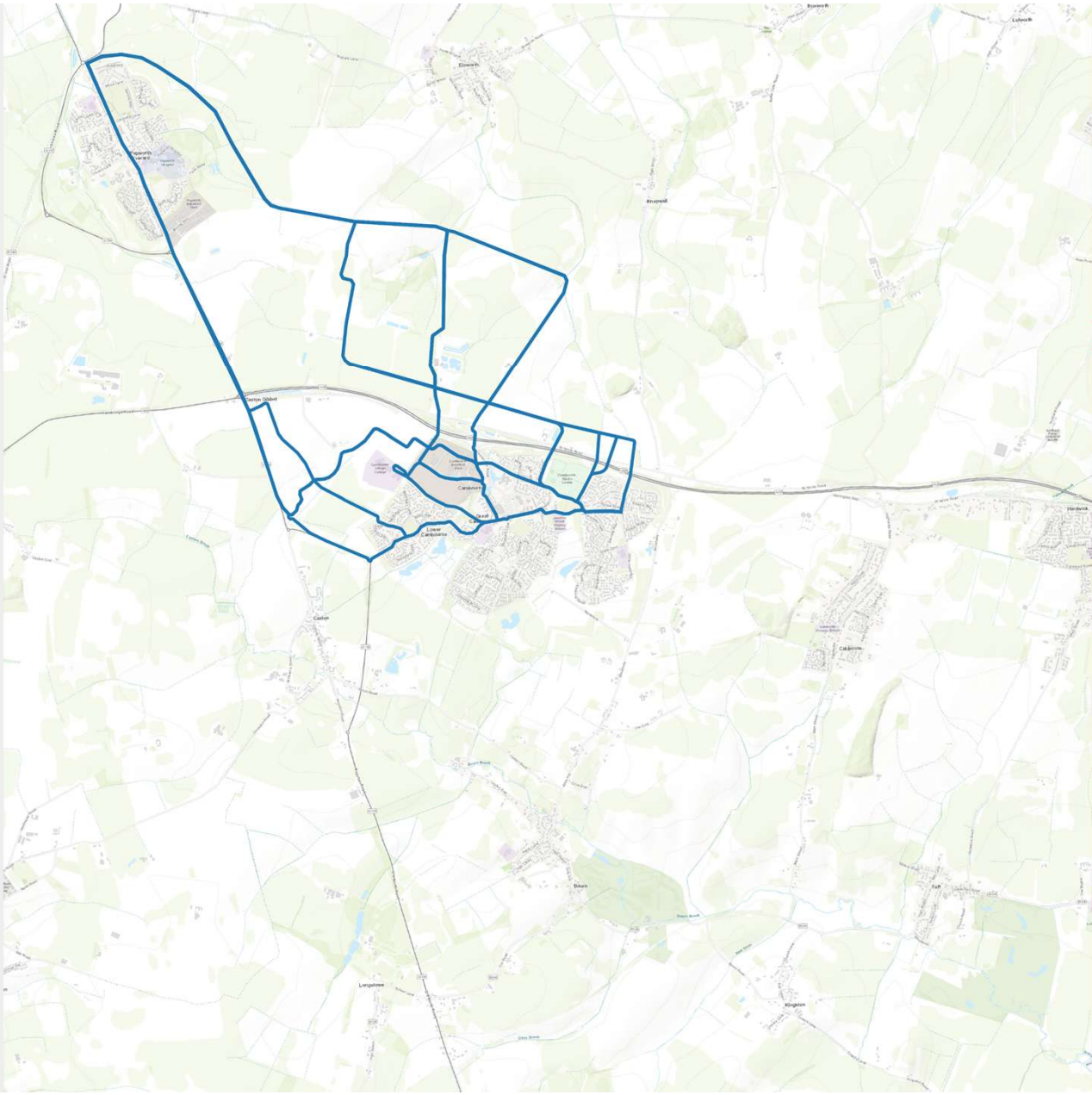
Individual numbered sections of existing or proposed road and dedicated busway were used together to make complete routes that could link the existing planned busway shown in orange and an expected terminus at Papworth Everard.

Points have also been identified for potential hubs for the busway services that would provide access to residents along the busway extension.

Consideration was given to current and planned population density around stop locations and proximity to nearby destinations.

The nearest stop to the study area that is already planned is found to the east of Cambourne on the Bourne Airfield site.

The route through the planned development to the north of the A428 is indicative at this stage, subject to further iteration and integration with the site masterplan and options include both unconstrained, and those influenced by known site constraints.



Route N

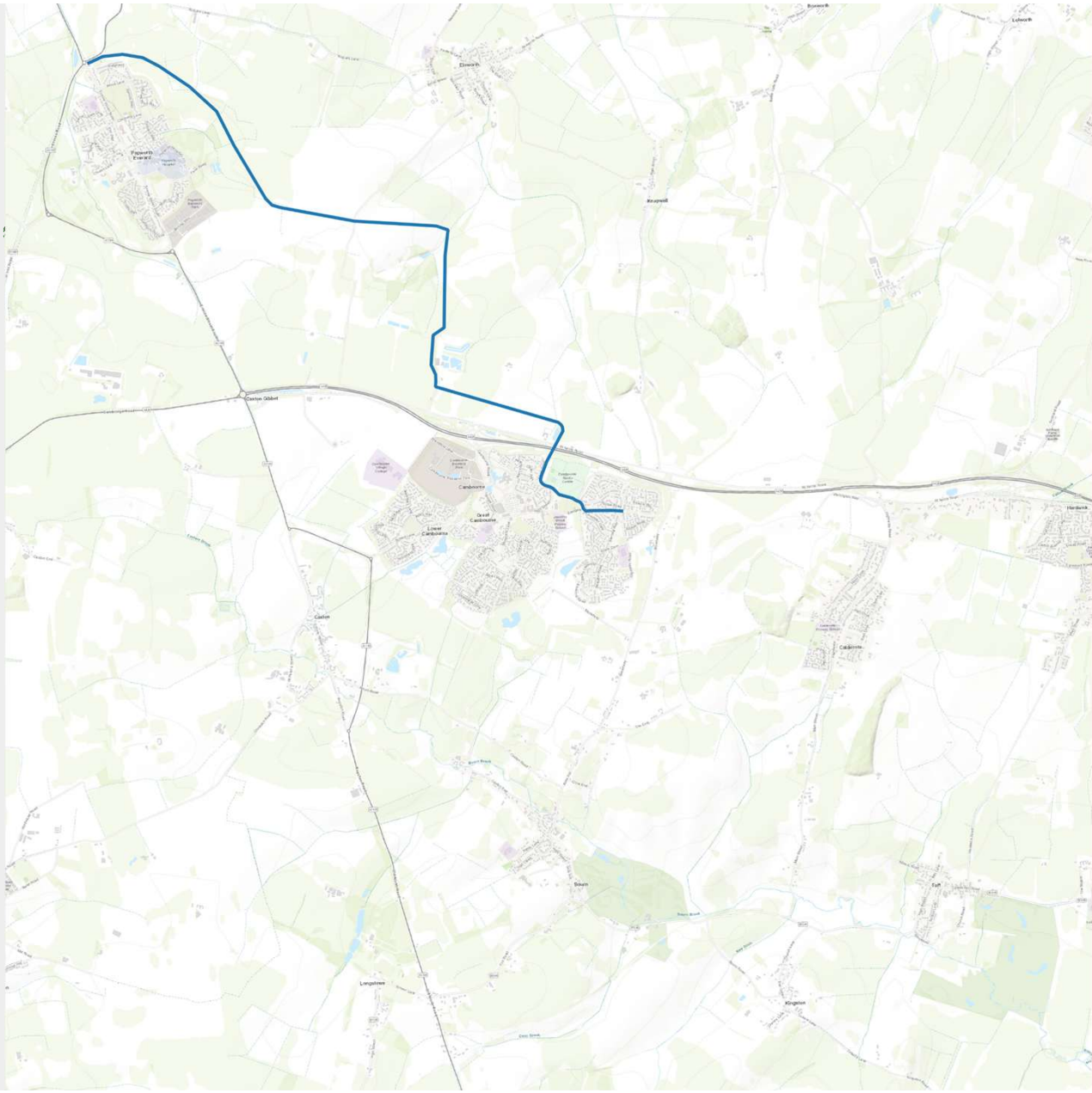
Monk Drive Busway: Sections 1, 3, 4, 13, 40, 41, 44, 45

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m before turning off right on to a dedicated busway running alongside Monk Lane. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station.

It continues with a potential stop at Elsworth Wood and the terminus in Papworth Everard.

Approximately 17,500 people will live within 400m of this route once North Cambourne is developed.

Population capture	Within 400m	Within 800m
Current population	4,800	11,000
Future population	12,700	23,449
Total population	17,500	34,449



Route O

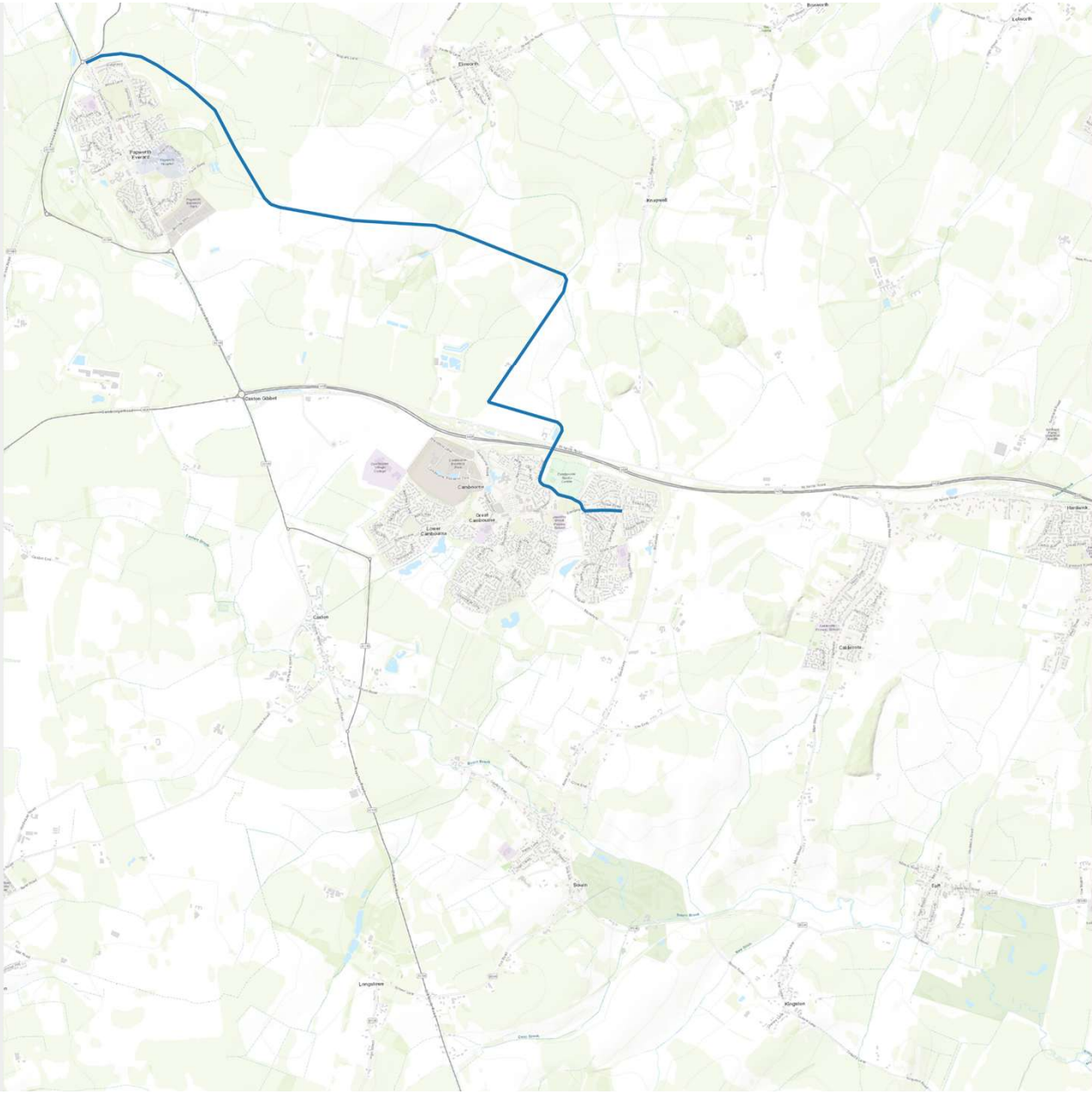
Extended Cambourne Direct: Sections 1, 3, 4, 13, 40, 45, 55, 56, 58

