

A12 Chelmsford to A120 widening Supplementary consultation November 2021



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Investing in your roads

At National Highways (formerly Highways England), we believe in a connected country where our network makes these connections happen. Our roads link with railway stations, ports and airports to give people a choice of travel and to support interconnectivity. When it comes to getting people where they need to be, we provide three times more miles per person than the railways.

The east region’s 650 miles of motorways and A-roads support and boost a growing and vital economy. We recognise that the region contains a mixture of high-tech business and housing growth closer to London, alongside areas of scenic rural fenland, coastal towns and ports.

In contrast to the region’s towns closer to London, three-quarters of land in rural East Anglia is used for farming to help feed the nation, and the area also remains a traditional holiday destination.

We’re also helping UK businesses thrive, furthering the nation’s economic growth through better connections to international hubs. Our region has established links to energy production, and now has ambitions to become the UK’s foremost energy coast. There are also major ports in the east region (including Felixstowe, Britain’s busiest, which handles nearly half of all shipping containers) and four airports.

To support this, in the last five years we’ve improved 244 miles of roads in the east region which are prone to congestion, as well as upgrading existing A-roads and building new ones to better connect the more rural communities and commerce.

Why is the proposed scheme needed?

The A12 road is an important economic link in Essex and across the east of England. It provides the main south-west/north-east route through Essex and Suffolk, connecting Ipswich to London and to the M25. The section between Chelmsford and Colchester (junction 19 Boreham Interchange to junction 25 Marks Tey Interchange) carries high volumes of traffic, with up to 90,000 vehicles every day. Heavy goods vehicles are between 9% and 12% of the traffic on this section due to its important freight connection, especially to Felixstowe and Harwich ports.

This section of the A12 is also an important commuter route between Chelmsford and Colchester. The resulting congestion leads to delays and means that, during the morning commute, a driver’s average speed is particularly slow in both directions for a dual carriageway A-road of its kind.

- The proposed changes to this stretch of the A12 road will:
- improve safety for road users, especially at the junctions and slip roads through better design while also removing the current direct private accesses onto the A12
 - reduce traffic congestion by increasing the capacity of the road, making journey times more reliable. The proposed scheme will save motorists as much as 1.5 hours in a working week if they travel daily between junctions 19 and 25
 - take long-distance traffic off the local roads and put it back onto the A12 where it belongs, so that local roads aren’t used as rat runs, affecting local villages and their communities
 - ensure that the road can cope with the predicted increase in traffic from more jobs and homes in the area
 - make improvements for walkers, cyclists, horse riders and public transport users, to give them better connections and safer, more enjoyable journeys

What's happened since our statutory consultation?

On 16 August 2021 our statutory consultation ended. We received 794 responses and over 2,000 people visited our virtual event space. Despite uncertainty around COVID-19 restrictions, we were also able to safely hold six in-person events. We are pleased at the level of interest and replies to our consultation.

We have undertaken further design work, as well as considered the feedback we received during the consultation and this supplementary consultation presents that work. Our proposals address common themes and concerns raised, whilst continuing to deliver on our key project objectives.



Overview of our statutory consultation

794
responses to our consultation



16,481
hits on our consultation website



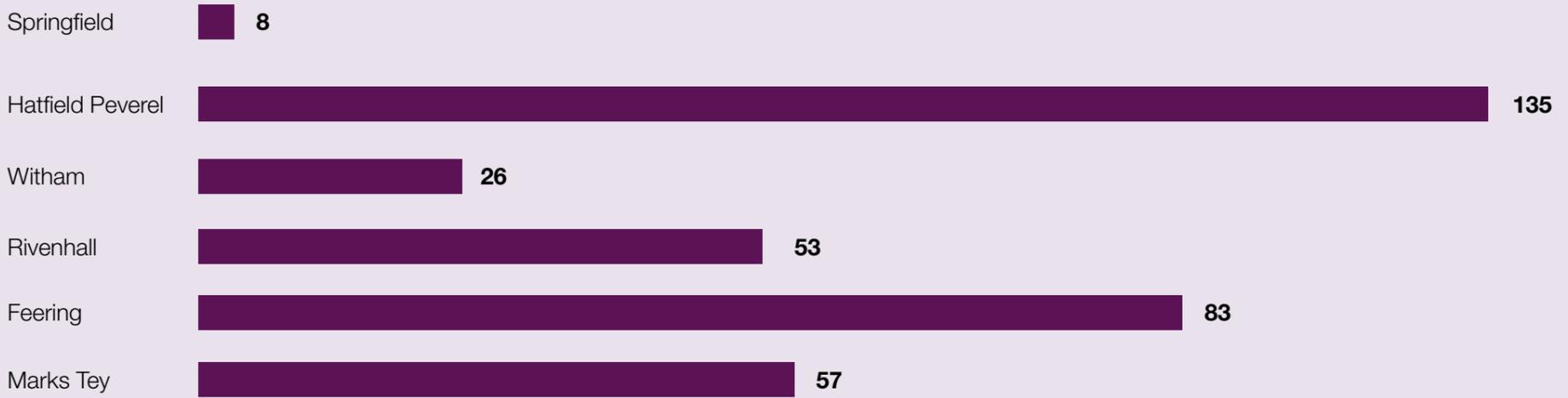
36,000
residents received a letter



more than
2000
people attended our virtual event space



Public information event attendees



Why are we having a supplementary consultation?

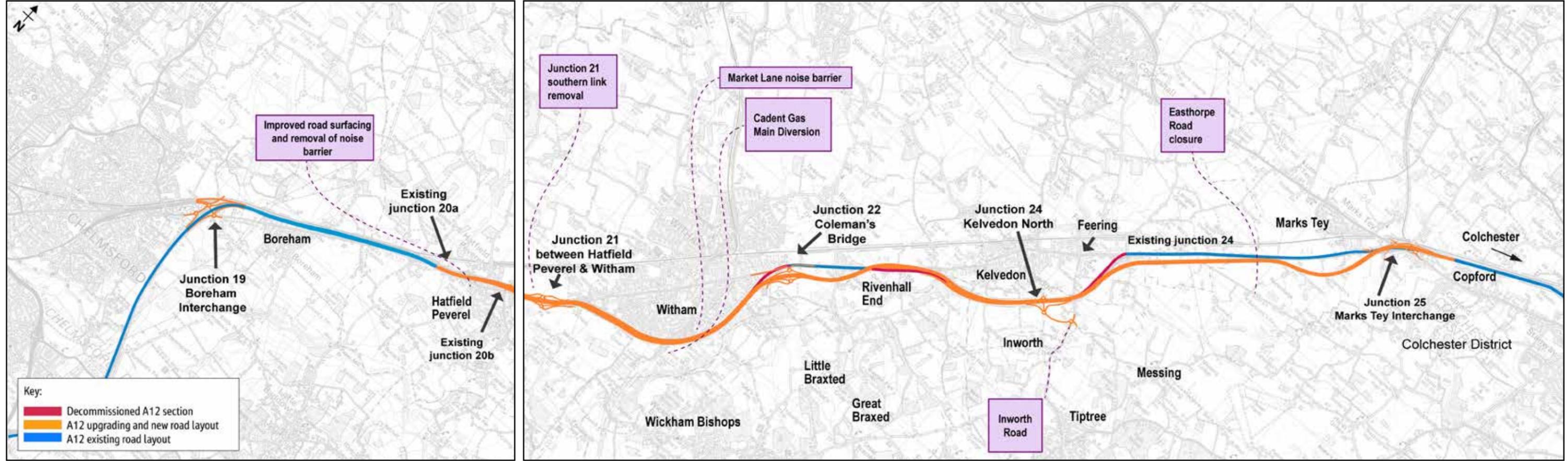
We have undertaken further design work, as well as considered the feedback we received during the consultation and this supplementary consultation presents that work. Our proposals address common themes and concerns raised, whilst ensuring that the project continues to address traffic concerns, improve journey times and improve safety as key considerations.

We have split the changes made to our updated design into three categories. These are explained below:

Category 1 changes: the main changes we are proposing as a result of our updated design which are likely to result in a change to the environmental information we presented at statutory consultation. The updates in this category are shown on the map to the right and are explained in more detail in this brochure.

Category 2 changes: further changes as a result of our updated design. These are changes that may also involve an environmental change but those that we consider are less significant in environmental terms and which are potentially more localised. These are detailed in a table on page 42 of the brochure.

Category 3 changes: minor changes as a result of our updated design. The majority of these will not involve a change to the environmental information we presented at statutory consultation and which are generally more localised in nature. These updates can be found in a table in our **Map books: general arrangements and land use plans** which are available online at www.nationalhighways.co.uk/A12



How to get involved

We'd like to hear what you think of our design updates and changes to the proposed scheme, so please share any ideas, local knowledge or views that you may have. The consultation will run for five weeks from **Tuesday 9 November** to **Sunday 19 December 2021** and there are lots of ways you can tell us what you think.

