

PROPOSALS FOR THE CAMBRIDGESHIRE AUTONOMOUS METRO (CAM)

21 February to 3 April 2020



Vehicle shown for illustrative purposes only

Welcome

“ I am delighted to invite you to our public consultation for the Cambridgeshire Autonomous Metro - a new high-quality ‘metro-style’ transport network for the region.

CAM will create a platform for growth across the region, by seamlessly connecting new and existing households and businesses with key employment areas, railway stations and the city centre.

The creation of this world-class public transport will transform the day-to-day lives of local people across Cambridgeshire by introducing a new fast and reliable travel option, designed to sustain the growth of the region in the long-term.

By reducing reliance on private cars, CAM will also help cut congestion and tackle air quality issues, improving the quality of the local environment for generations to come.

I hope you will be able to attend one of our upcoming consultation events, to discover more and speak with members of the CAM project team.

Feedback from the consultation will help to influence the evolution of the proposals.



Mayor James Palmer
Cambridgeshire and Peterborough
Combined Authority

About Us

The Cambridgeshire and Peterborough Combined Authority (CPCA) is the Transport Authority responsible for transport planning and public transport in our area. It brings together the councils of the area and is led by the elected mayor.



What is CAM?

The vision is for an expansive metro-style network that seamlessly connects regional settlements, major city fringe employment sites and key satellite growth areas across the region with key railway stations and Cambridge city centre, helping to nurture and sustain long-term regional economic growth. CAM is currently expected to use a technologically advanced, sustainable, highly flexible trackless electric vehicle.

The CAM network will comprise both tunnelled and surface elements and will be delivered over the next decade:

- The City Tunnel Section, which is the subject of this consultation, will include new underground tunnels and stations under the city of Cambridge, with planned major interchange hubs at the city centre and at Cambridge railway station;
- Four regional routes will connect St Neots, Alconbury, Mildenhall and Haverhill with the city of Cambridge and, through the central tunnelled section, with each other.

An indicative map of how the CAM network would look is shown below.



Scope of the Consultation

As part of this consultation, we are seeking your views on:

1. The need for and benefits of CAM;
2. The potential route alignments for the City Tunnel Section of CAM, further details of which are available in this leaflet.

Your feedback to this consultation will influence the evolution of the proposals and support the preparation of the Outline Business Case (OBC) for the City Tunnel Section, further information on which is available in this leaflet.

How to Participate in the Consultation

Public exhibitions are being held as set out in the table below. The exhibitions will provide an opportunity to view the proposals and discuss them with members of the CAM project team.

Date	Venue	Time
29 Feb 2020	Lion Yard Shopping Centre, St Tibb's Row, Cambridge, CB2 3ET	10am – 4pm
2 Mar 2020	Cambridge United Football Club, Abbey Stadium, Newmarket Road, Cambridge, CB5 8LN	1pm – 7pm
5 Mar 2020	Royal Papworth Hospital, Papworth Road, Trumpington, Cambridge, CB2 0AY	10am – 4pm
7 Mar 2020	Grafton Shopping Centre, Cambridge, CB1 1PS	10am – 4pm
11 Mar 2020	Cambridge Science Park, St Johns Innovation Centre, Cowley Road, Cambridge, CB4 0WS	12pm – 3:30pm
20 Mar 2020	The Hauser Forum, 3 Charles Babbage Road, Cambridge, CB3 0GT	1pm - 7pm

The consultation materials, including the consultation leaflet and feedback form, will also be available to view at information points between **Thursday 27 February and Friday 3 April 2020**, which are set out in the table below. Please note that opening times may be subject to change. Copies of the consultation materials are also available online at www.cam.consultationonline.co.uk.

Venue	Opening Hours
Sainsbury's, St Germain Walk, Huntingdon, PE29 3FG	Mon-Weds: 8am-8pm, Thurs-Fri: 8am-9pm Sat: 7:30am-8pm, Sun: 10am-4pm
Linton Health Centre, Coles Lane, Linton, Cam-bridge, CB21 4JS	Mon-Fri: 8am-6pm Sat & Sun: Closed
Love's Farm House, 17 Kester Way, St Neots, PE19 6SL	Mon-Fri: 9am-3pm Sat & Sun: Open for private functions only
Co-op Mildenhall, King Street, Mildenhall, Bury St Edmunds, IP28 7ES	Mon-Sun: 7am-10pm
Leiston Community Centre, Leiston Road, Haverhill, CB9 8JJ	Mon-Fri: 10am-5pm & 6:15pm-8pm Sat: 10am-4pm & 6:15pm-8pm, Sun: Closed
The Club, Enterprise Campus, The Boulevard, Alconbury Weald, Huntingdon, PE28 4XA	Mon - Fri: 9am - 5:30pm, Sat & Sun: Closed

The Need for CAM

To date, economic growth in the region has not been matched by infrastructure, particularly transport. To nurture and sustain this growth, new infrastructure is needed to support the delivery of new jobs and new homes.