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m before turning off right on to a dedicated busway running alongside Monk Drive. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station.

The route then travels through Extended Cambourne serving the new development on a direct busway to a junction with the A1198 and potentially onward to Papworth Everard on highway.

Approximately 21,230 people will live within 400m of this route once North Cambourne is developed.

Population capture	Within 400m	Within 800m
Current population	4,800	11,000
Future population	16,430	26,802
Total population	21,230	37,802



Route P

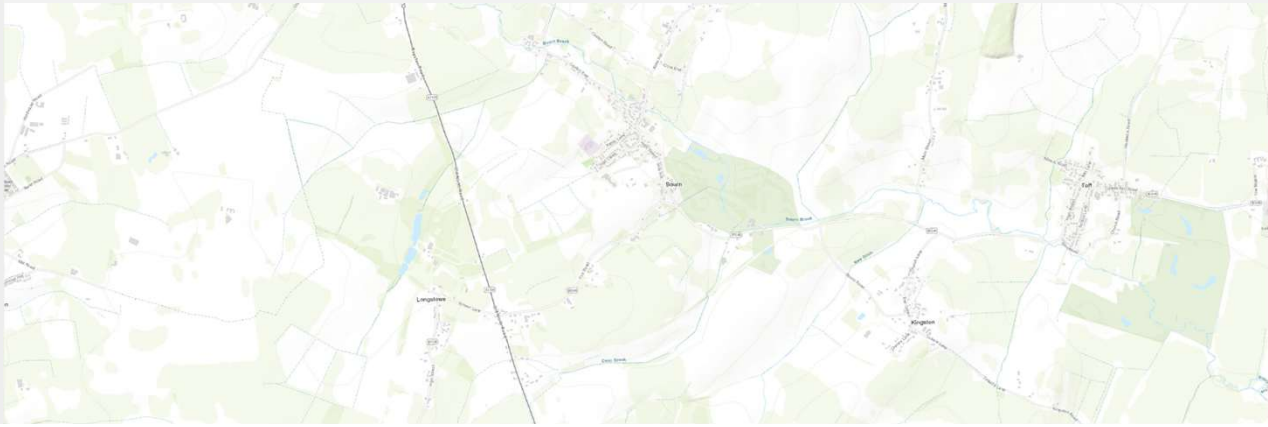
Expanded Cambourne Loop: Sections 1, 3, 4, 1
40, 45, 56, 58, 59

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m before turning off right on to a dedicated busway running alongside Monk Lane. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station.

The route runs as a loop through the new Extended Cambourne expansion serving the core of the built-up area. This may be implemented to align with an earlier phase of the development to serve areas that have been built before running all the way to Papworth Everard. Future expansion of the route where it would no longer be a loop would be possible.

Approximately 25,027 people will live within 400m of this route once North Cambourne is developed.

Population capture	Within 400m	Within 800m
Current population	4,000	8,200
Future population	21,027	30,199
Total population	25,027	38,399



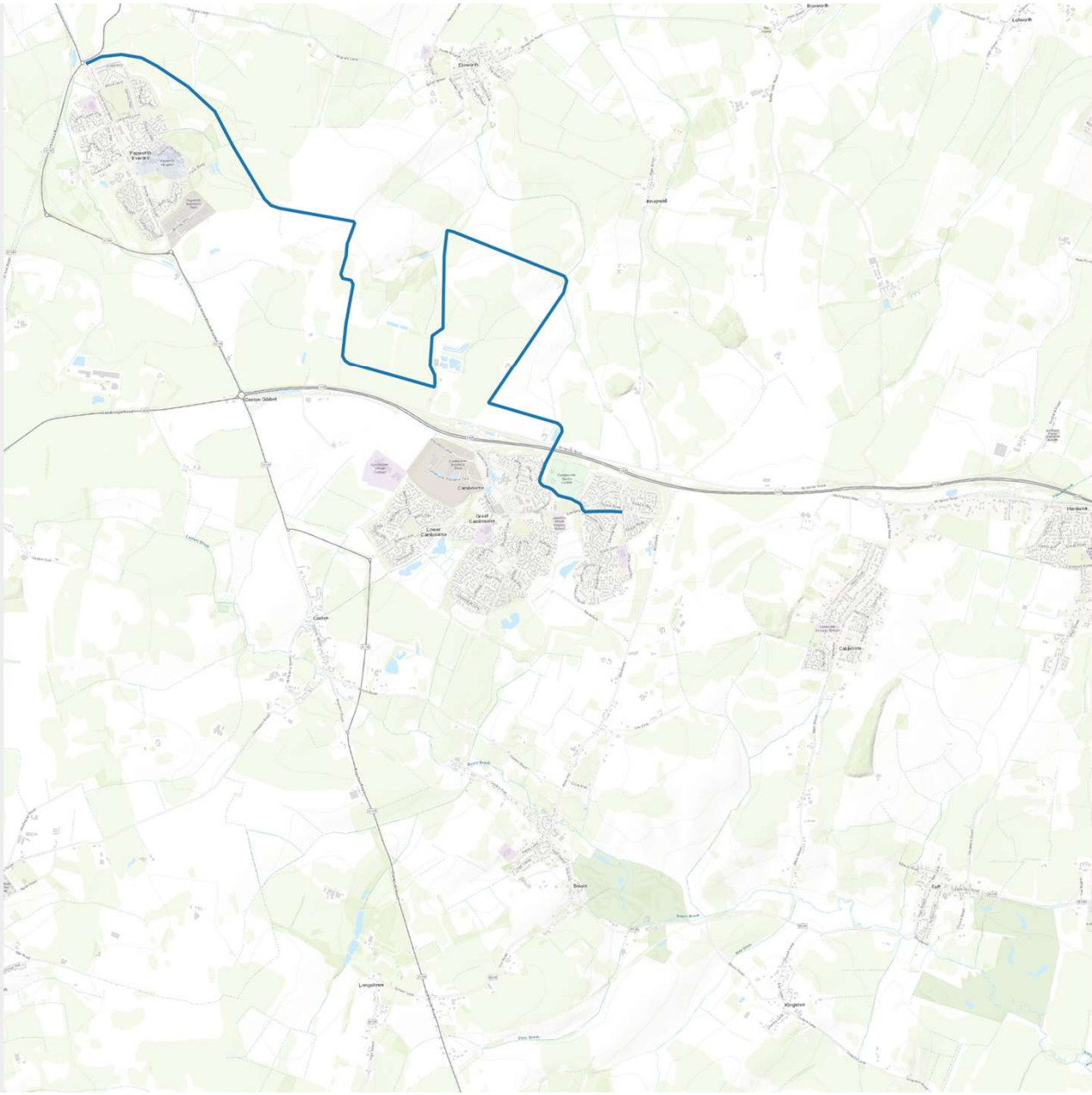
Route Q

Expanded Cambourne Half Loop: Sections 1, 3, 4, 13, 40, 45, 55, 58, 59

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m before turning off right on to a dedicated busway running alongside Monk Lane. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station.

The route then serves the new Expanded Cambourne expansion making use of the new distributor corridors in the newly built-up area. This route aims to achieve maximum coverage of the area to ensure more people have easy access to the bus service. It then connects to the A1198 just south of Papworth Everard.

Population capture	Within 400m	Within 800m
Current population	4,800	11,000
Future population	22,653	30,269
Total population	27,453	41,269