Further information can be found by visiting the specially created A12 Chelmsford to A120 widening virtual exhibition via our webpage at www.nationalhighways.co.uk/A12

All the consultation materials will be digitally available there, including:

- this consultation brochure
- a response form
- map books: general arrangements and land use plans showing the updated design. The map books also have a table explaining the category 3 changes.
- an environmental report explaining the impact of the changes in further detail

You can also take away hard copies of this brochure and view additional materials at pick-up points as detailed on page 11 of this brochure. Please contact our project team at A12chelmsfordA120wide@highwaysengland.co.uk to request an accessible format of this brochure.



You can respond to this consultation using one of the following methods:

- Online via the response form at www.nationalhighways.co.uk/A12
- Complete the consultation response form available from the pick-up points listed on page 11, and return the form to **FREEPOST A12 WIDENING**
- Email your response to: A12chelmsfordA120wide@highwaysengland.co.uk
- Write to us at **FREEPOST A12 WIDENING**.

All responses should be returned by 11.59pm on Sunday 19 December 2021.

Virtual event space

One of the best ways to find out more about our updated design is to visit our virtual exhibition which will be live from **Tuesday 9 November 2021** at www.nationalhighways.co.uk/A12. This can be accessed at any time convenient to you. The virtual exhibition includes all the materials that you would be able to find at a public exhibition, such as maps and environmental information.

We have provided clear instructions so that people know how to navigate through the room. If you require help accessing the room, you can get in touch with our project team at A12chelmsfordA120wide@highwaysengland.co.uk or by calling **0300 123 5000**.

Online drop-ins

We will be holding a series of online events on the following dates. These will be online events where you can drop into a session at any time during the allocated slot. Technical experts will talk you through our proposals and answer any questions. If you would like to take part in one of these sessions, please sign up on our website at www.nationalhighways.co.uk/A12.

- Wednesday 17 November – 9am–1pm
- Monday 22 November – 2pm–6pm
- Thursday 2 December – 4pm–8pm

You can also get in touch with our project team at A12chelmsfordA120wide@highwaysengland.co.uk or by calling **0300 123 5000**.

Drop-in events

Subject to the government's COVID-19 guidelines, we plan to hold a number of drop-in events. Here you can find out more about our updates and speak to members of the project team who will be happy to answer any questions you may have.

Location	Date
Hatfield Peverel Village Hall Maldon Rd, Hatfield Peverel, Chelmsford CM3 2HW	Tuesday 23 November 2pm–6.30pm
Messing Village Hall The St, Messing, Colchester CO5 9TN	Thursday 25 November 4pm–6.30pm
Spring Lodge Community Centre Powers Hall End, Witham CM8 2HE	Friday 26 November 3pm–7pm

Please check www.nationalhighways.co.uk/A12 prior to the event to ensure that COVID-19 guidance has not affected our ability to hold the event.

Where to get a hard copy or accessible version of this brochure

A digital version of the brochure will be available to view and download online at www.nationalhighways.co.uk/A12.

If you require an accessible version of the brochure or additional materials, or need to have one posted to you, please get in touch with our project team at A12chelmsfordA120wide@highwaysengland.co.uk or by calling **0300 123 5000**.

The Chelmsford Talking Newspaper will also be producing voiceovers of both the brochure and our virtual event space. This will be available on the talking newspaper applications as well as Amazon's Alexa.

Subject to COVID-19 guidelines, hard copies of the consultation brochure and response form will be available at the following locations from **Tuesday 9 November 2021**. Availability will depend on venue opening times and any venue restrictions. Please call the venue ahead to check that they are open and have copies available.



Location	Address	Opening Hours
Braintree Library	Fairfield Road, Braintree, CM7 3YL	Monday 9am–7pm Tuesday–Friday 9am–5.30pm Saturday 9am–5pm
Chelmsford City Council Customer Service Centre	Duke Street, Chelmsford, CM1 1JE	Monday–Friday 10am–4pm
Colchester Library and Community Hub	Colchester Library, Trinity Square, Colchester, CO1 1JB	Monday, Tuesday, Thursday and Friday 9am–5.30pm Wednesday 9am–7pm Saturday 9am – 5pm Sunday 1pm–4pm
Essex County Council County Hall	Market Road, Chelmsford, CM1 1QH	Monday–Friday 8.30am–5pm
Hatfield Peverel Library	The Street, Hatfield Peverel, Chelmsford, CM3 2DP	Tuesday 2pm–7pm Wednesday 9am–1pm Saturday 9am–5pm
High Chelmer Shopping Centre	15A Exchange Way, Chelmsford, CM1 1XB	Monday–Saturday 7am–6.30pm Sunday 9.30am–5pm
Kelvedon Library	Aylett's Foundation School, Maldon Road, Kelvedon, CO5 9BA	Monday 2pm–5.30pm Thursday 9am–1pm Saturday 9am–5pm
Maldon Town Council Offices	Market Hill, Maldon, CM9 4RL	Monday–Friday 9am–4pm
Marks Tey Parish Hall	Old London Road, Marks Tey, Colchester, CO6 1EJ	Open for certain events
The Old Crown	Lodge Road, Messing, Colchester, CO5 9TU	Monday – Sunday 12pm–11pm
Oak Stores – Rivenhall	Church Rd, Rivenhall, Witham CM8 3PQ	Monday–Saturday 6am–10pm Sunday 7am–10pm
Springfield Library	St Augustine's Way, Springfield, Chelmsford, CM1 6GX	Tuesday, Thursday and Friday 1pm–5pm Saturday 10am–1pm
St Mary's Parish Church	Easthorpe Road, Easthorpe, Colchester, CO5 9HD	Open for certain events
Tiptree Library	Rectory Road, Tiptree, CO5 0SX	Tuesday 9am–5.30pm Thursday 2pm–7pm Saturday 9am–5pm
Witham Library	18 Newland Street, Witham, CM8 2AQ	Monday, Tuesday, Thursday and Friday 9am–5.30pm Wednesday 9am–7pm Saturday 9am–5pm

Category 1 changes

As set out on page 6, our category 1 changes are the main changes we are proposing as a result of our updated design which are likely to result in a change to the environmental information we presented at statutory consultation. The changes in this category are detailed in the following sections. Our category 2 changes can be seen in the table at the end of this brochure on page 42 and our category 3 changes can be found in a table in our map books which are available online at www.nationalhighways.co.uk/A12.

Changes in the Hatfield Peverel area

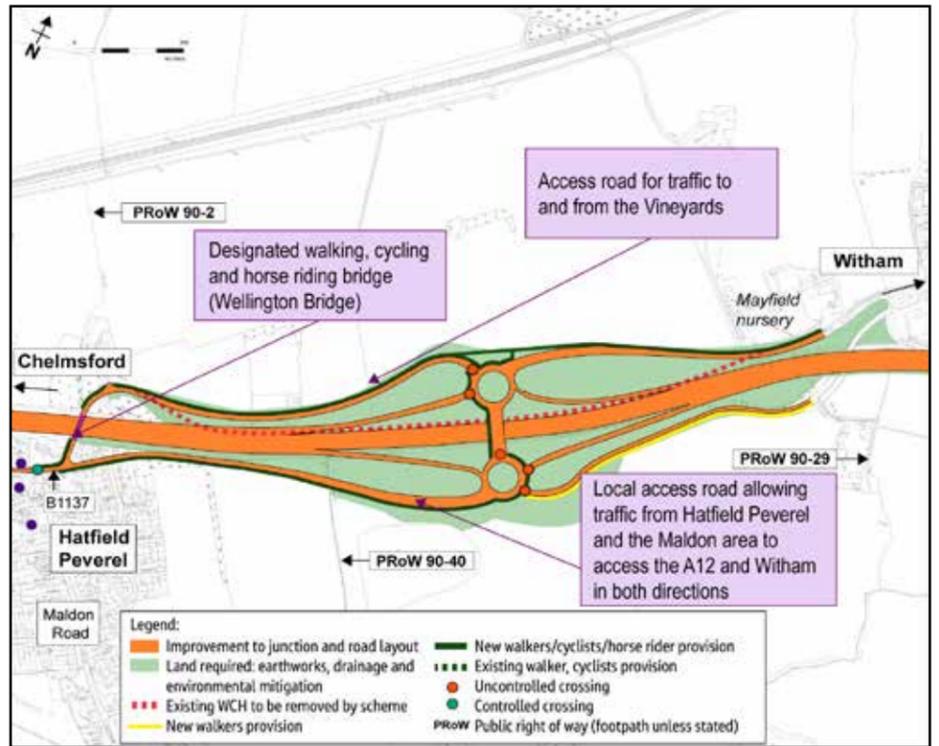
Taking into account feedback received during statutory consultation, our team made changes to how traffic accesses our new proposed junction 21. These changes will reduce the impact on residents living along the eastern end of The Street, and our new approach to noise mitigation will mean that more households will see a beneficial noise impact. The design at the junction with Maldon Road and The Street remains as presented at our statutory consultation but will continue to be subject to further engagement with key stakeholders as we remain committed to doing our part to find a joined-up solution.

Access to the junction to and from Witham remains the same as we presented at statutory consultation.

Junction 21 – southern link road removal

What we presented at our statutory consultation

At statutory consultation we showed that traffic coming from the Hatfield Peverel and Maldon areas, via Maldon Road and the eastern end of The Street, would join the new junction 21 via a southern link road. Wellington Bridge was to be converted into a designated walking cycling and horse-riding (WCH) route. Properties to the north side of the bridge (The Vineyards) would have been able to access junction 21 via an access road. This can be seen in the map below.