CAM will connect key regional centres of employment, existing settlements, key railway stations, new homes and planned growth, to create a platform for sustainable and inclusive growth across the region.

Introducing a rapid transit solution in the form of CAM will transform people's day-to-day lives, by connecting communities and creating new jobs and widening access to opportunities across the region.

Benefits of CAM



Improving Your Travel Experience

CAM will provide a reliable and regular service using modern vehicles, significantly reducing journey times between the wider region and the city of Cambridge through the utilisation of autonomous technology (where practicable) with dedicated routes which reduce congestion, improving the travel experience for all.



Expanding Your Range of Opportunities

By connecting existing and planned settlements with key regional centres of employment, CAM will greatly expand the opportunities available to residents of the region, including access to a greater number and variety of jobs. Students will also benefit from greater access to a wider range of training opportunities, apprenticeships, colleges and sixth form places. Access will also be improved to health care facilities and other essential services for all residents.



Improving Air Quality and Reducing Congestion

By providing a passenger transport system that offers a genuine alternative to using the car, CAM would help to reduce congestion and improve air quality within the city of Cambridge through the use of electric vehicles, improving the local environment for all.



Supporting Sustainable Regional Growth

CAM will connect key regional centres of employment, with existing settlements, railway stations and planned growth, to create a platform for sustainable and inclusive growth across the region, in addition to the opportunity to provide more new and affordable homes.



Encouraging New Investment

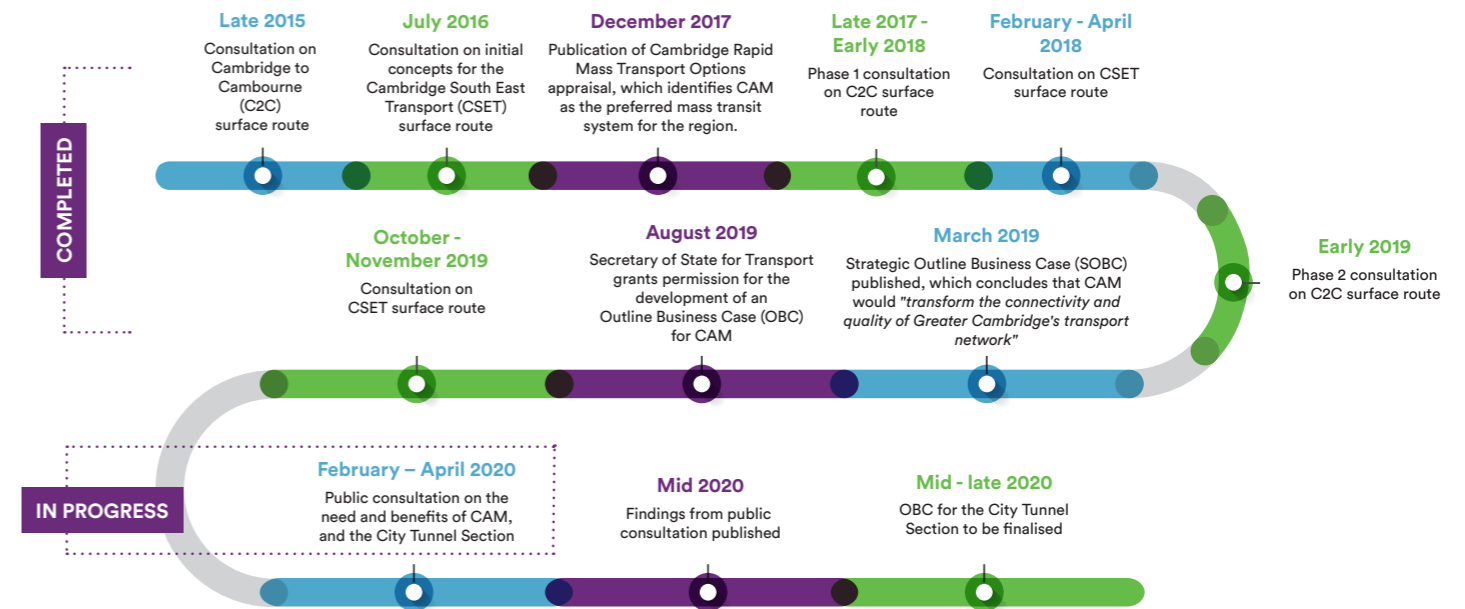
By decreasing the relative distance between key 'clusters' around the city and across the region, CAM will link key growth areas, encouraging additional jobs by making the region a more attractive place to locate, expand and invest.