Route A

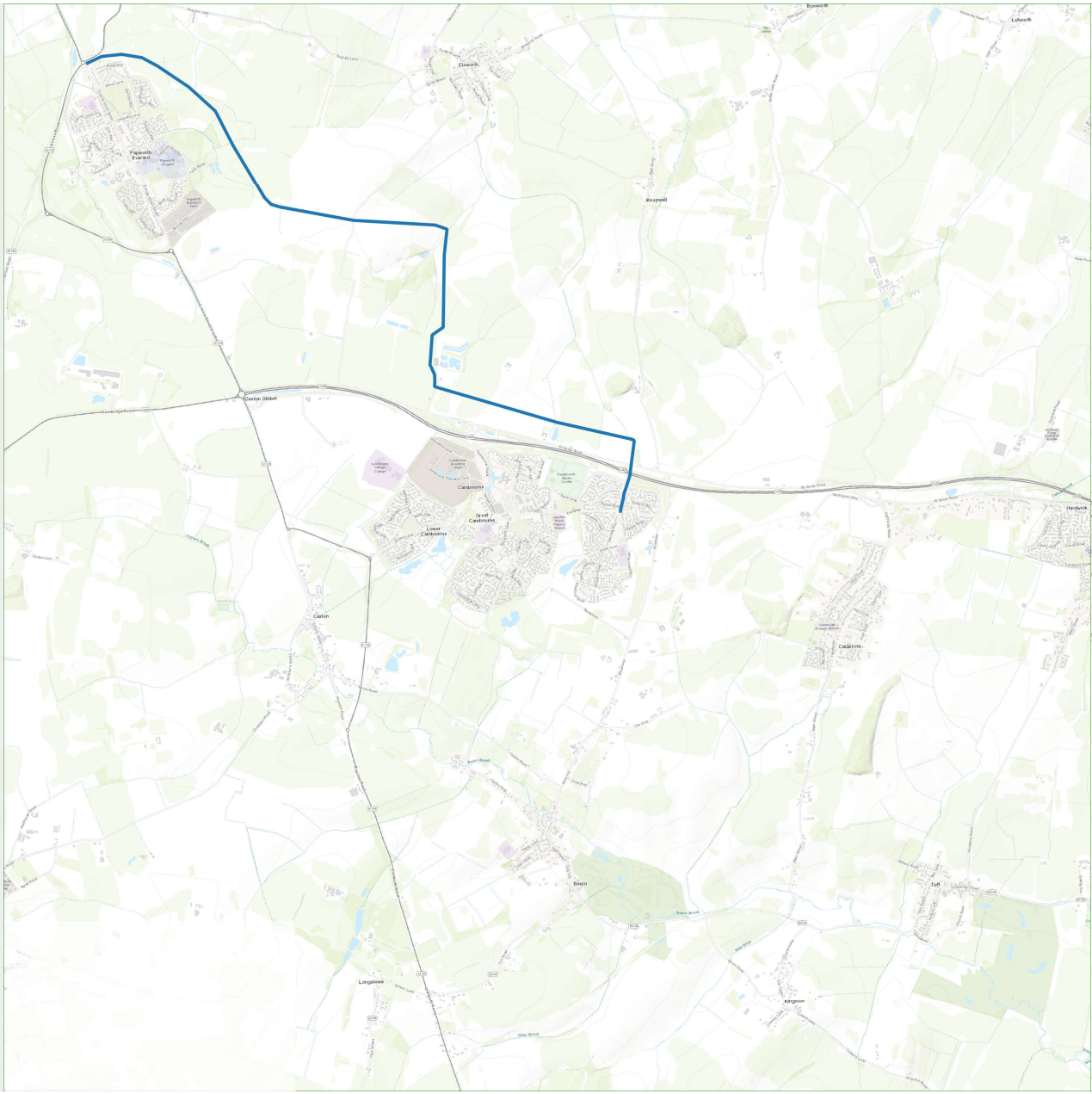
Sterling Way: Sections 6, 7, 40, 41, 42, 43, 44, 46

Diverts off the busway alignment just after the existing planned route ends and turns north up Sterling Way for approximately 135m before going on a dedicated right of way between developments. This off-street section through the Upper Cambourne residential area would be bus priority and go across the A428 requiring a new bridge to carry buses and those travelling via active means.

After serving the proposed EWR station, the route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 16,635 people will live within 400m of this route once North Cambourne is developed.

Population capture	Within 400m	Within 800m
Current population	3,300	9,300
Future population	13,335	26,349
Total population	16,635	35,649



Busway options extension summary

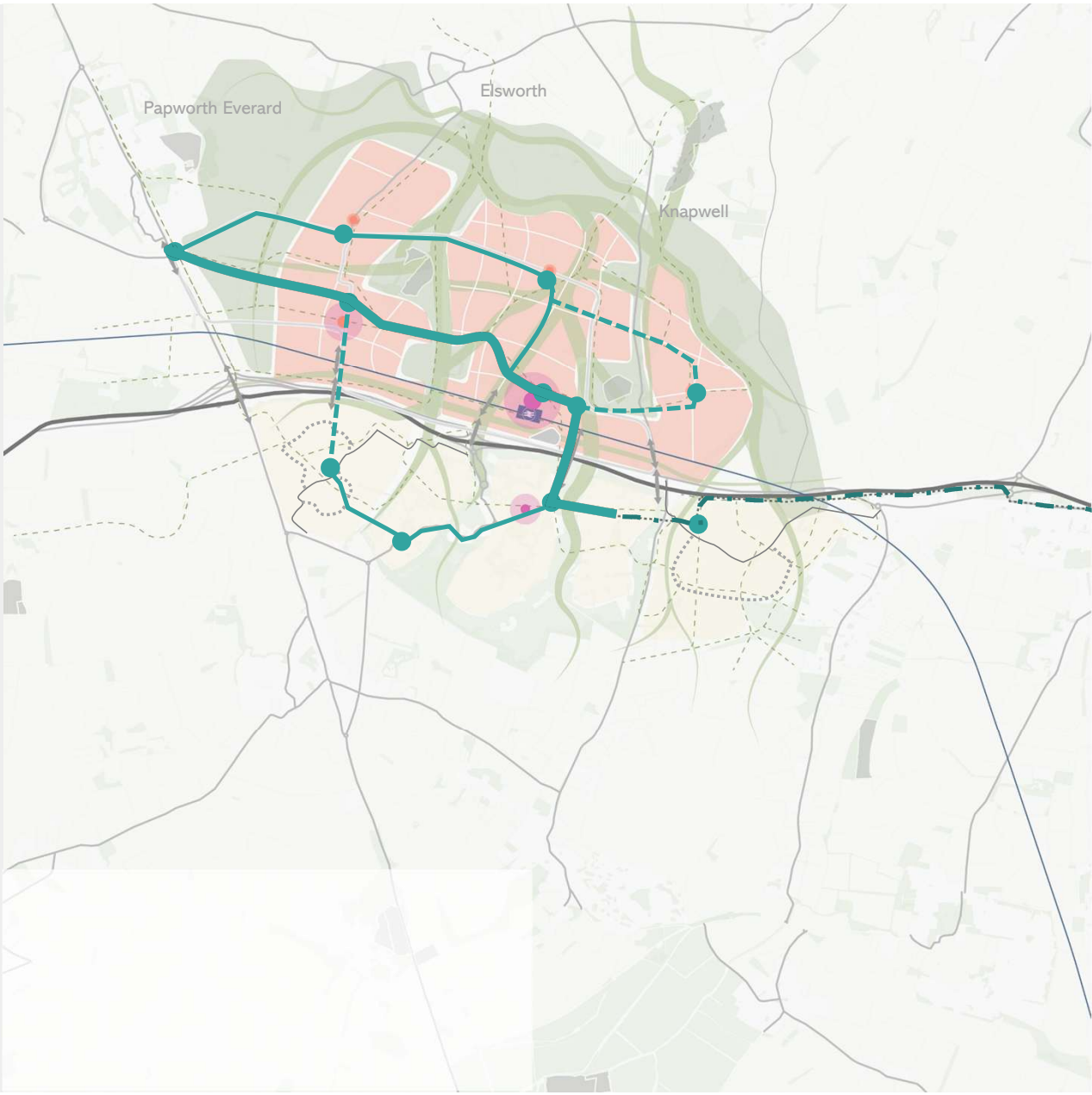
Summary and route option considerations

All of the short-listed route options identified are likely to include some on-street sections to align with the vision for Extended Cambourne. Through the development of the growth programme, on-street, rather than segregated bus corridors, has been identified as the preferred option, in order to reduce severance, increase flexibility and better integrate with surrounding development.

However, additionally, many route options identified include segregated off-street sections through Expanded Cambourne (and potentially extending beyond). Whilst no specific route travel time assessments have been undertaken between the options, this has been balanced against the service frequency benefits, the resulting severance and need for flexibility through phased development. Instead, the focus has been on serving areas of proposed higher density populations.

Through the option development and review process, a direct busway extension route has been identified, and illustrated opposite. There are some notable deviations from the short-listed options, namely around the approach to Papworth Everard. The proposals included within the Spatial Framework Strategy have sought to minimise land-take and infrastructure requirements, compared to the short-listed options which sought to maximise routing along areas of population and patronage.

Whilst the core route has been identified to minimise diversions and journey times, this does result in the need to suggest additional future busway branches to maximise coverage. Mobility hubs and wider standard bus services are also proposed to provide a comprehensive coverage and service to lower density fringes of the development.



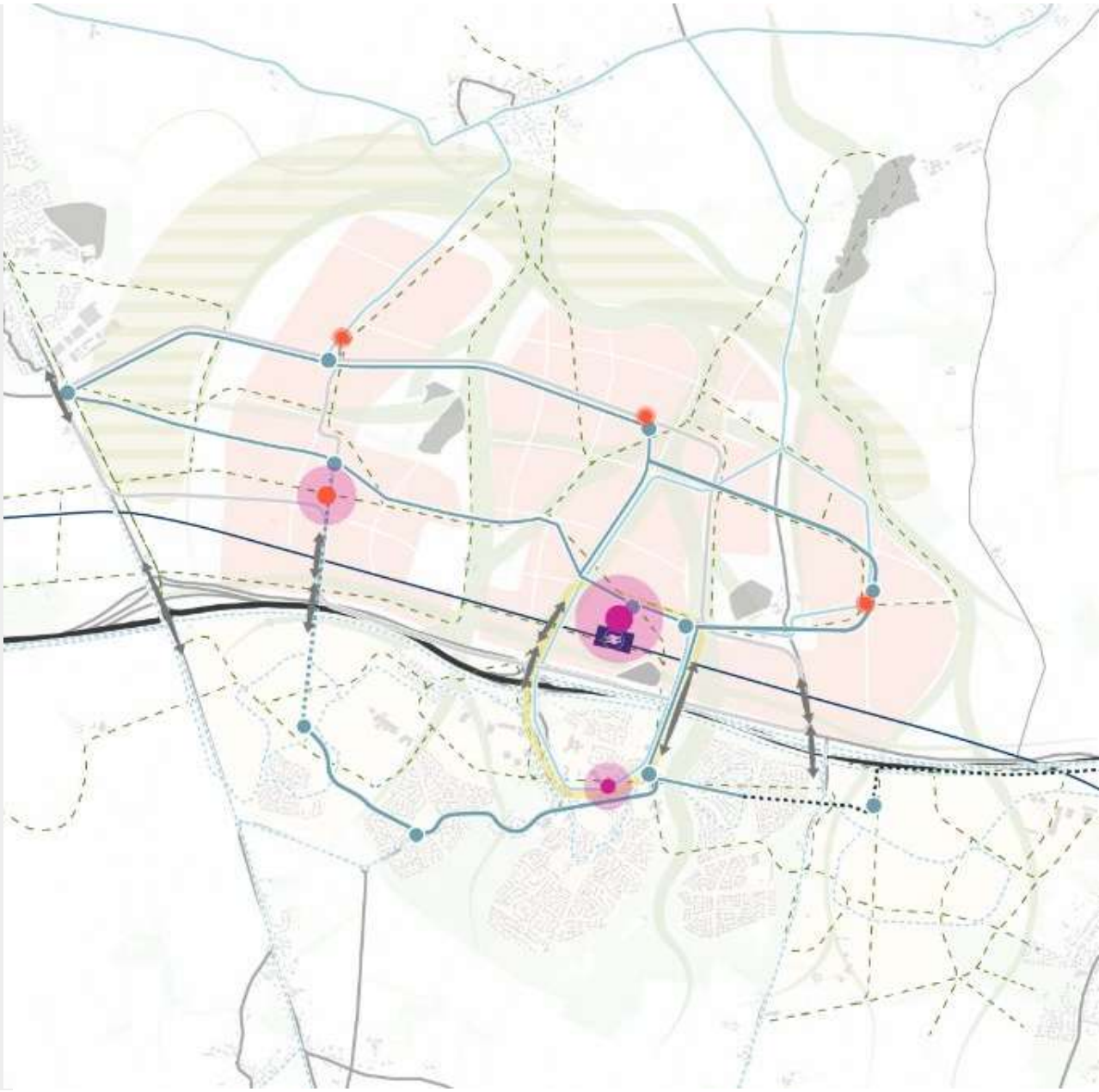
Busway options extension summary

Connecting new and existing neighbourhoods

A critical element of the integration of the CtoC Busway into the spatial framework will be how it connects existing and future neighbourhood centres. It is envisaged that the Busway would provide the backbone for a sustainable, public transport-oriented settlement, supported by an integrated active travel network.