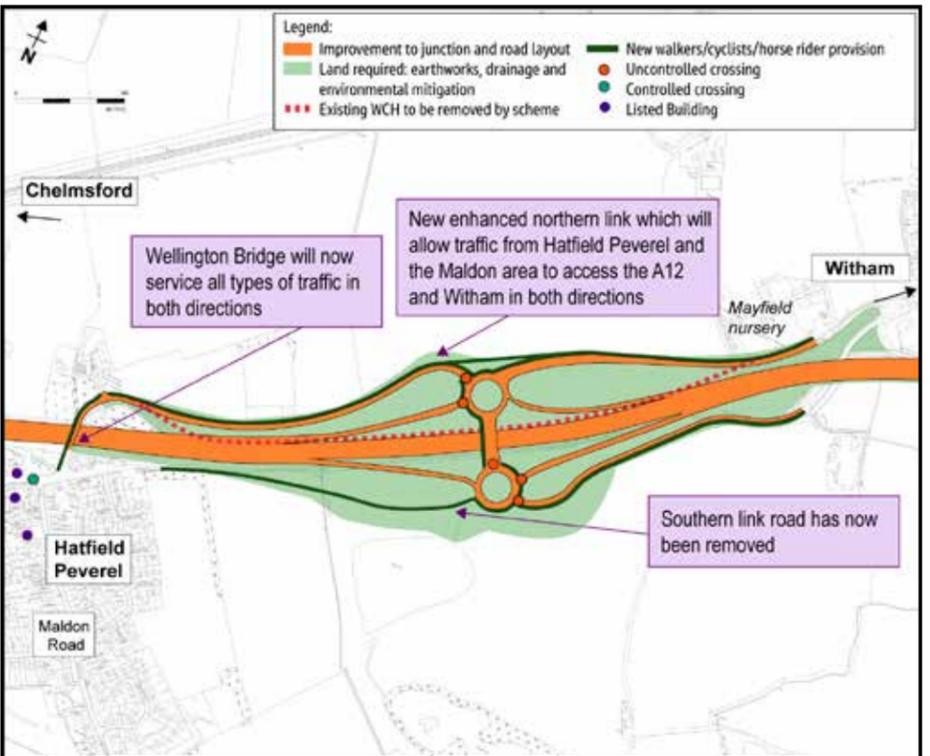
Junction 21 design presented at statutory consultation

Why have we changed our design?

In response to the statutory consultation, we have done a further review of the design at this location. Feedback from the statutory consultation suggested removing the previously proposed southern link road, and opening Wellington Bridge in both directions for all traffic to and from Hatfield Peverel and Maldon Road. This traffic would then use an enhanced northern link road (previously only serving The Vineyards) to access junction 21. Concerns were also raised about the environmental impact of the southern link on properties on the east section of The Street and it was felt by some who responded to the statutory consultation that removing the southern link road would address this.

Our updated design

In accordance with the feedback we received, and as shown in the map below, our updated design has removed the southern link road. Instead, traffic will use a new and enhanced northern link road to access our proposed junction 21. To allow this, Wellington Bridge will no longer only be a bridge for just WCH. It will now allow for all types of vehicles to travel both ways over it. To ensure WCH facilities are maintained, a route will be provided alongside the new connection to allow for the same WCH journeys we proposed as part of our statutory consultation. We will continue to work with Essex County Council and WCH stakeholders to develop the opportunities and welcome comments via this supplementary consultation.



Updated design at junction 21

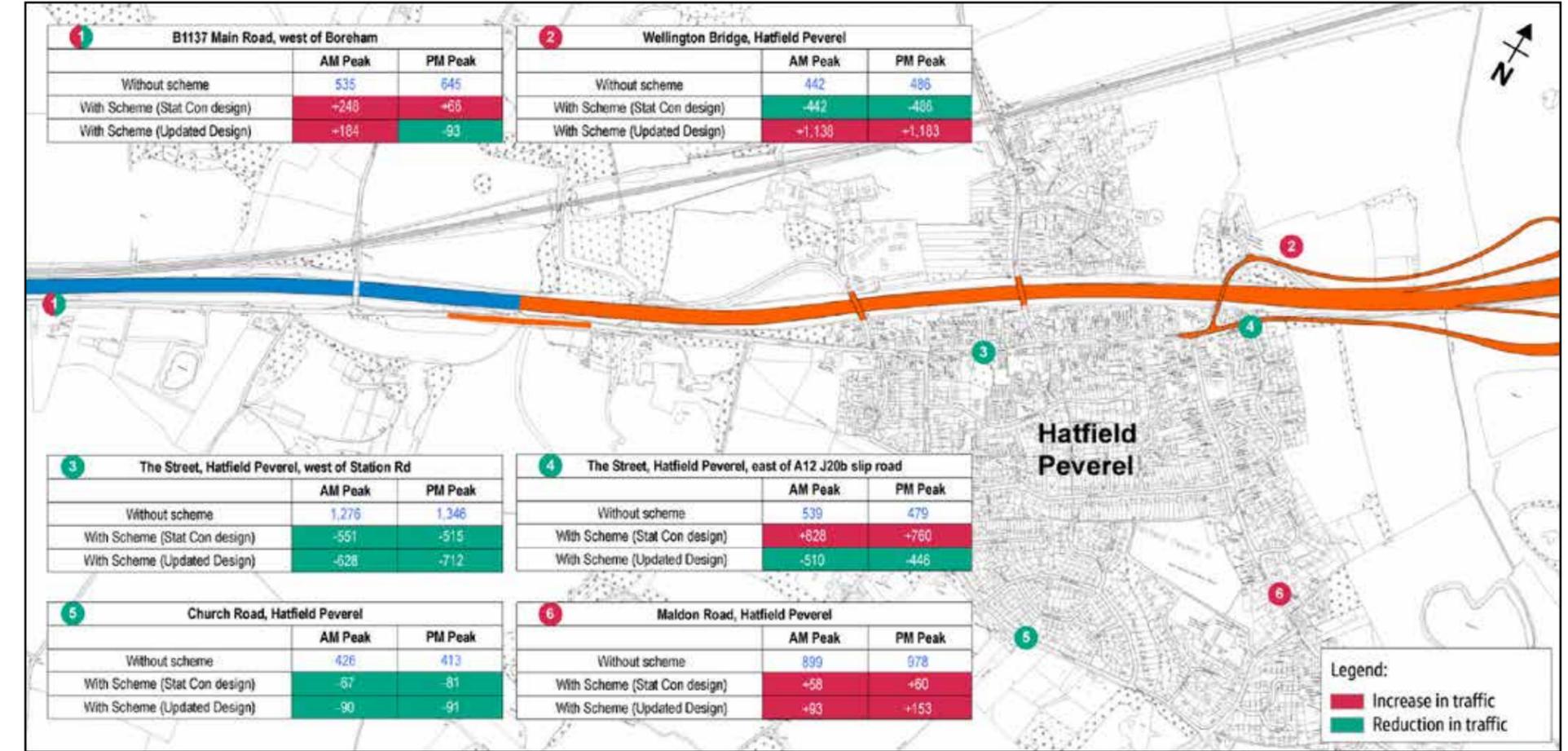


Traffic assessment for the junction 21 update

The diagram on page 15 shows what the expected traffic would be in 2027 if the proposed scheme was not built, what it was under our statutory consultation design and how it compares to our updated design. For ease, we have also shown how the design we presented at the statutory consultation compares to our updated design.

The map shows that traffic decreases considerably on the eastern end of The Street, but increases considerably on the new enhanced northern link road. The reduction on the central section of The Street is maintained, as are the predicted reductions on Church Road.

Predicted traffic on Main Road has also changed since the statutory consultation. This is due to the updated model, as well as our proposals to introduce new speed limits on the road. This proposal is confirmed in the category 2 changes on page 42.



Expected traffic numbers in Hatfield Peverel with the updated design

Environmental assessment for the junction 21 update

The Preliminary Environmental Information Report (PEIR) presented at our statutory consultation showed that traffic coming from the Hatfield Peverel and Maldon areas, via Maldon Road and the eastern end of The Street, would join the new junction 21 via a southern link road. Our updated design has removed the southern link road. Instead, traffic will use a new and enhanced northern link road to access our proposed junction 21. The below section explains how air quality, noise and population and health are anticipated to be affected by this change. No other aspects of the environment will be affected by this change compared to what was reported in the PEIR at statutory consultation. Further details can be found in our environmental report online at www.nationalhighways.co.uk/A12.

Air quality

The design for junction 21 we shared at our statutory consultation proposed to have a southern link road on the junction. This southern link road would have reduced air quality on The Street (east of Maldon Road) but improved air quality for the homes within the Vineyards. With our updated design, by removing the southern link road and having traffic use the new and enhanced northern link road to access our proposed junction 21, the design will see a slight reduction in air quality for dwellings within the Vineyards but will improve air quality for most residents on The Street (east of Maldon Road). For The Street (west of Maldon Road), there will be no change in air quality to what was reported in the statutory consultation. Even though this change does see a slight reduction in air quality for dwellings within the Vineyards, there are still no breaches of air quality legal limits. No additional mitigation will therefore be required in this area as a result of this update.