Let us know your thoughts

We would like to know your view on the need and benefits of CAM outlined above. Please answer question 7 on the feedback form to share your view.

Story so far

The diagram below illustrates the work that has previously been undertaken on CAM, and indicative timescales for the project's next steps.



About the Outline Business Case (OBC)

The Outline Business Case (OBC) is the second phase in the development of a business case compliant with HM Treasury guidance.

The business case is a multi-stage decision-making tool designed to ensure that public money is spent in the best way possible to improve public services.

A business case is developed over three phases:

- 1. The Strategic Outline Business Case (SOBC):** Was published in 2019 and explains the case for change and suggests an indication of the potential solution to stakeholders;
- 2. The Outline Business Case (OBC):** Will revisit the SOBC in more detail and identify a preferred option that optimises Value for Money;
- 3. The Full Business Case (FBC):** Will revisit the OBC and recommend detailed arrangements for the successful delivery of the project.

Each phase addresses the following five key aspects, with an increasing level of detail:

Strategic Case: Demonstrating the strategic rationale for the CAM network, including how it will meet the region's interconnected transport, economic, and environmental objectives;

Economic Case: Ensuring that the project will deliver the greatest possible value from this investment, not only to CAM's users, but to wider society by driving economic growth, enabling a more sustainable transport network, and improving quality of life across the region;

Commercial Case: Ensuring the commercial viability of the project and determining the delivery framework, including a robust and transparent procurement strategy;

Financial Case: Verifying whether the project is affordable and fundable over time; and

Management Case: Determining whether the project can be delivered successfully by the organisation and its partners.

The City Tunnel Section

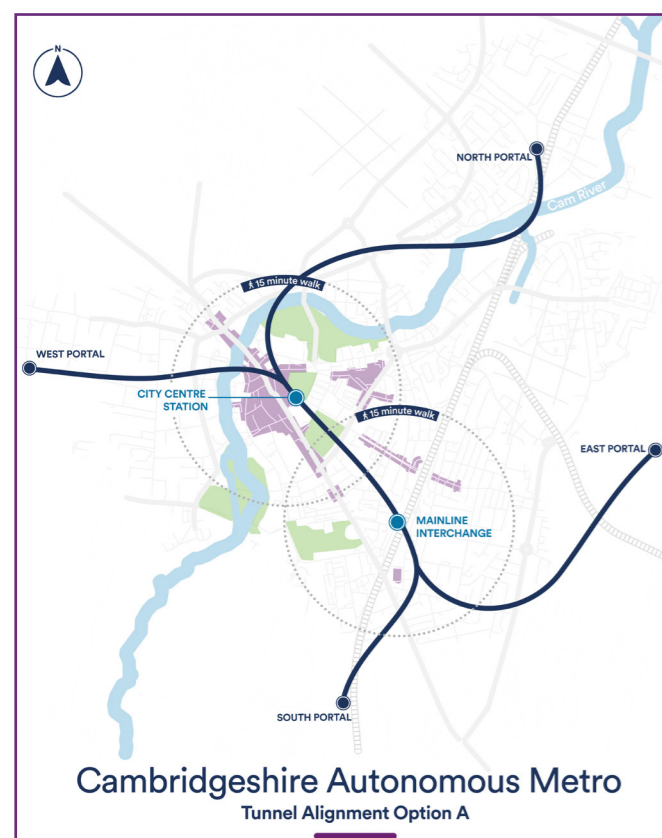
The City Tunnel Section comprises underground tunnels, planned major interchange hubs at the city centre and at Cambridge railway station, under the city of Cambridge, and portals where CAM links to the surface routes. Further detail regarding portals is available on page 8 of this leaflet.