By linking centres directly to one another, the busway will support the vision for Cambourne as a small group of compact, walkable communities and thus will reduce the need for car-based trips.

The proposed alignment identified in the previous section has responded to landscape constraints, needs of the urban environment and to deliver viable plot sizes for development, whilst balancing against key criteria for successful public transport infrastructure.



Mobility Hubs

Supporting the Busway

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. These have been proposed to extend the catchment of the busway and encourage interchange with CtoC from alternative modes to drive patronage and encourage sustainable travel patterns.

We anticipate a three-tier mobility hub hierarchy:

Local mobility hubs at Knapwell, Elsworth West Cambourne and Bourn Airfield, offering basic facilities that are sensitive to local historic characteristics and links to the wider network, including:

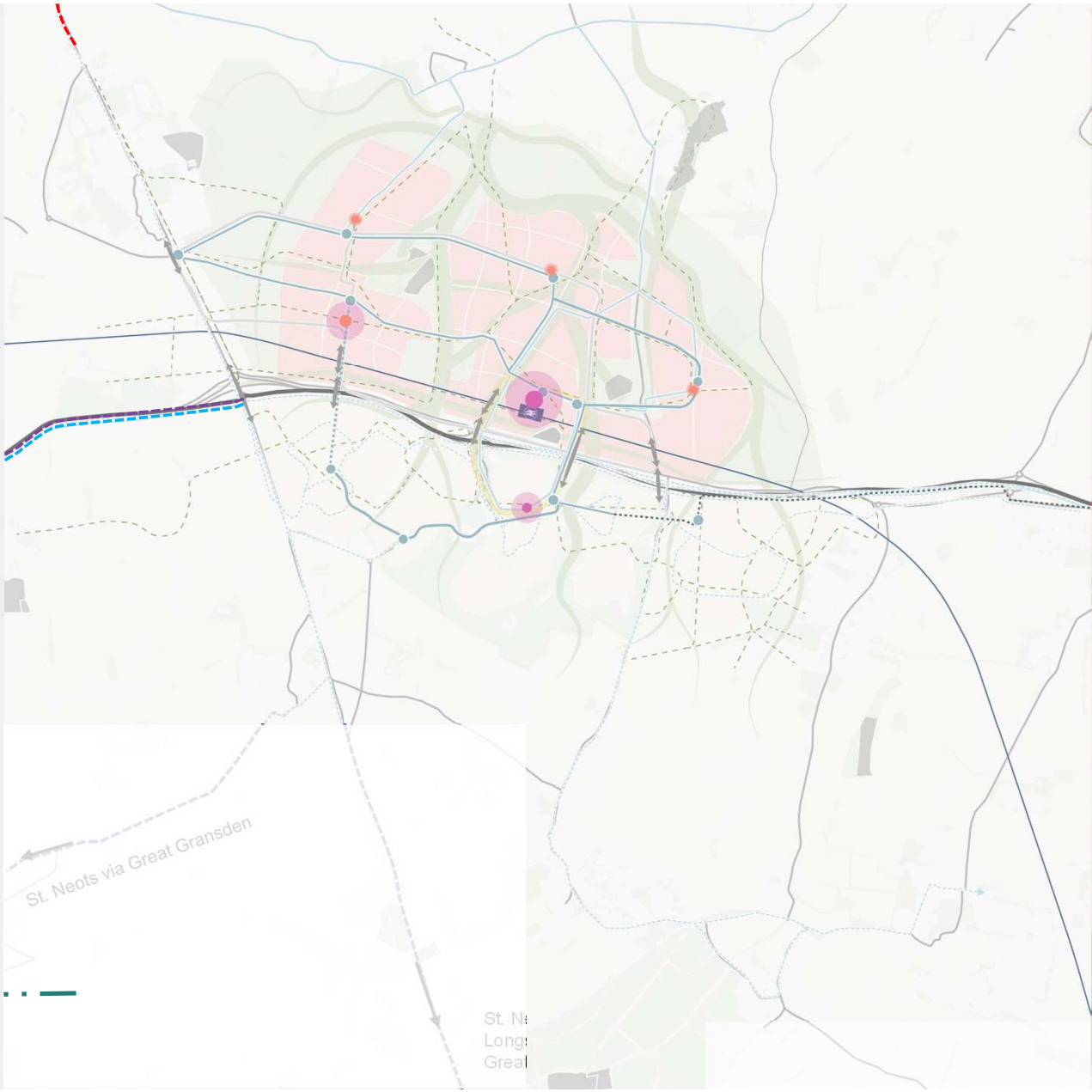
- Shelters, digital wayfinding, drop-off/pick-up bays, secure cycle parking and self-repair station, dockless e-cycle and e-scooter rental, delivery lockers, electric vehicle car sharing, restroom/baby-changing, elements of play/seating

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.



4 Recommendations

This section sets out a summary of the CtoC route extension options and the key recommendations to integrate a Busway extension into the Spatial Framework Strategy.

Key Recommendations

CtoC Busway Extension and Spatial Framework Strategy integration

This study suggests the following recommendations for the CtoC Busway Extension to support the Cambourne vision:

1. Connecting existing and expanded Cambourne:

- Extending Busway services to the west of Cambourne and to Extended Cambourne are likely to require a mix of segregated and on-street provision to integrate with existing and proposed development. To support development at Extended Cambourne, prioritised on-street provision should be provided, rather than segregated bus corridors in order to reduce severance, increase flexibility and better integrate with surrounding development.
- The design of the busway in expanded Cambourne is expected to be on-highway with some areas dedicated bus-only running, it is not expected to be a concrete-guided busway-type arrangement.
- The Busway extension could and should support early phases of development, with the Spatial Framework then phased to be delivered with increasing distance from the proposed EWR station and mobility hub.
- New crossings over A428 and EWR alignment provide opportunities to integrate bus corridors/ Busway to directly connect existing and new communities without relying on the strategic highway network, which could impact journey times.
- Busway stops should be focused in neighbourhood centres, integrated with the EWR station and spaced appropriately to focus activity, minimise route delay and maximise catchments and service patronage.

2. Complementing the EWR opportunity:

- The Busway extension routing should be used to establish key development, public transport and active travel corridors early in the masterplanning process ahead of EWR being operational (the quantum of which should be tested through further modelling). Once operational, the Busway and EWR will serve different locations within Cambridge with EWR stations at Cambridge and Cambridge South. A combination of both EWR and CtoC Busway are required to provide the sustainable transport options to support and facilitate sustainable growth and development at this location.
- Busway routes within Extended Cambourne should seek to maximise the benefits of sustainable movement within new development at Extended Cambourne, focus on providing fast and direct routes to the station for existing Cambourne residents and employees and the wider travel to work area.
- New walking and cycling crossings over EWR and A428 should also seek to accommodate to potential for the Busway to increase activity and natural surveillance where there is significant vertical segregation.

Cambourne
Growth
Strategy
Programme

Appendix

Long-listed Busway extension options

Route B

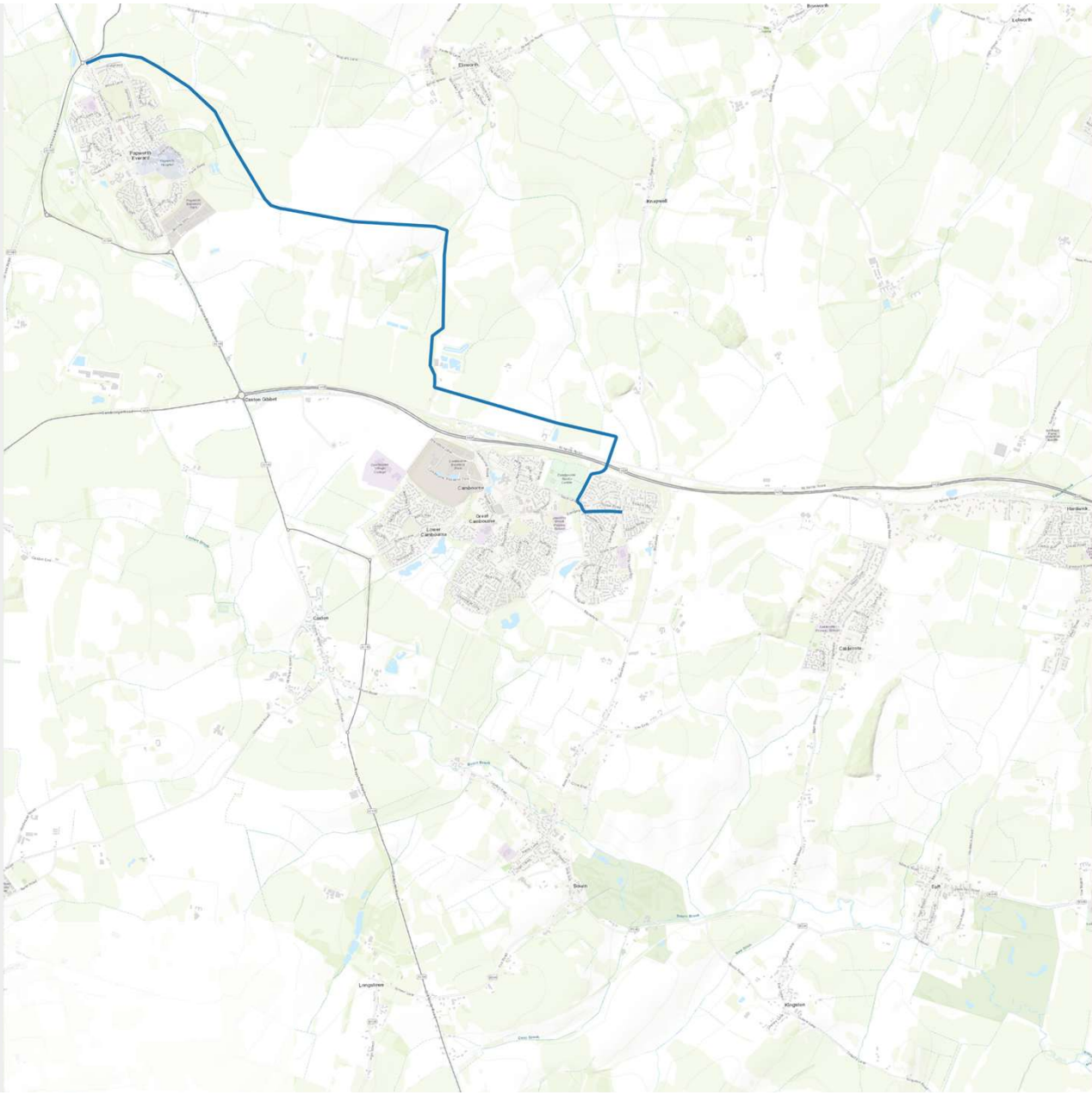
Sports pitches 1: Sections 1, 3, 4, 5, 9, 40, 41, 42, 44, 46

Continuing along the busway alignment through Upper Cambourne to Lancaster Gate, the route runs on a short stretch of Lancaster Gate and Back Lane until diverting north to a dedicated busway between the Cambourne Town FC sports pitches and Upper Cambourne housing development. It then crosses the A428 on a dedicated new bridge to serve Extended Cambourne.