Noise and mitigation

The inclusion of the southern link road presented at statutory consultation would have resulted in significant noise effects for properties along The Street (east of Maldon Road). The removal of the southern link road will remove the significant effects for the majority of properties east of Maldon Road. There will be a slight increase in noise for the Vineyards due to the increased use of the northern link road, but this will not be significant and as such no additional mitigation is being proposed as a result of this update.

Population and health

Changes in noise and air quality have the potential to affect health and wellbeing. However, overall, the new design with the northern link road will mean that more dwellings are likely to be positively affected by this change compared to the southern link road we presented at statutory consultation.

Construction

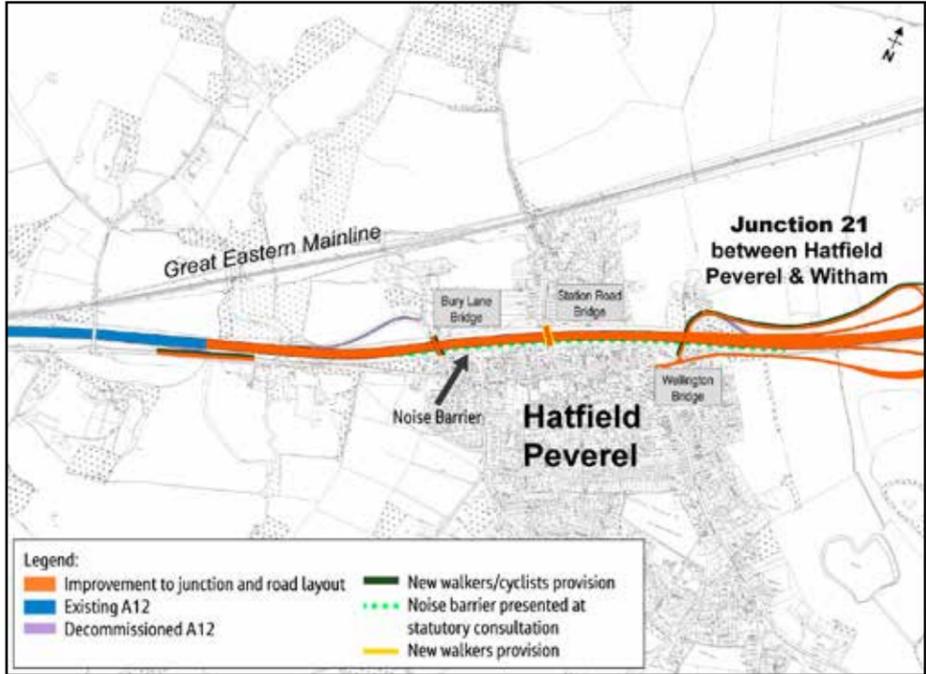
With the northern link road update, it is likely that there will be a longer construction period at Wellington Bridge to make sure it is suitable for all traffic, but it is unlikely that this will result in an overall increase in the construction period in the area. To ensure that traffic from Hatfield Peverel can access the A12 and local roads towards Witham, we will provide a temporary link to the new junction 21 while Wellington Bridge is being constructed.



Improved road surfacing and removal of noise barrier

What we presented at our statutory consultation

As shown in the map below, as part of the statutory consultation we proposed to build a 3 metre high noise barrier between the existing junctions 20a (Bury Lane) and 20b (Wellington Bridge), on the south side of the A12, as it runs through Hatfield Peverel. This proposal would have seen a noise reduction for homes in the village, predominantly to the south side of the A12.



Noise barrier presented at statutory consultation

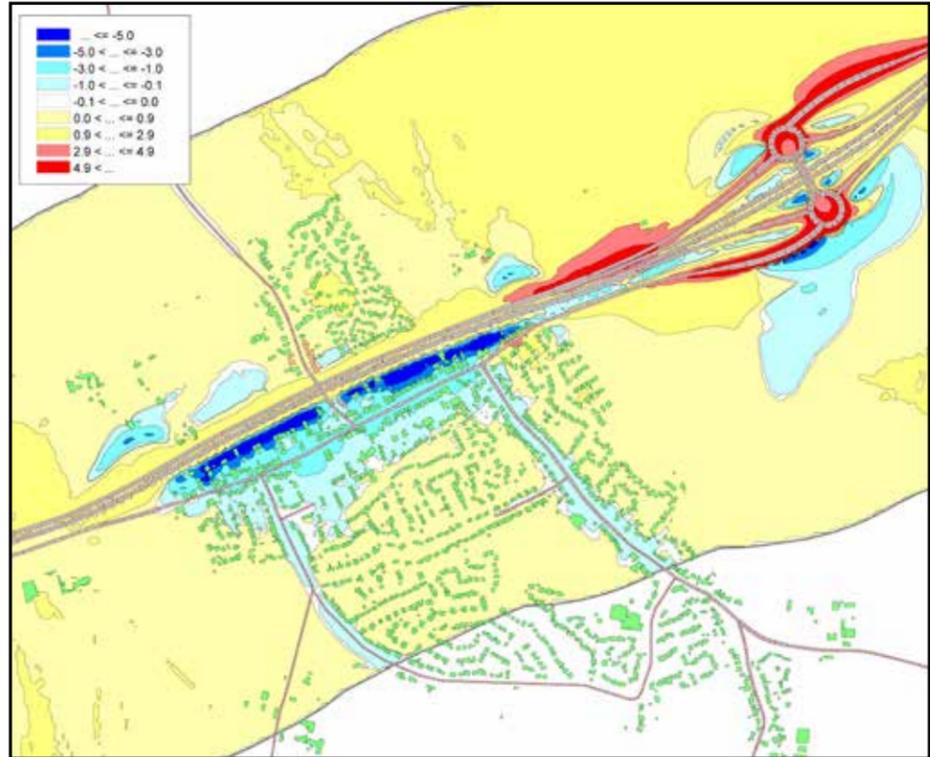
Why have we changed our design?

We received lots of feedback on our proposals for a noise barrier during statutory consultation, with many responses asking that we consider better mitigation for houses on the northern side of the proposed scheme. We have considered this in more detail and are now proposing to provide road surfacing with better noise performance on the A12. This allows us to remove the noise barrier we were proposing on the southern side of the A12 while at the same time reducing noise levels for more properties than our statutory consultation design would have done, as well as reducing construction impacts. The noise maps on page 19 show the expected overall noise reduction that residents can expect with the improved road surfacing, compared to what we previously proposed with just the noise barrier. Above this, the height of the retaining wall required will be reduced.

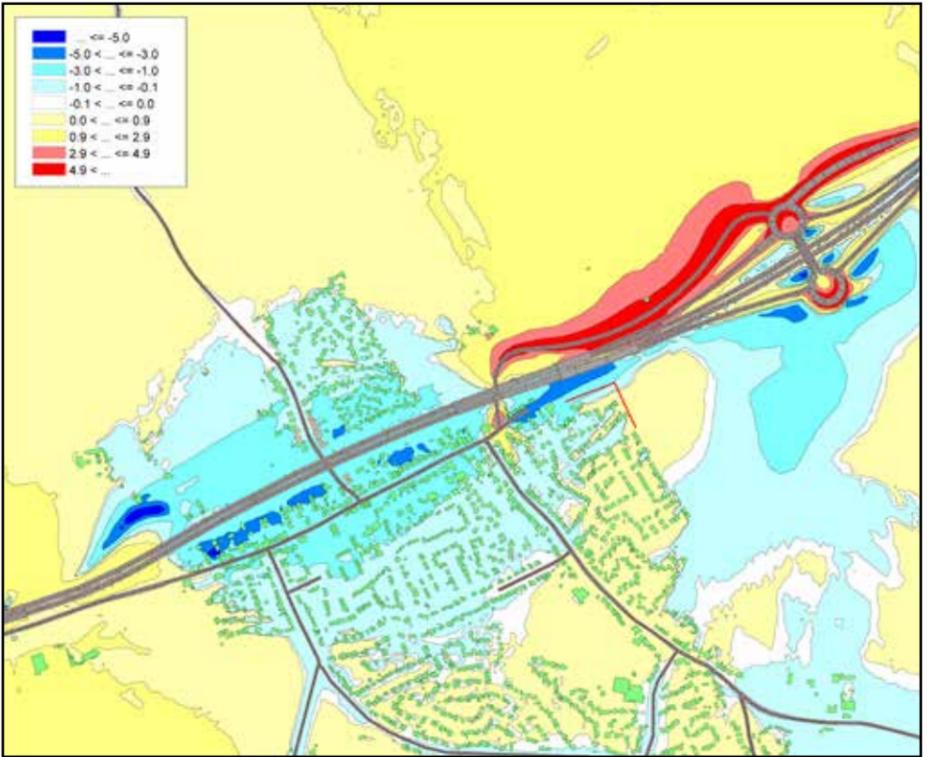
Our updated design

Our new approach at this location will remove the noise barrier we presented at statutory consultation and use improved road surfacing to mitigate noise impacts. Our approach will also:

- reduce the height of the retaining wall
- reduce the depth underground to which the retaining structure needs to be installed, meaning there will be a shorter construction period required and less construction noise for residents
- reduces the disruption associated with installation



Statutory consultation design – with noise barrier



Updated design – with improved road surfacing

Environmental assessment for the improved road surfacing

Landscape

During construction, there would be significant visual effects due to the removal of vegetation in this location, which would open up views of the A12 and construction activity. This vegetation loss would occur with or without a noise barrier. This visual impact was represented during statutory consultation and remains the case under the updated design without the noise barrier. During operation of the proposed scheme, the noise barrier would have helped to reduce some visual effects by providing a visual screen. However, the significant effects would still remain particularly for upper storeys due to tree loss and the limited space available for replanting. Without the noise barrier, given the constraints for replanting, the visual effects would still remain significant.