Both Route Alignment Options set out here have been arrived at following a detailed optioneering process that has taken into consideration various planning, engineering and environmental factors, further details of which will be published as part of the planning process.

Why tunnels?

The city of Cambridge's historic streetscape means that it is not possible to deliver a surface-level segregated route through the city centre. If services were to run on-street, they would be significantly slower and frequently delayed by other traffic. Tunnelling under the city centre is therefore the best way to ensure fast, frequent and reliable CAM services, which meet the objectives of the scheme.

Route Alignment Option A



Option A would see the four surface routes connect to the City Tunnel Section via four portals to the north, south, east and west of the city, where CAM would transition from above ground to below ground operation.

Once underground, the north and west routes would converge at a new City Centre station.

The south and east tunnels would converge at a Mainline Interchange station at Cambridge railway station that would enable users to transfer between CAM and the existing National Rail network.

The Mainline Interchange station and City Centre station would be connected by tunnels which would be used by vehicles travelling to/from the surface routes.

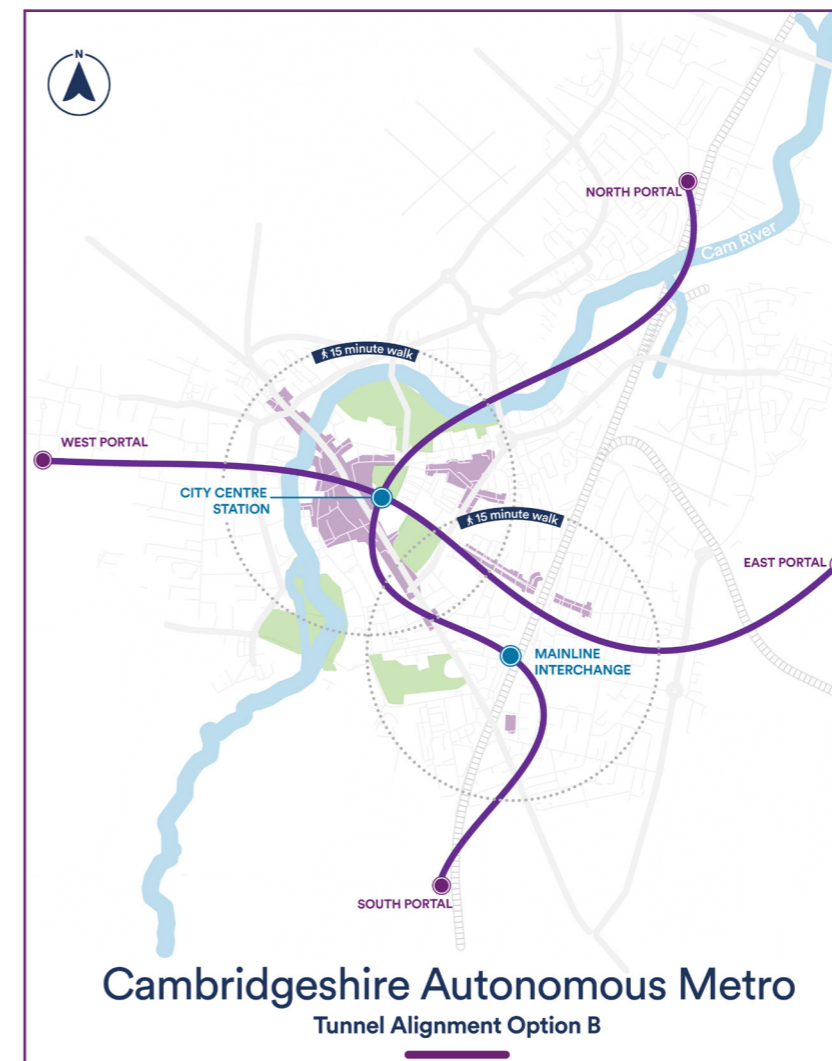
This would provide passengers with easy access to both stations in the city centre and facilitate swift and efficient transfers between different routes.

Further details regarding the proposed City Centre and Mainline Interchange stations can be found on pages 9 and 10 of this leaflet.