There is a right turn before the bridge as to avoid a small plot of land with dense tree coverage.

After serving the proposed EWR station, the route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 4,700 people currently live within 500m of this route.



Route C

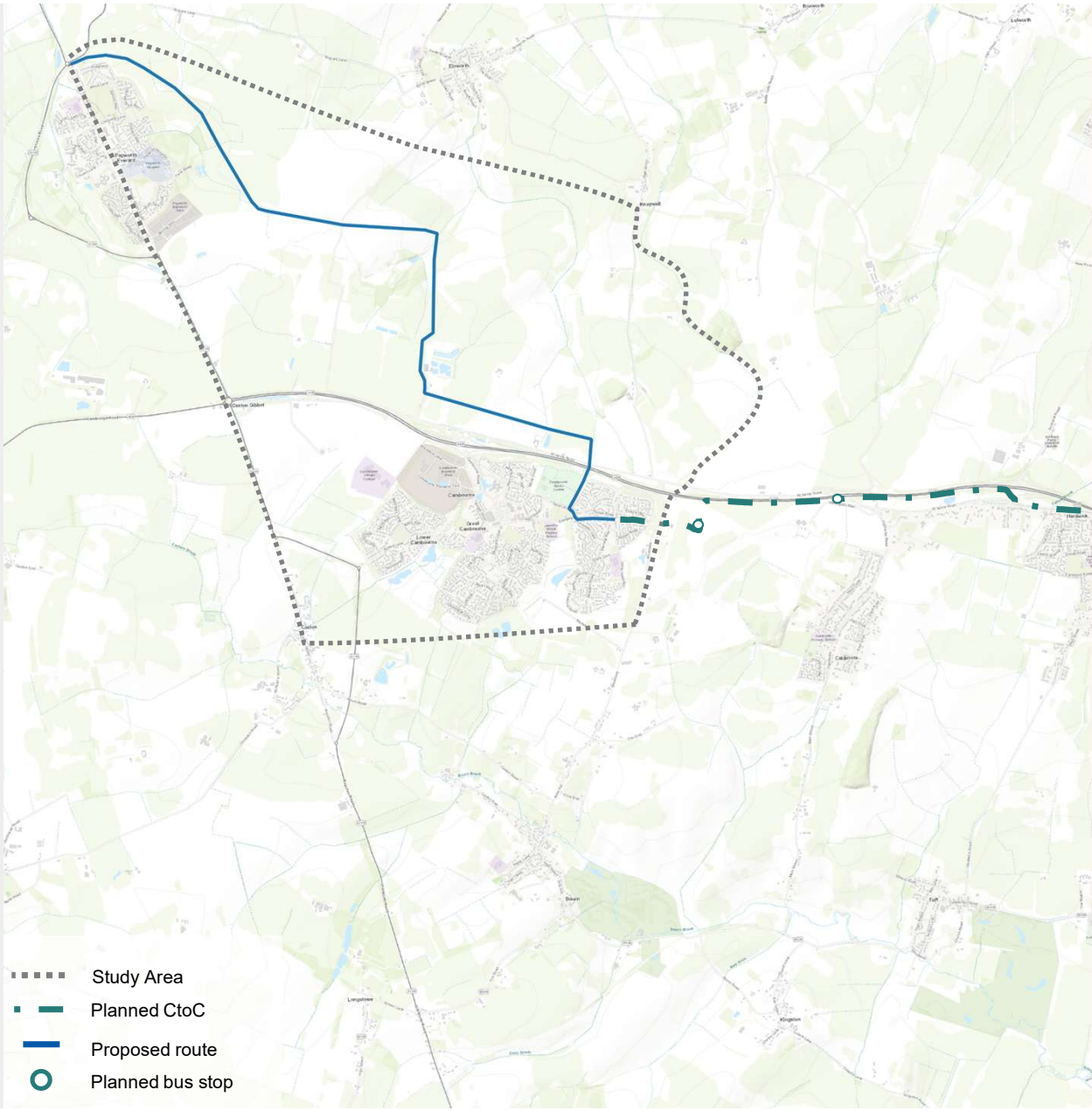
Sports pitches 2: Sections 1, 3, 4, 5, 10, 40, 41, 44, 46

Continuing along the busway alignment through Upper Cambourne to Lancaster Gate, the route runs on a short stretch of Lancaster Gate and Back Lane until diverting north to a dedicated busway between the Cambourne Town FC sports pitches and Upper Cambourne housing development. It then crosses the A428 on a dedicated new bridge to serve Extended Cambourne.

There is no right turn before the bridge and instead goes straight on through a small plot of land with dense tree coverage.

After serving the proposed EWR station, the route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 4,700 people currently live within 500m of this route.



Route D

New Hall Lane Busway: Sections 1, 3, 4, 13, 15, 21, 22, 41, 44

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m until switching back to the dedicated busway. The dedicated busway runs between housing developments and crosses New Hall Lane before joining mixed traffic on Cambourne Road.

At Cambourne Road, the route continues north using the existing bridge to cross the A428 but would not directly serve the proposed EWR station. The route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 5,300 people currently live within 500m of this route.

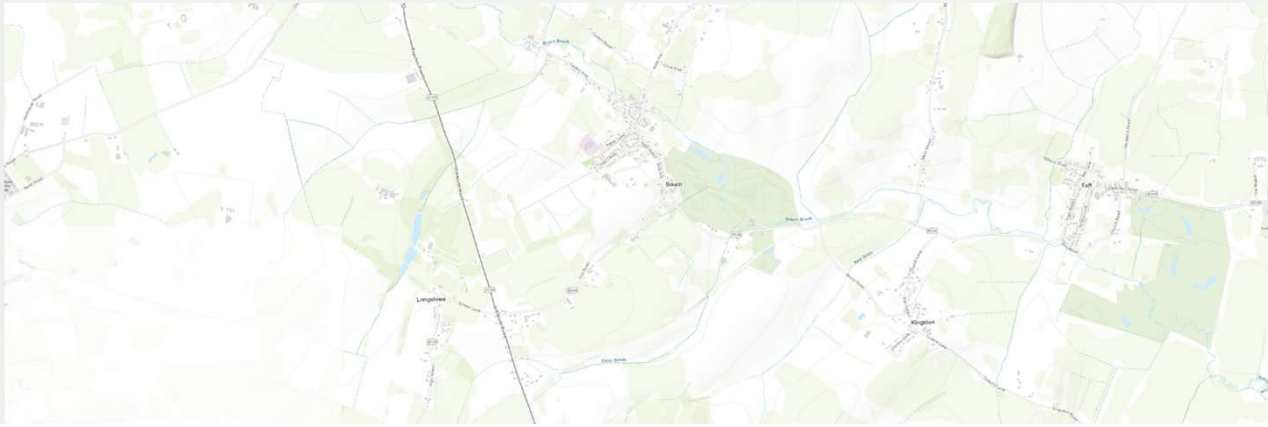
Route E

Cambourne Business Park via High Street: Sections 1, 2, 3, 8, 11, 12, 18, 19, 41

Continuing along the busway alignment to Lancaster Gate, the route crosses Lancaster Gate to go down the length of Eastgate. After going the entirety of Eastgate, the route goes right on to a short stretch of Jeavons Lane before turning left onto High Street. Continuing along the High Street, the route goes through the middle of Cambourne turning right on to Broad Street.

The route then turns left serving Cambourne Business Park before turning right on a dedicated busway between the business park and Sheepfold Lane. This section crosses Sheepfold Lane and goes over the A428 on a new dedicated bridge crossing but would not directly serve the proposed EWR station. The route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 6,600 people currently live within 500m of this route.