Noise and vibration

As can be seen in the images on page 19, using improved road surfacing provides a more widespread benefit for this area. In addition, the use of improved road surfacing as the solution would reduce the noise on both sides of the A12 – not just the southern side as the noise barrier would have. This approach means that:

- **373** properties would see a noise reduction of between 1 and 3 dB, compared to **142** in the statutory consultation design
- **76** properties would see a reduction of more than 3 dB, compared to **73** in the statutory consultation design

Population and health

The improved road surface is predicted to reduce noise levels for a greater number of people which would improve noise-related health outcomes. Without a noise barrier, there may be an increased perception of noise due to greater visibility of traffic for those overlooking the road, which may have a negative impact on mental wellbeing. However, it is likely a greater number of people would benefit from actual noise decreases than those who would experience a loss of visual screening and perceived noise increases.

Construction assessment

There will be a reduction in disruption by not providing the noise barrier as there will be a lower height retaining wall to construct. Noise and vibration associated with construction will be reduced as will the need for night-time working.



Changes in the Witham area

Since we held our statutory consultation, we have undertaken further design work and have also been engaging with utility companies. This work has concluded that we need to include the diversion of a gas pipeline shown on the map to the right in the area of our proposed scheme, as well as update our construction approach for the retaining wall proposed between Benton Bridge and Brain Bridge.

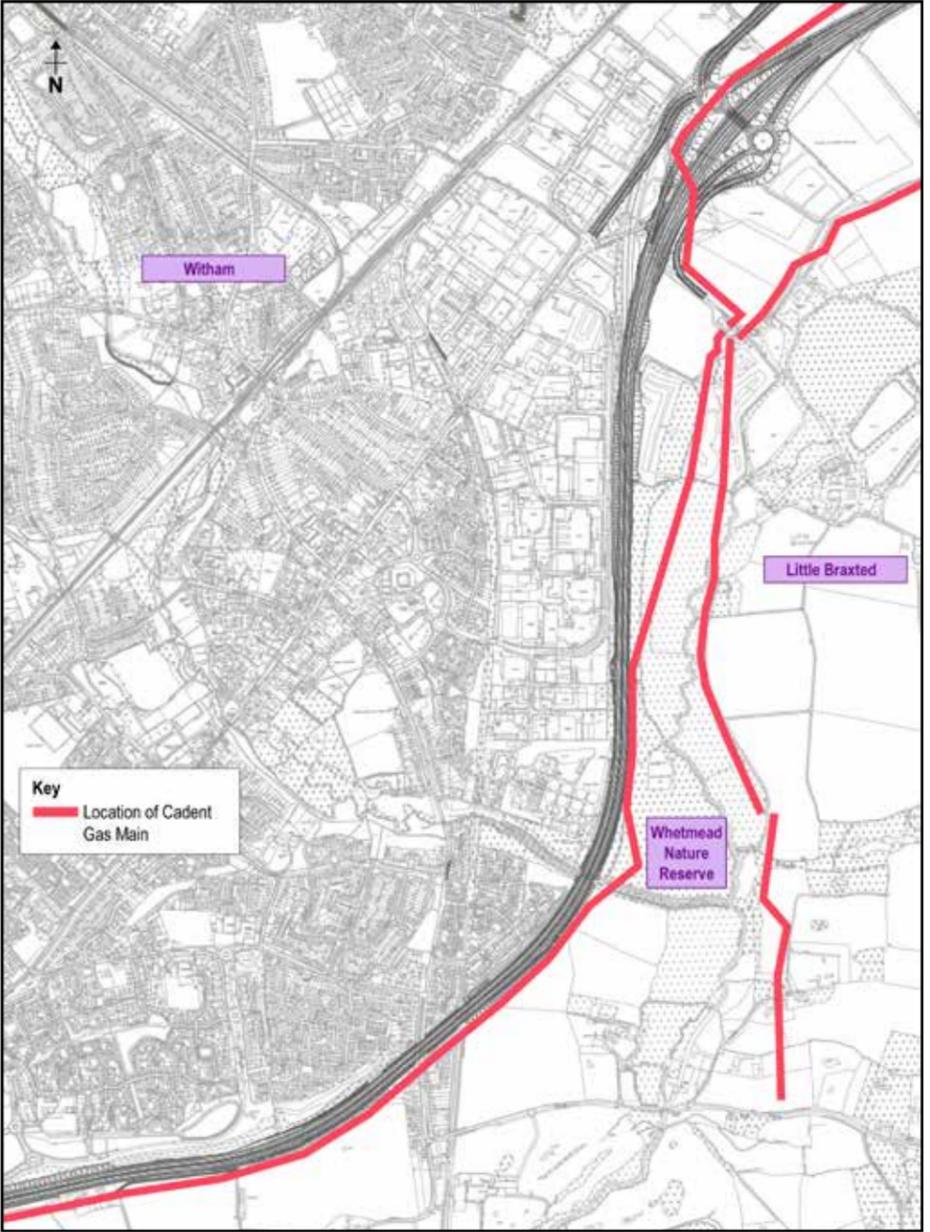
Cadent gas main

What we presented at our statutory consultation

At statutory consultation, while we mentioned the possibility of a high-pressure gas main diversion being required, we had not completed the necessary work to understand the extent of the gas main, whether it would require a diversion and where the diversion may go.

Why have we changed our design?

We have carried out further work on possible corridors which could accommodate this pipeline. This work has identified five corridor options where the gas main could be diverted. As part of the proposed scheme, we will need to reroute part of the high pressure gas pipeline. We are therefore asking for your opinions on each of the possible diversion corridors. It is important to note that the decision on which route which will be taken forward will be a decision for Cadent Gas Limited who operate and maintain the gas distribution network, but your comments could influence the decision that they make.



Existing location of the high pressure gas main

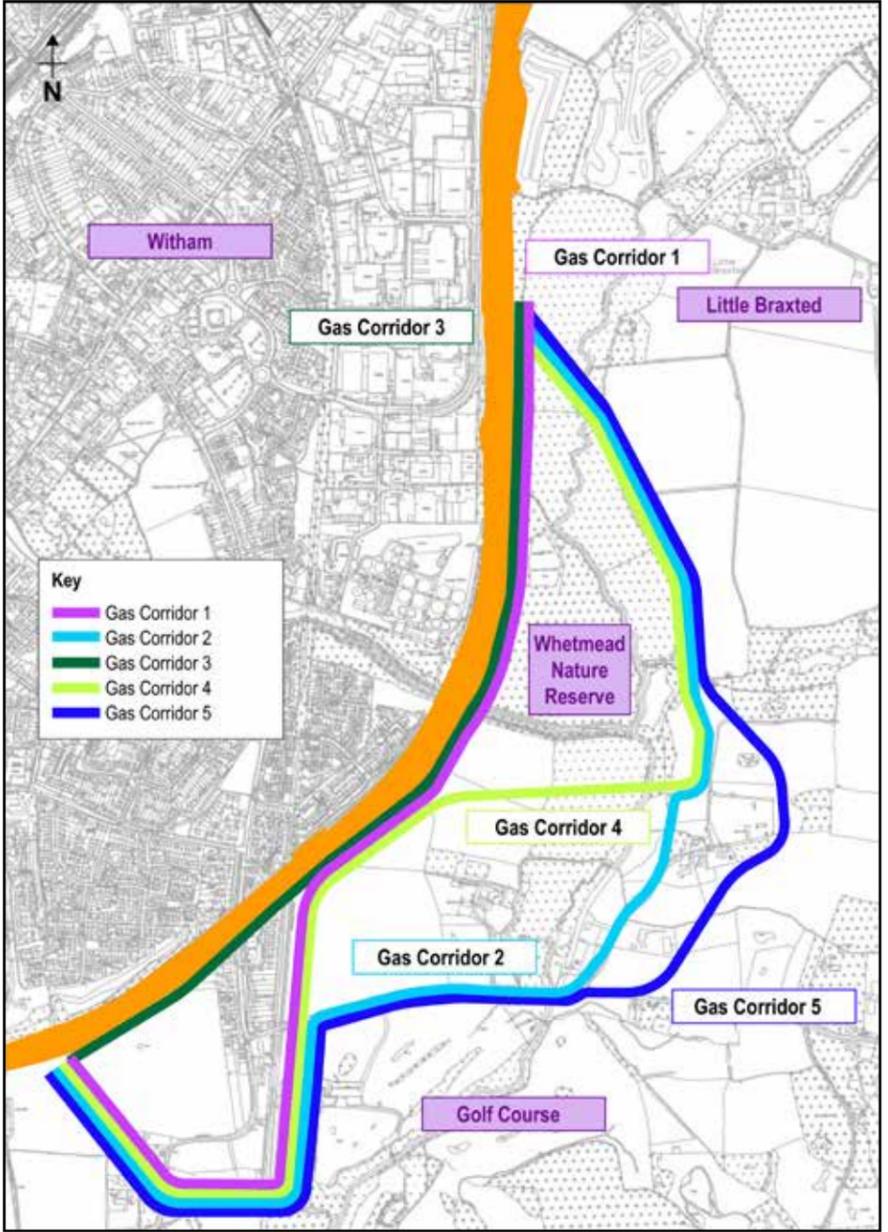
Potential identified corridors

The adjacent image shows the five potential identified route corridors. Only one of these corridors would be needed and therefore constructed.