Key Benefits and Drawbacks Associated with Option A

Benefits	Drawbacks
+ More direct connections than Option B, especially to/from the east and Cambridge railway station, and to/from the west and south	- Combined tunnels could constrain capacity
+ Easier to interchange between lines than Option B through the provision of cross-platform interchanges	- Any operational issue within the central section may impact all lines
+ Provides more flexibility than Option B to change the distribution of vehicles and service patterns to match any changes in the level of demand	

Route Alignment Option B



Option B would also see the four surface routes connect to the City Tunnel Section via four portals to the north, south, east and west of the city, where CAM would transition from above ground to below ground operation.

Once underground, all four tunnels would converge at a new City Centre station only, with the new Mainline Interchange station served solely by the services running to/from the southern surface routes.

Passengers from the east and west would be required to change at the City Centre station to reach the Mainline Interchange station.

Key Benefits and Drawbacks Associated with Option B

Benefits	Drawbacks
+ Provides a simpler services pattern where lines have dedicated platforms	- No direct link between the east/west and Mainline Interchange station
+ Separation of lines enables services to continue running if operational issues arise on one line	- Larger double-level station required at the City Centre station
	- Provides less flexibility than Option A to change the distribution of vehicles and service patterns to match any changes in demand

Let us know your thoughts

We would like to know your view on the potential route alignments outlined above. Please answer questions 9 and 10 on the feedback form to share your view.

The Portals

Portals are the locations at which CAM transitions from above ground to below ground operation and will be similar in appearance to the entry/exits of road and railway tunnels.

Four portals will be required to link the surface routes with the City Tunnel Section, and are proposed to be located to the north, south, east and west of the city.

At present, we anticipate the portals will be located in the following approximate areas:

- **North:** Near Cambridge North Railway station
- **South:** Near Cambridge Biomedical Campus
- **East:** Near Cambridge Airport
- **West:** Near University of Cambridge west site

Precise locations for the portals have yet to be confirmed as further technical work is required to refine potential locations. Once this work has been carried out, precise portal locations will be presented as part of a future consultation.

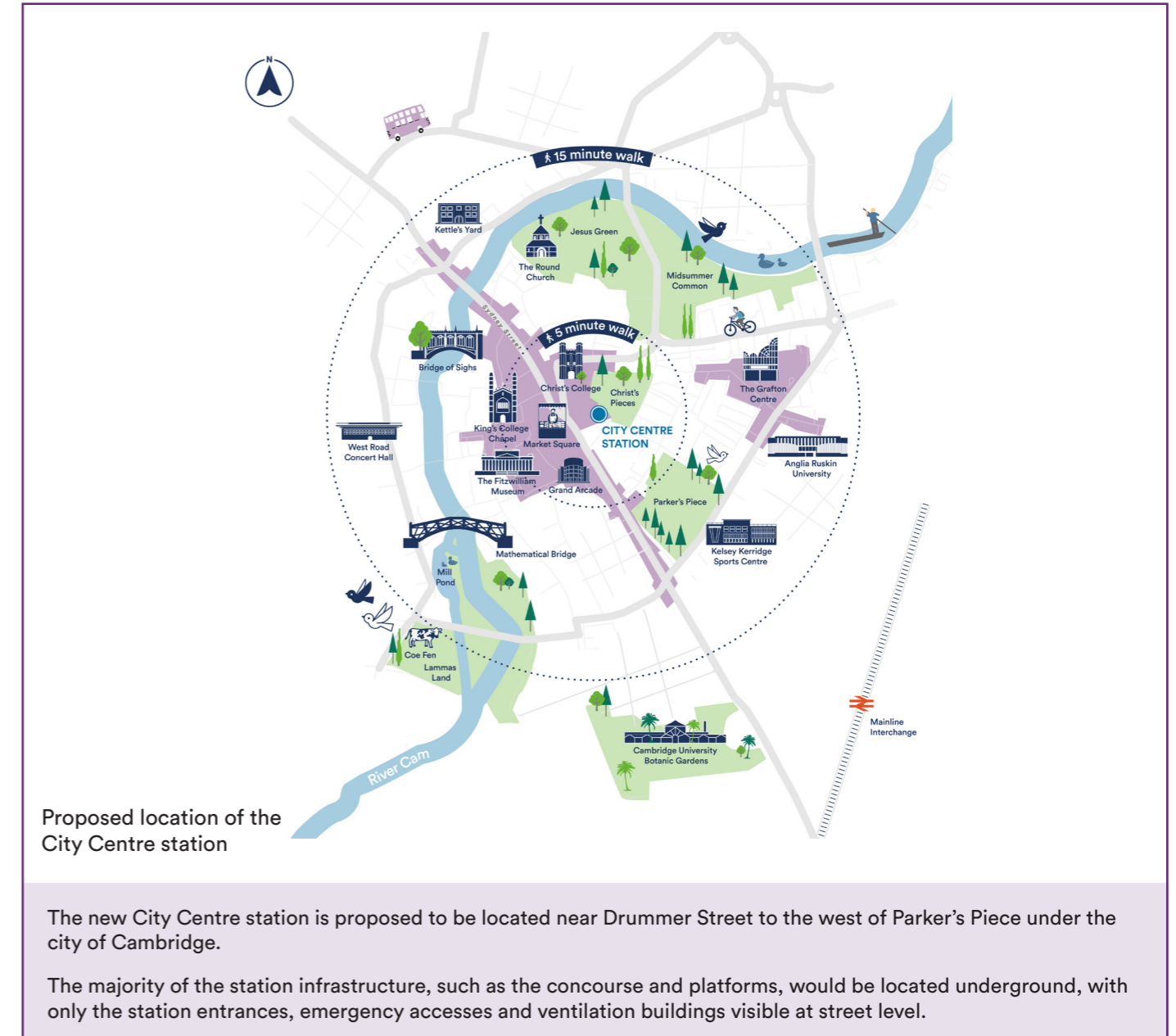
Stations will be located above ground in close vicinity to all four portals, with the exception of the north portal, where the station may be located partially underground due to engineering constraints.