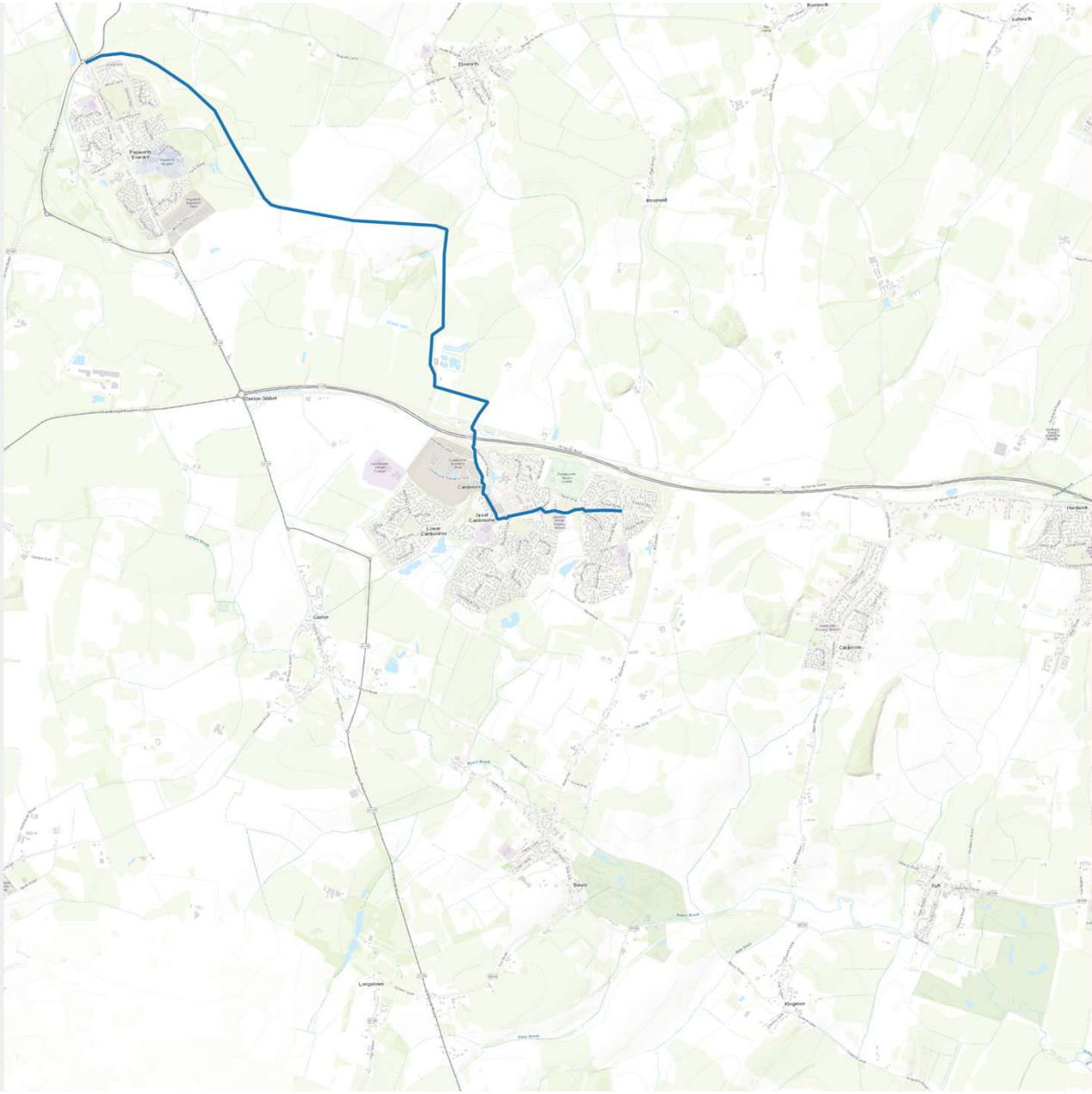
Route F

Cambourne Business Park via High Street: Sections 1, 2, 3, 8, 20, 22, 41, 44

Continuing along the busway alignment to Lancaster Gate, the route crosses Lancaster Gate to go down the length of Eastgate. After going the entirety of Eastgate, the route goes right on to a short stretch of Jeavons Lane before turning left onto High Street. Continuing along the High Street, the route goes through the middle of Cambourne turning right on to Broad Street.

The route then continues along Cambourne Road across the existing bridge over the A428 but would not directly serve the proposed EWR station. The route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 6,600 people currently live within 500m of this route.



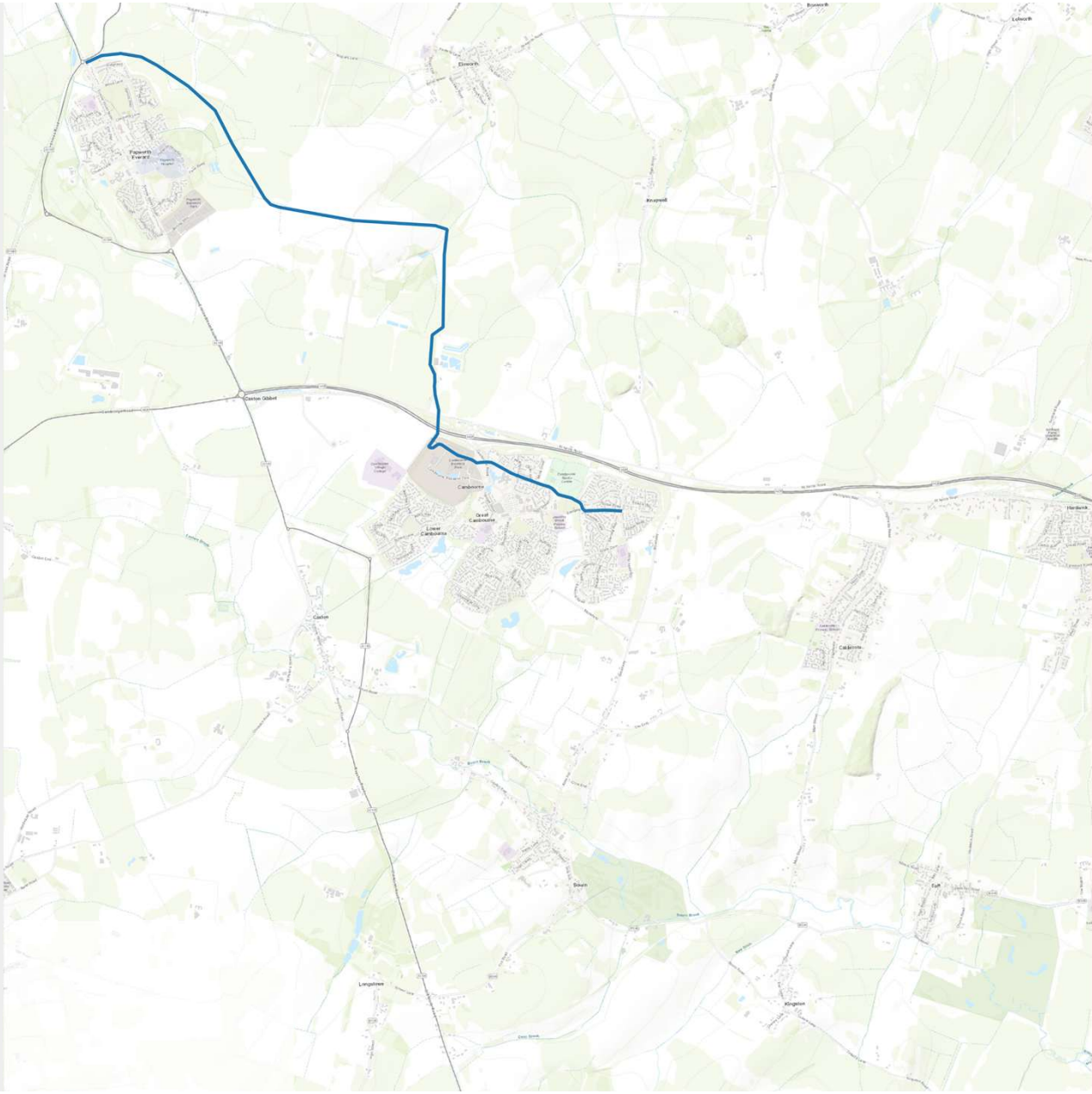
Route G

Sheepfold Lane via Newhall Lane Busway: Sections 1, 3, 4, 13, 15, 19, 21, 23, 41

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m until switching back to the dedicated busway. The dedicated busway runs between housing developments and crosses New Hall Lane before cutting across Cambourne Road to travel along Sheepfold Lane in mixed traffic for approximately 460m.

The route turns right off Sheepfold Lane before going into the new West Cambourne development and across north across the A428 on a newly built bridge on a dedicated right of way but would not directly serve the proposed EWR station. The route then continues north with stops at Elsworth Wood and Papworth Everard.

Approximately 5,700 people currently live within 500m of this route.



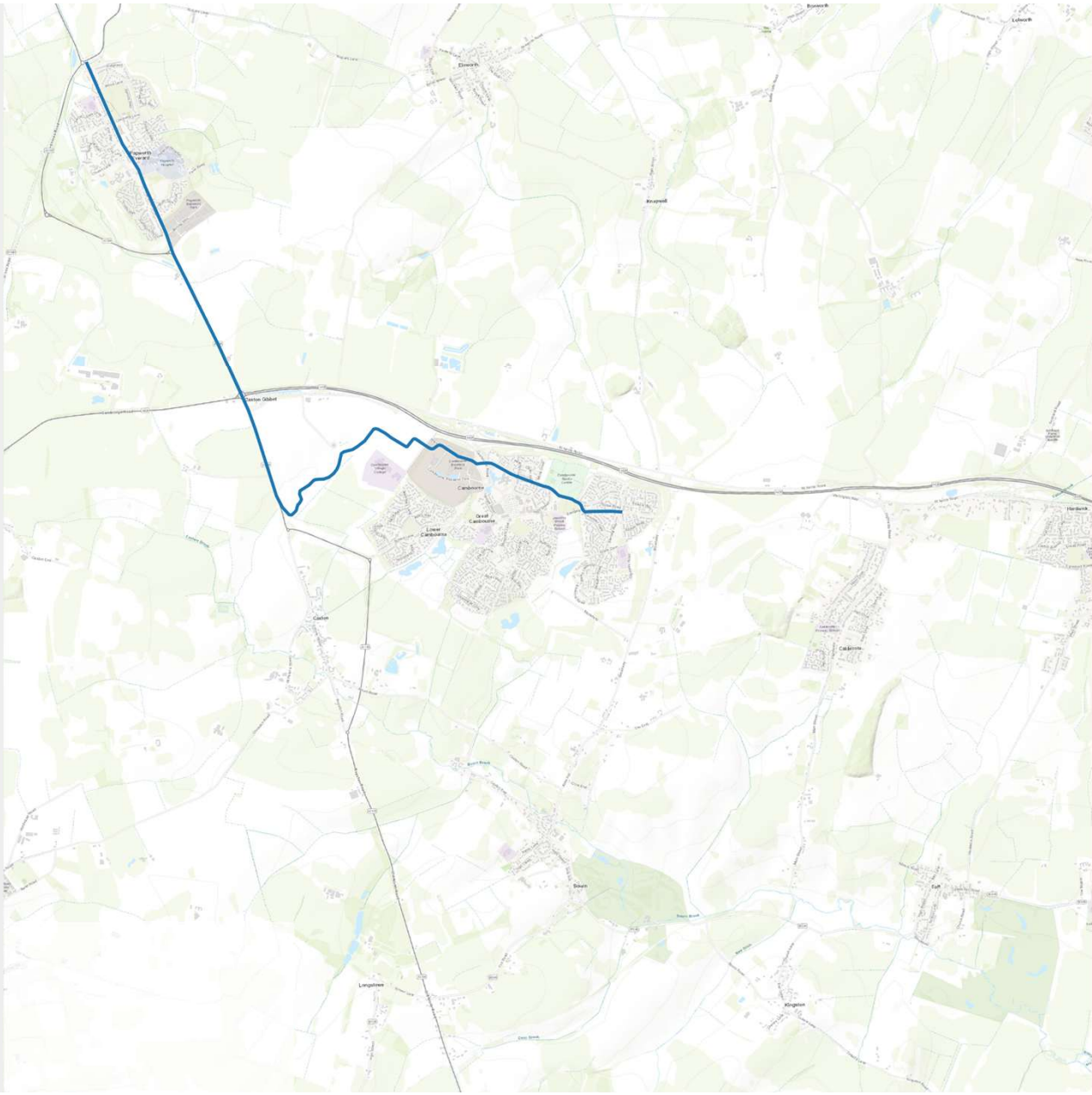
Route H

A1198 via High Street: Sections 1, 3, 4, 13, 15, 21, 23, 26, 27, 32, 33, 35, 38

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m until switching back to the dedicated busway. The dedicated busway runs between housing developments and crosses New Hall Lane before cutting across Cambourne Road to rejoin mixed traffic roads along Sheepfold Lane, Dobbins Avenue, and Royce Street serving the new West Cambourne development.

After serving West Cambourne, the route takes a right onto the A1198 to head north to the A428 and potentially onward to Papworth Everard on highway.

Approximately 5,700 people currently live within 500m of this route.