Corridors 1 and 3 would be our preferred routes as they broadly run alongside the proposed scheme, and therefore have less impacts on the surrounding area. Corridors 2, 4 and 5 were designed to provide alternative options whilst providing sufficient width to reduce impacts on properties, businesses and ecologically sensitive areas (including a nature reserve) where possible.

As we stated, the final decision will be made by Cadent Gas Limited who will consider many other factors such as operational safety.

The land associated with any works required (temporary or permanent) for pipeline diversion works can be viewed in our **Map Books: land use plans**.



Potential route corridors identified for diversion

Environmental assessment for the Cadent gas main

The gas main diversion corridors could result in the following significant effects:

- All diversion corridors have the potential to remove archaeological remains associated with crop marks east of Oliver's Farm. These remains are currently assessed as having little value, but this could change following completion of ongoing trial trenching. There is therefore the potential for a significant effect on these remains subject to the findings of the trial trenching.
- Diversion corridors 2, 4 and 5 have the potential for significant effects on additional archaeological remains associated with cropmarks south of Little Braxted; and corridors 2 and 5 also have the potential for significant effects on the site of Machin's Mill or Blue Mills.
- All diversion options have the potential for significant effects on local landscape character and properties due to vegetation loss.
- All diversion options have the potential for significant effects from the loss of mature woodland, which is difficult to mitigate due to the time required for replacement habitats to mature.
- Diversion corridors 1 and 3 would involve excavations adjacent to Whetmead Local Nature Reserve. These options could result in a significant effect to this site, as Whetmead is a potential groundwater dependent ecosystem, and works could impact groundwater flows.
- All diversion options have the potential for significant effects on groundwater due to changes in groundwater flows.



The effects would largely be limited to the construction phase. Once the gas diversion is installed there would be no above ground infrastructure. However, the landscape and visual effects might extend into the operational phase due to the need to maintain an easement (a legal right to enter land above the gas pipeline for maintenance works), which would prevent tree replanting along the easement.

Walking, cycling and horse riding

The gas corridors identified will temporarily impact a number of public rights of ways (PRoWs) which are referenced in our **Map books: general arrangement drawings**. These will remain accessible during the works but may require some rerouting temporarily. As we have done throughout the scheme, where works are taking place, we will seek to enhance walking cycling and horse riding (WCH) provision. Our proposals for a WCH bridge which connects Maldon Road to Olivers Drive (PRoW 121_95) remain unaffected by the proposed gas diversion works.

Construction assessment

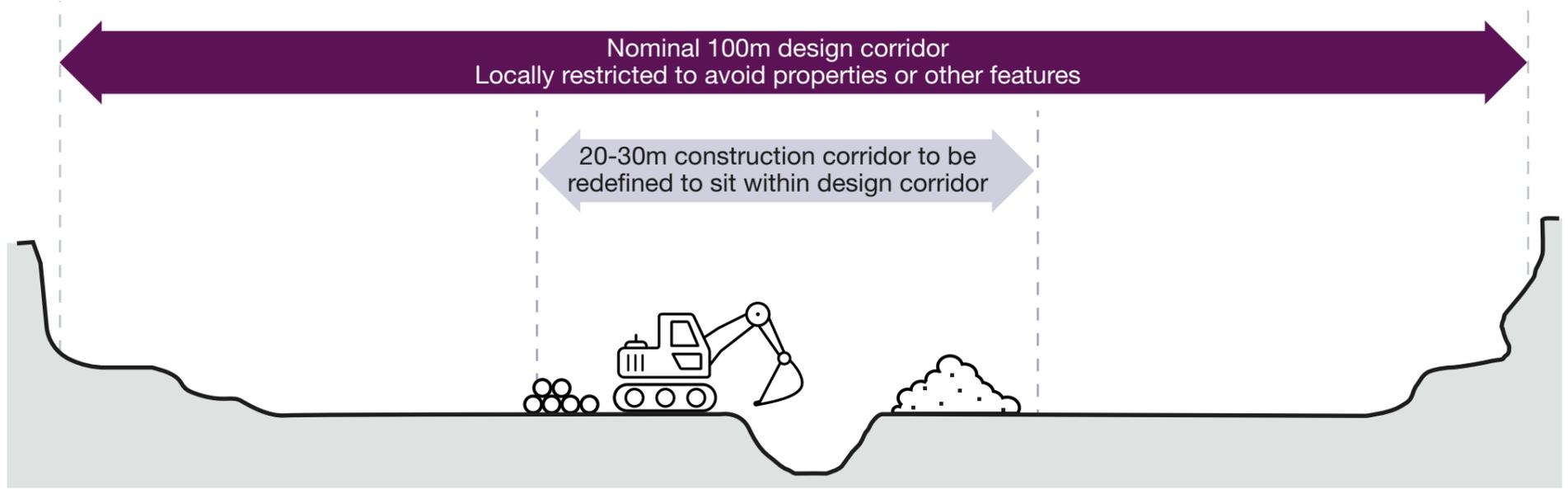
There are two main construction methods used to install a buried gas pipe:

1. Open cut: this involves digging a trench, laying the pipe into it and then burying the pipe after
2. Trenchless: this essentially involves tunnelling the pipe underground and is used for instance when crossing a river

In order to undertake the work, a working corridor will be required of approximately 20 to 30 metres. This would allow us to dig trenches, store the excavated material next to the trench and receive deliveries safely. A fence would also be required during the construction period to manage access to the working area and keep everyone safe.

The indicative image below shows a breakdown of how the space may be used during construction. This would be the approach no matter which corridor is constructed.

While the working area will be up to 30 metres, the corridors shown on the graphic below are approximately 100 metres in width. This is to allow for flexibility in the route that the pipeline will take. As Cadent Gas Limited progresses to a more detailed design, there will be greater certainty around the exact route the pipe would take within a corridor. Work that will help with this includes better understanding the type of pipe required and what constraints would be next to the pipe, such as residential properties and environmental impacts.



Construction space required for gas corridor diversions



Market Lane noise barrier

What we presented at our statutory consultation

During our statutory consultation, it was assumed that we would be able to keep the existing noise barrier at Market Lane in place whilst constructing the retaining wall required for the proposed scheme.

Why have we changed our proposed design?

The land shown to be either permanently or temporarily acquired (Provisional Order Limits) that we presented at the statutory consultation extended up to an existing noise barrier which is located between the proposed scheme and Market Lane. However, further work has now been undertaken to assess the constructibility of the retaining wall between Benton Bridge and Brain Bridge in Witham. This determined that additional land is required to construct the retaining wall, while maintaining two lanes operating on the proposed scheme.

The proposed design

Due to the additional land required to construct the retaining wall, and therefore widen the proposed scheme, the Provisional Order Limits would now extend to the edge of Market Lane. The existing noise barrier would need to be removed temporarily while the retaining wall is constructed but would be re-provided once construction is complete.

It is important to note that we will continue to work to find a solution at this location which means that we can keep the noise barrier in place during construction.

Environmental assessment

Landscape

The PEIR we published at statutory consultation noted that existing highway vegetation up to the noise barrier would be removed. With the temporary removal of the noise barrier during construction, there will be additional loss of existing vegetation to the north of the barrier. This would result in a significant adverse visual impact on residents in Market Lane, and potentially residents in other properties in the area looking towards the proposed scheme, during the construction phase. There would also be direct open views of construction activity and traffic. The noise barrier will be reinstated following construction of the retaining wall, and trees will be replanted. During the first year of operation, views would be obstructed by the replacement noise fence, however replacement planting alongside Market Lane will take time to establish, up to 15 years after construction.

Noise and vibration

The PEIR we published at statutory consultation reported no change in noise levels along Market Lane due to the existing noise barrier. The temporary removal of the noise barrier during construction would result in short-term significant noise impacts from traffic on the proposed scheme until the barrier is reinstated. Once the barrier is reinstated, noise levels will return to previous levels.

Noise levels from construction activities may be higher from the temporary removal of the noise barrier, however these would be short-term and there would be no material change to the conclusions reported in the PEIR. Impacts from construction activities would be mitigated where practicable through good site practice, as set out in the PEIR.

Population and health

The temporary loss of the barrier, coupled with additional vegetation loss, may increase the perception of noise. This would have the potential to affect mental wellbeing for the duration of the works. However, this would be a temporary impact and would not change the overall effect on health as reported in the PEIR.