Let us know your thoughts

We would like to know your view on the potential portal locations outlined above. Please answer question 13 on the feedback form to share your view.

Proposed City Centre station location



Alternatives Considered

As part of the initial optioneering work, a number of potential station locations were identified and investigated, with a large number of these being discounted as they would have required the demolition of a significant number of buildings.

Following this process, three options remained:

1. Near Drummer Street
2. Near Parker's Piece
3. Near Market Square

Parker's Piece was not chosen as a preferred location due to the impact a station would have on both the visual environment and the heritage. Similarly, it was felt that the Market Square location was not a viable option due to its sensitive location, impacts and complexity of construction, access, and loss of public space in the centre of Cambridge.

Let us know your thoughts

We would like to know your view on the potential station locations outlined above. Please answer question 11 on the feedback form to share your view.

Proposed Mainline Interchange station location



The new Mainline Interchange is proposed to be located in close proximity to the existing Cambridge railway station, allowing passengers to quickly change between the CAM and National Rail networks.

Like the new City Centre station, the majority of the station infrastructure, such as the concourse and platforms, would be located underground, with only the station entrances, emergency accesses and ventilation buildings visible at street level.



Indicative CGI of a station entrance

Have your say

Thank you for taking the time to view our proposals for CAM. There are a range of ways to respond to the consultation, including:

- **At public exhibitions and information points** – Feedback forms, together with freepost envelopes, will be available to complete at all public exhibitions and information points;
- **Online** – An online feedback form will be available at cam.consultationonline.co.uk. An electronic copy of the feedback form will also be available to download via the website and can be returned via email or Freepost (see below);
- **By post** – Comments will be accepted in writing via post to 'FREEPOST CAM CONSULTATION'. Completed hard copy feedback forms can also be returned via this address;
- **By email** – Comments can be submitted via email to cam@consultation-online.co.uk. Electronic or scanned copies of completed feedback forms can also be returned via email;
- **By phone** – The project team will be contactable via freephone on 01223 608001 with any queries (9:00–17:30 Mon-Fri).

Responses to the consultation must be submitted by no later than 23:59 on Friday 3 April 2020 (postal responses will be accepted up to three working days after this deadline) and responses received after this date may not be taken into consideration.

All comments submitted during the consultation will be recorded and carefully considered by CPCA and will be taken into account when further developing the proposal.

Next steps

Following the end of the consultation, CPCA will review all feedback submitted and publish the findings as part of the planning process.

In addition, the OBC will be prepared and submitted to the Department for Transport.

We remain at an early stage in the development of CAM and there will be further public consultation ongoing in the future as we continue to refine our proposals to provide additional detail.



Contact Us

If you have any questions, please contact us via:

- Website: www.cam.consultationonline.co.uk
- Freephone: **01223 608001** (09:00 - 17:30, Mon to Fri)
- Email: cam@consultation-online.co.uk
- Freepost: **FREEPOST CAM CONSULTATION** (no stamp required)

Please leave your notes here

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