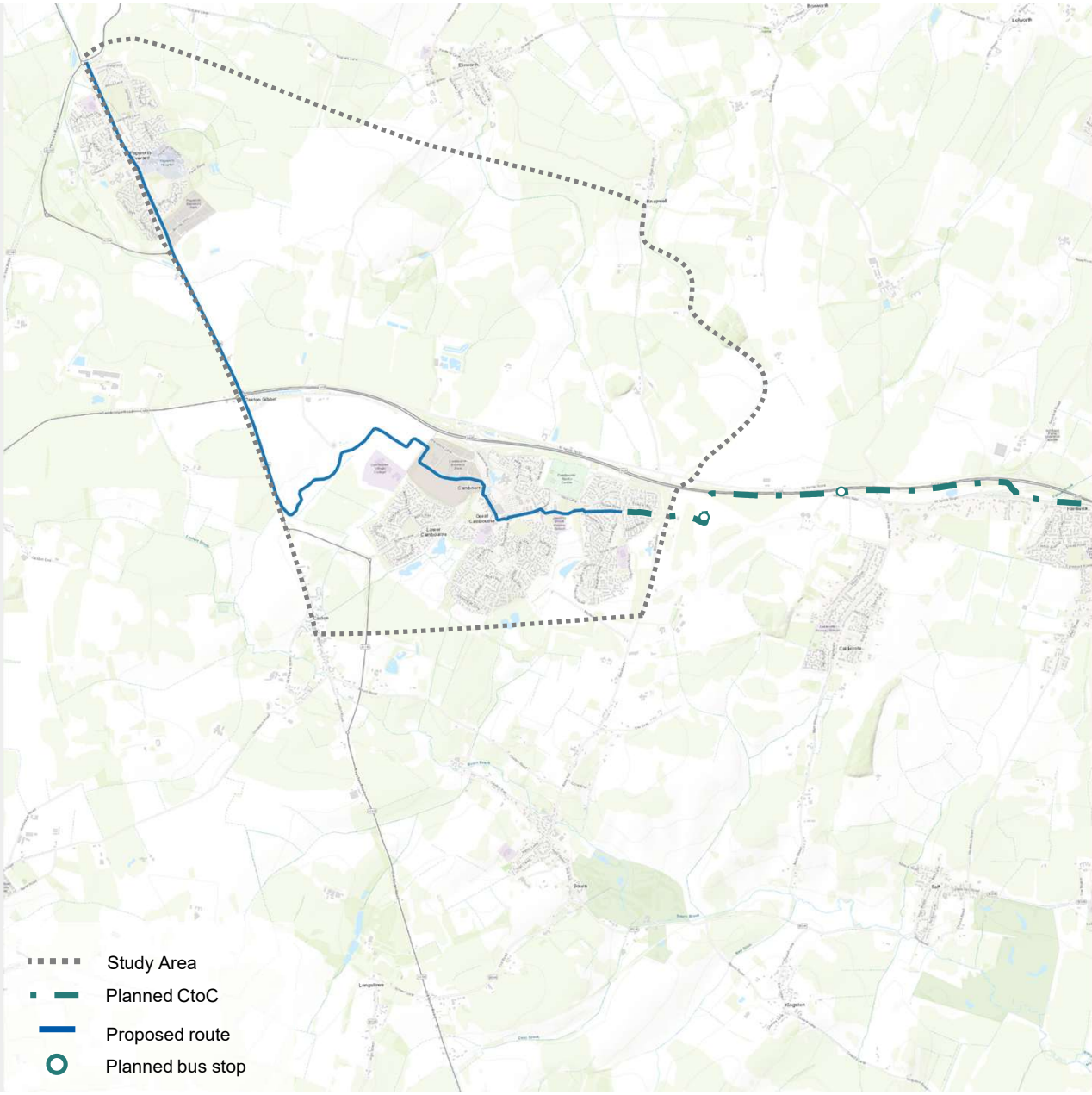
Route I

A1198 via High Street & Business Park: Sections 1, 2, 3, 8, 11, 12, 18, 26, 27, 32, 33, 35, 38

Continuing along the busway alignment to Lancaster Gate, the route crosses Lancaster Gate to go down the length of Eastgate. After going the entirety of Eastgate, the route goes right on to a short stretch of Jeavons Lane before turning left onto High Street. Continuing along the High Street, the route goes through the middle of Cambourne turning right on to Broad Street.

The route then turns left serving Cambourne Business Park before turning right on a dedicated busway between the business park and Sheepfold Lane. Turning left onto Sheepfold Lane the route continues along Dobbins Avenue and Royce Street in mixed traffic through the West Cambourne development before turning right onto the A1198 to the A428 and potentially onward to Papworth Everard on highway.

Approximately 7,300 people currently live within 500m of this route.



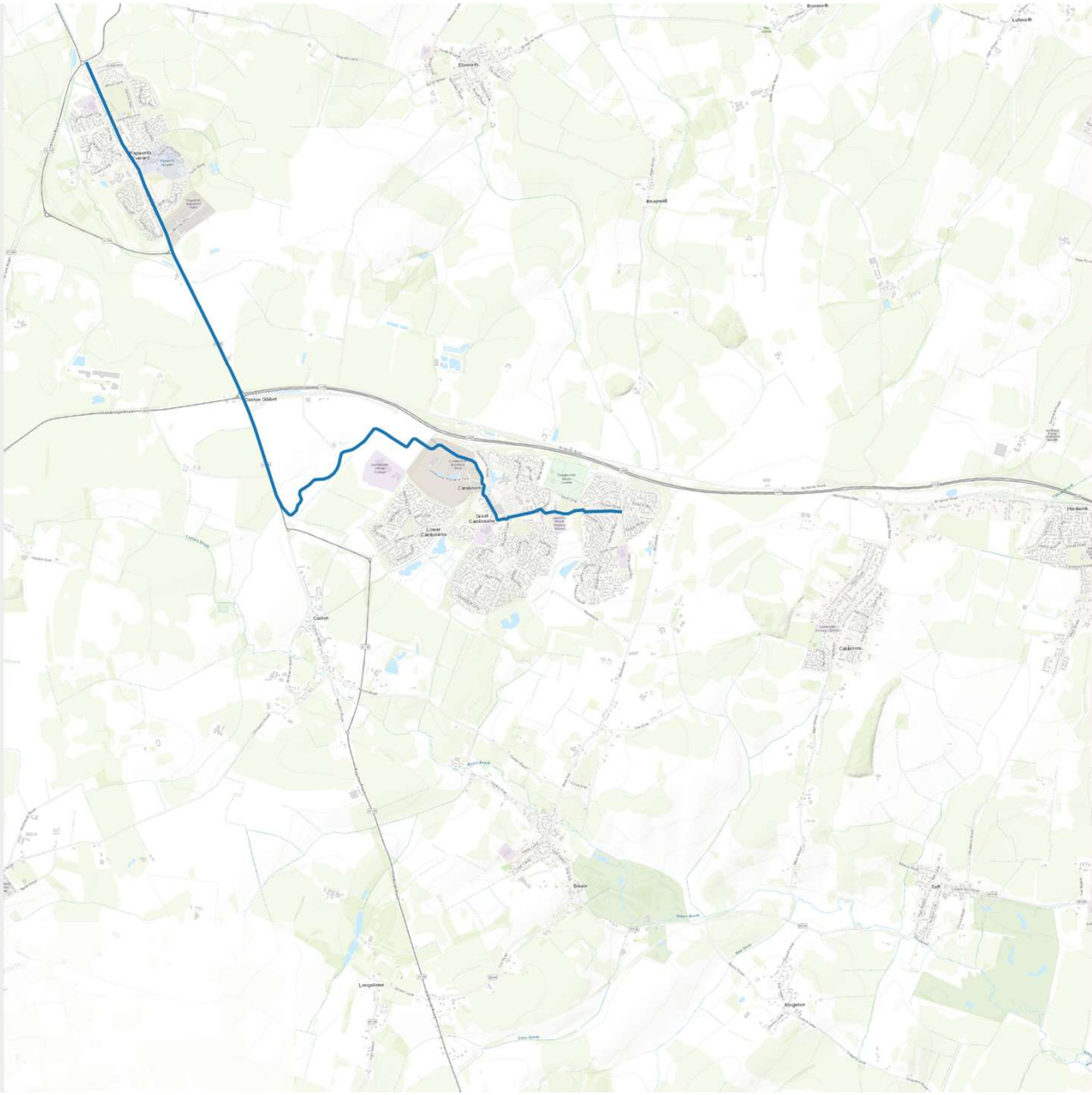
Route J

A1198 via High Street & Sheepfold Lane: Sections 1, 2, 3, 8, 20, 23, 26, 27, 32, 33, 35, 38

Continuing along the busway alignment to Lancaster Gate, the route crosses Lancaster Gate to go down the length of Eastgate. After going the entirety of Eastgate, the route goes right on to a short stretch of Jeavons Lane before turning left onto High Street. Continuing along the High Street, the route goes through the middle of Cambourne turning right on to Broad Street.

The route serves the middle of Cambourne and continues along Cambourne Road then turns left onto Sheepfolds Lane and travels through the West Cambourne Development along Dobbins avenue and Royce Street in mixed traffic through the West Cambourne development before turning right onto the A1198 to the A428 and potentially onward to Papworth Everard on highway.

Approximately 6,900 people currently live within 500m of this route.

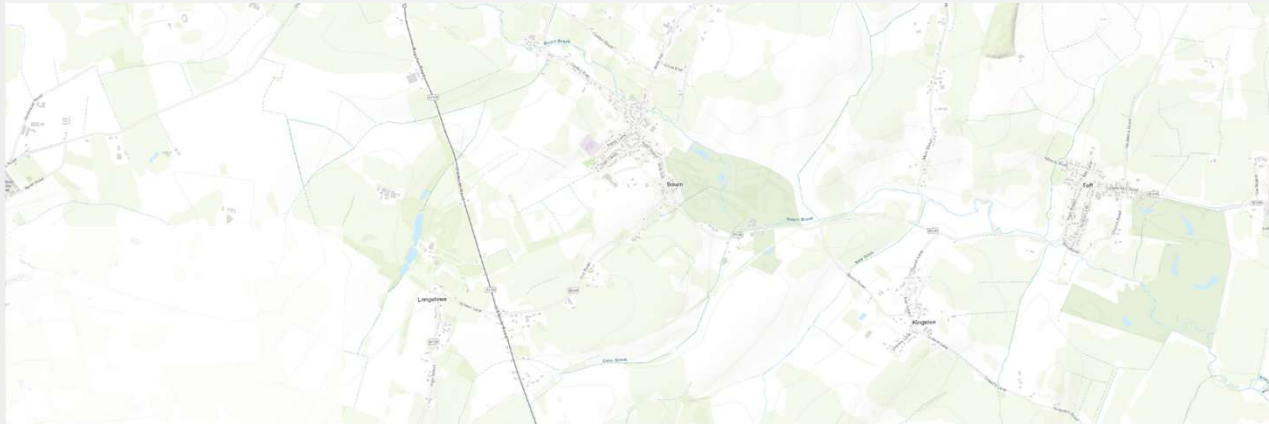


Route K

Cambourne Village College: Sections 1, 2, 3, 17 18, 19, 41, 47, 50, 52

Continuing along the busway alignment from Sterling Way to Lancaster Gate, the route uses Eastgate to get to Jeavons Lane on to the High Street. Here in the middle of Cambourne is the potential to introduce a stop serving the town centre. The route goes along the High Street on to School Lane before leaving the main highway network and using a dedicated busway to go off School Lane through Oaks Wood and next to a footpath along the edge of Cambourne Business Park.