Construction

A key principle of our Traffic Management Plan will be to ensure that two lanes of traffic are maintained in each direction on the proposed scheme during weekday daytimes. The reason for this is to ensure that the proposed scheme remains as free flowing as possible during construction. If it is not, it will increase journey times for users, which in turn could lead to local rat running.

In order to build the retaining wall next to the northbound carriageway, we need a level platform that can accommodate cranes, piling rigs, deliveries and workers safely. At this location, we do not believe we have the space available to do this safely from the proposed scheme while maintaining the two lanes of traffic. As such, we expect we will need to construct the retaining wall from the area of land between Market Lane and the proposed scheme. To do this safely, we will need to temporarily remove the existing noise barrier.

We will continue to keep this expectation under review, including looking at the possibility of widening the southbound carriageway first which could allow us to implement a contraflow system creating more space on the northbound carriageway. As piling is needed to build the retaining wall, it is our aim, where possible, to use piling techniques that push, rather than hammer piles into the ground. This approach helps to reduce construction noise.

Inworth Road

What we presented at our statutory consultation

At statutory consultation, we included land within the highway boundary of Inworth Road for a length of 1.9km. We also confirmed that we would continue with our work to consider what interventions could be required to help the road manage the additional traffic that is predicted.

Why have we changed our proposed design?

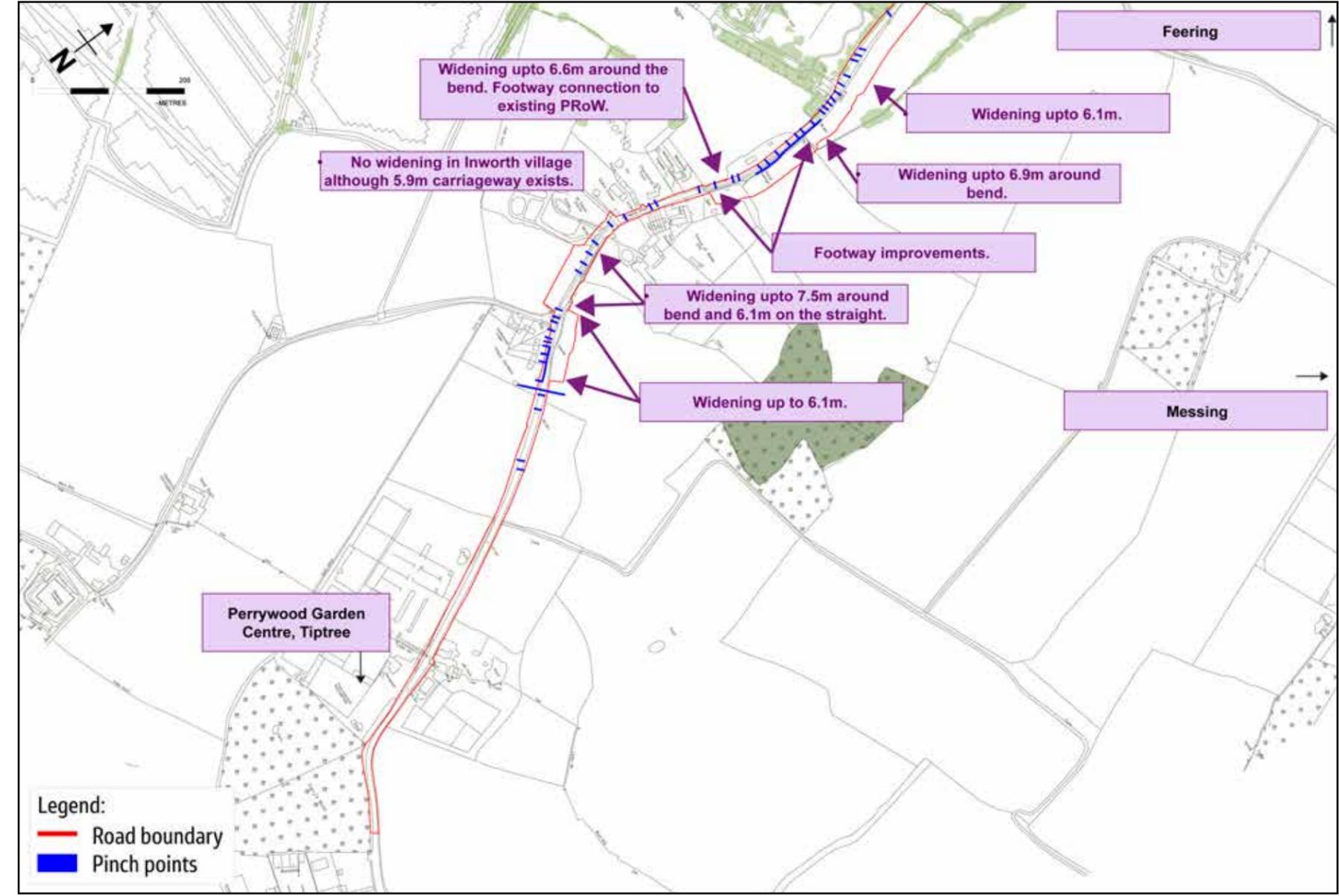
Since our statutory consultation, design work has advanced, and we have completed a traffic and drainage assessment. This has allowed us to present a design that will ensure that the additional traffic does not lead to increased delays on the road, and also addresses some of the safety and flooding concerns raised by stakeholders.

Our updated proposed design

We are proposing to widen certain pinch points along Inworth Road by between 0.3m and 2m. This includes widening straight sections of the road to provide a minimum of 6.1m carriageway width and widening bends to accommodate two large vehicles passing in opposite directions. Where we make these changes, we will also provide new drainage.

A detailed technical assessment has taken place to consider what interventions are required to ensure that Inworth Road can manage the increase in traffic, and these are explained in the diagram on page 29. The interventions will require some flood mitigation. Several flood and drainage mitigation areas have been proposed, these can be found in **Map book 1 – updated general arrangements (set 3): sheets 14 and 20.**

A safety assessment has taken place and concluded that, with our proposed interventions, the road can support the traffic.



Intervention measures on Inworth Road



Environmental assessment of Inworth Road

The Provisional Order Limits presented at the statutory consultation allowed for improvements along Inworth Road. However, the PEIR (which can be viewed on our statutory consultation website) did not include an assessment of these improvements, as at the time, design development was ongoing. Since the statutory consultation, design work has advanced, and it is now proposed to undertake widening at particular pinch points along Inworth Road. This change in design would potentially affect the assessment conclusions for the below environmental aspects.

Air quality

The PEIR air quality assessment concluded that there would be minor increases in nitrogen dioxide concentrations along Inworth Road, but no breaches of air quality legal limits. Our updated interventions would have no impacts on air quality compared to what was reported in the PEIR.

Cultural heritage

The pinch point widening would result in temporary short-term impacts on the setting of the grade I listed Parish Church of All Saints, Inworth, and 11 grade II listed buildings from the visual and noise effects of construction work. The drainage ponds and flood mitigation have the potential to remove as yet unidentified below ground archaeological remains. These are new impacts which were not reported in the PEIR. Tree and hedgerow replanting would mitigate impacts to the setting of listed buildings in the long term. Short term impacts from noise disturbance on listed buildings during construction would be mitigated by implementing good site practice, as described in the noise chapter of the PEIR. A programme of archaeological work to understand and record any below ground remains prior to construction would reduce impacts on such remains.

Landscape

As design work was ongoing at the time of the PEIR assessment, no tree or hedgerow loss along Inworth Road was assessed in the PEIR. However, the pinch point widening proposals, along with new drainage ponds and flood risk mitigation, would result in the loss of roadside hedgerows and trees opening up views of Inworth Road and passing traffic from some visual receptors such as properties, including listed buildings. Most sections of lost hedgerow would be mitigated by replanting. Effects would generally be not significant when considered with our proposed mitigation. However, while there is potential for adverse effects from the loss of mature trees at the frontage of the Parish Church of All Saints that may impact on its setting, this would be mitigated with a new frontage and tree planting. Additional tree surveys are taking place along Inworth Road, which will be used to inform the design and look to avoid tree loss where practicable.

Biodiversity

There is potential for loss of habitat and temporary disturbance (noise and vibration) to impact some species during the construction phase. However, overall, with the implementation of mitigation, any impacts are likely to be minor. Mitigation for impacts to species along Inworth Road would follow the broad principles set out in the PEIR.

Noise and vibration

Changes in traffic flows along Inworth Road as a result of the new junction 24 would increase noise levels by approximately 1 to 2 dB(A), as was reported in the PEIR. Noise increases like this are not typically considered significant, however, due to the high existing noise levels that some dwellings experience, this increase could result in significant effects to some properties. Impacts during construction are likely to be minor and not significant. Impacts during construction would be mitigated through good site practice, as set out in the PEIR.

Population and health

The proposed changes would result in the loss of roadside hedgerows and trees and may impact on the boundaries of a small number of properties near the pinch points. This would have negligible to minor magnitudes of impacts on residential land use but may have a negative impact on mental wellbeing for those individuals. We recognise that these impacts can have negative effects on individual mental wellbeing which are difficult to mitigate. We will maintain our engagement with affected residents throughout the construction phase. The drainage ponds and flood mitigation would result in some permanent land-take from arable fields, however, the proposals occupy the edge of the fields, and it is therefore anticipated the remaining field areas would remain tenable. Access to a public footpath may be disrupted during construction for safety reasons, but once operational access would be restored.