It then serves a potential stop at Cambourne Village College before heading north on a dedicated busway and crossing the A428 on a new bus and active travel bridge to serve another potential stop location to the north of Cambourne. This would be nearby the EWR station. The route then continues north with stops at Elsworth Wood and Papworth Everard.

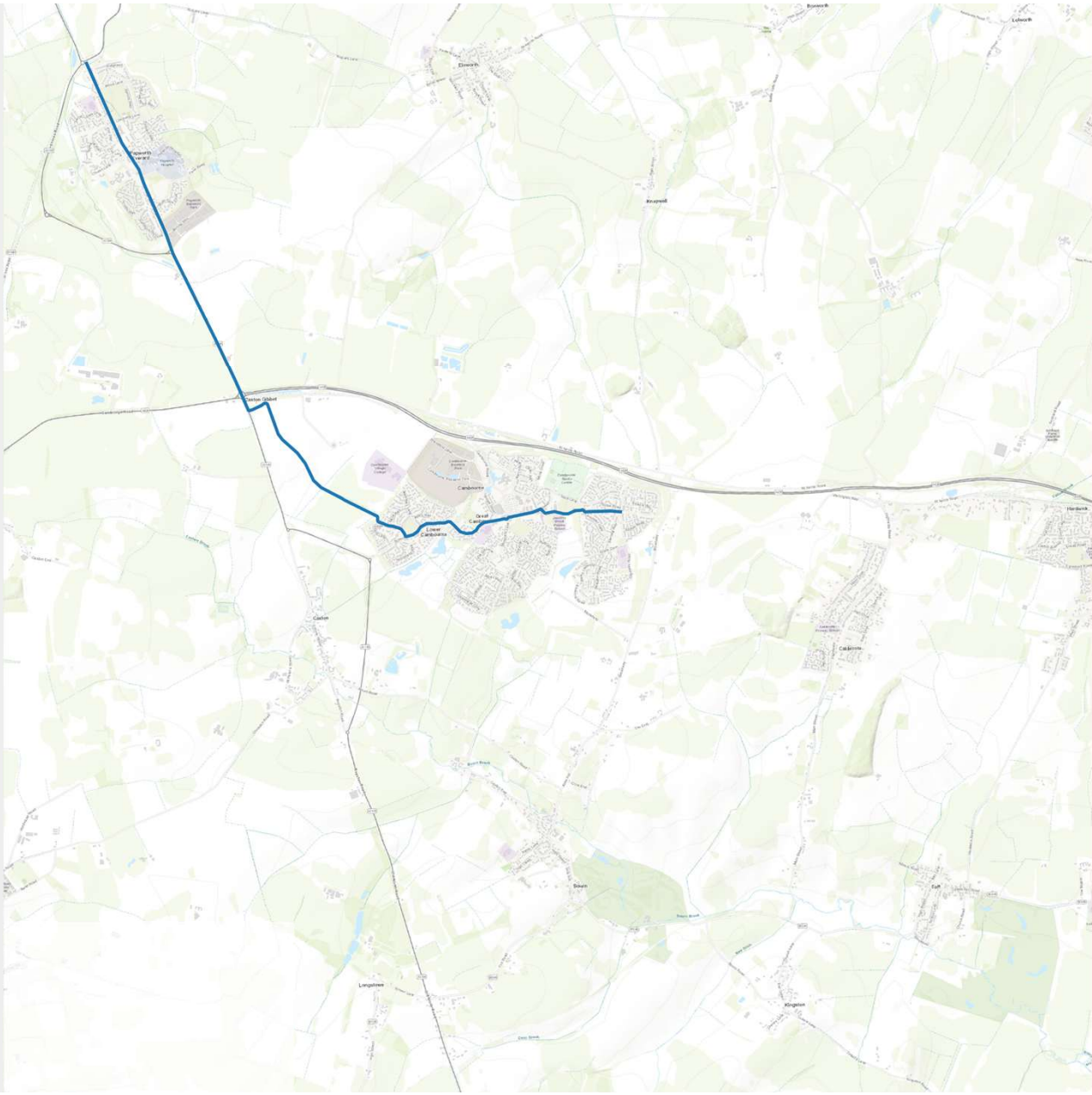


Route L

West Cambourne Busway: Sections 1, 2, 3, 25, 28, 29, 30, 36, 39, 47, 49, 53

Continuing along the busway alignment from Sterling Way to Lancaster Gate, the route uses Eastgate to get to Jeavons Lane on to the High Street. Here in the middle of Cambourne is the potential to introduce a stop serving the town centre. The route continues along School Lane in general mixed traffic until turning right on to Woodfield Lane where, at the northern end, it joins a dedicated busway.

The route then continues through the new West Cambourne development on a busway which crosses Cavell and Dobbins Avenues. It then runs in mixed traffic for approximately 450m before turning off on a dedicated busway. It then rejoins the main highway network on an unnamed road to the northwest of the West Cambourne development and potentially onward to Papworth Everard on highway.

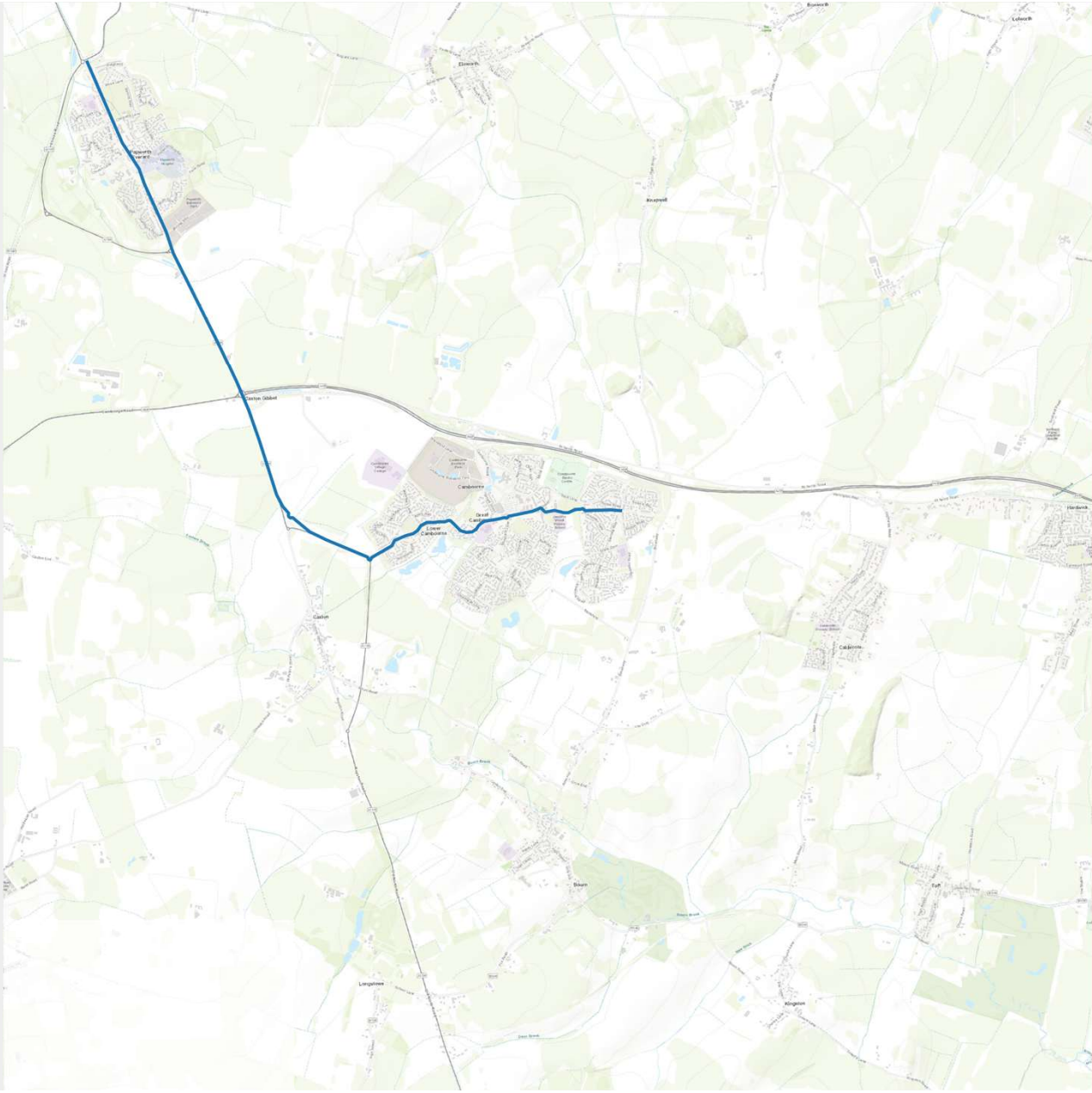


Route M

A1198 via High Street: Sections 1, 2, 3, 28, 31, 35, 47

Continuing along the busway alignment from Sterling Way to Lancaster Gate, the route uses Eastgate to get to Jeavons Lane on to the High Street. Here in the middle of Cambourne is the potential to introduce a stop serving the town centre. The route continues along the entirety of School Lane in general mixed traffic.

The route then heads on to the A1198 northbound and potentially onward to Papworth Everard on highway.



Route R

Expanded Cambourne-A1198 Loop: Sections 1, 3, 4, 13, 15, 21, 23, 26, 27, 32, 33, 35, 38, 40, 45, 55, 56, 58

Continuing along the busway alignment to Lancaster Gate, the route runs on street along Back Lane for approximately 130m before splitting in two to make a loop through Extended Cambourne and existing Cambourne.

Travelling anti-clockwise, the route turns right off Back Lane on to a dedicated busway running alongside Monk Lane. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station. This then crosses the A428 on a dedicated busway and active travel bridge to serve the new EWR station.

The route then travels through Extended Cambourne serving the new development on a direct busway to a junction with the A1198 just south of Papworth Everard. The route goes south along the A1198 and crosses the A428 before turning into West Cambourne on Dobbins Avenue. The route continues through West Cambourne on Dobbins Avenue and Royce Street before using Sheepfolds Lane to connect to Cambourne Road. New busway is then used to cross Cambourne Road and cross New Hall Lane to complete the loop at the junction of Monk Drive and Back Lane.