Road drainage and the water environment

There are existing flood issues on Inworth Road. Flood risk along Inworth Road was not assessed in the PEIR as the design at that stage included no widening of Inworth Road. The pinch point widening would result in increased runoff of surface water from the road. Without our interventions, this may result in a small increase in the existing flood risk to local receptors including properties and Inworth Road itself. Detailed assessment of flood risk will be undertaken to determine the risk of flooding to the widened road, and whether widening would cause any increase in flood risk elsewhere. If found to be necessary, flood mitigation would be incorporated as required, and the scheme would seek to reduce existing flood risk. This would likely be in the form of flood storage areas. Good practice methods would be put in place during construction to prevent surface water runoff entering watercourses, as set out in the PEIR. There will be no effect to the physical or chemical qualities of watercourses with this mitigation in place. Additional drainage would be required, and this would likely include drainage attenuation ponds.



Traffic assessment for Inworth Road

Since holding the statutory consultation, we have updated our traffic model. The updated model shows a correction to the figures we presented at the statutory consultation. This is due to the model more accurately reflecting the condition of the road.

As the table below shows, while traffic is still expected to increase significantly through the village of Inworth, it is not expected to be as significant as what was presented at statutory consultation. As an example, in the morning peak traffic was predicted to rise by 92%, it is now expected to rise by 42%. In the evening peak it was expected to rise by 57%, it is now expected to rise by 34%.

	Statutory consultation		Updated traffic model	
	AM	PM	AM	PM
Without scheme	729	862	784	846
With scheme	1,403	1,358	1,111	1,132
Change as a result of our design update	674	496	327	286
% change	92%	57%	42%	34%

In addition to updating our traffic model, we have tested our proposed pinch point interventions to ensure that the road can manage the additional traffic. We do this by predicting the journey times a driver might experience along the section of Inworth Road from Perrywood Garden Centre to just south of where our proposed junction 24 connects. The table below outlines the results of that work:

	Average journey times, in seconds (10 runs)	
	without A12 propose scheme	with our proposed updated design
AM peak	Existing Inworth Road	
Northbound	92	92
Southbound	91	90

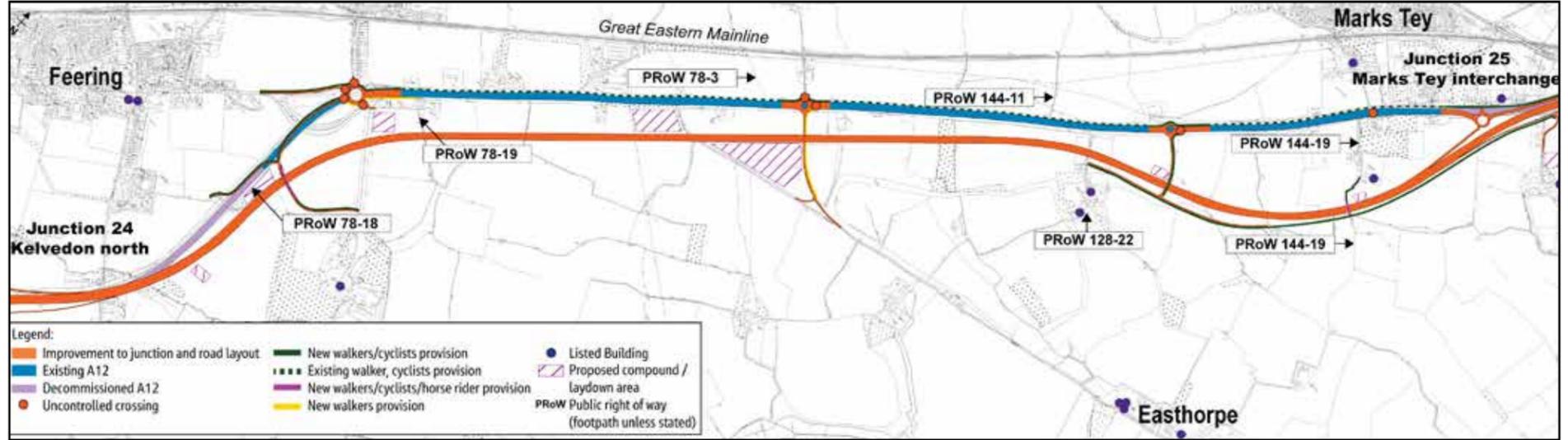
	Average journey times, in seconds (10 runs)	
	without A12 propose scheme	with our proposed updated design
PM peak	Existing Inworth Road	
Northbound	87	88
Southbound	89	91



Easthorpe Road closure

What we presented at our statutory consultation

In our statutory consultation, as presented in the map below, we showed proposals for improved access to Easthorpe Road from the existing A12 once it is bypassed and becomes a local road. The design presented at statutory consultation allowed drivers to use the new roundabout to access Easthorpe Road from both sides of the existing A12 and cross over the A12 bypass via a new bridge.



Design presented at statutory consultation with access to Easthorpe Road



Why have we changed our proposed design?

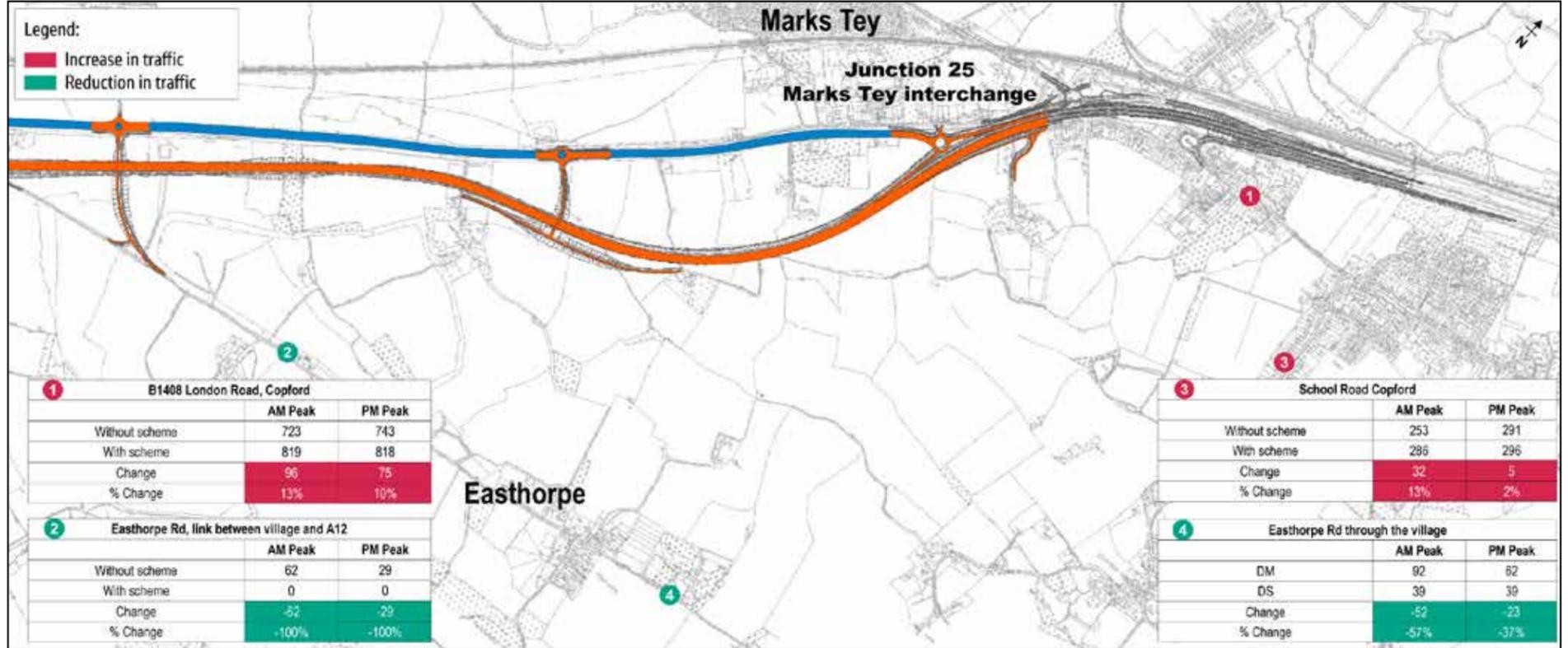
In response to our consultation proposals, we received a lot of concerns about the improved access arrangements we were proposing, and feedback that the access should be closed. These concerns referred to the increase in traffic predicted for Easthorpe Road. Considering the concerns, we reviewed the access arrangements at this location and concluded that the access could be closed.

Our updated design

To ensure that access for agricultural machinery and emergency vehicles is maintained, as well as the need for a crossing of the proposed scheme for walkers, cyclists and horse riders (WCH), we will maintain an accommodation bridge across the proposed scheme at this location. Our updated design will ban general traffic from using this bridge and we will do this by using signs and providing a gate.

Traffic

By stopping general vehicle access from Easthorpe Road onto the future de-trunked A12, vehicles that would use that access need to find an alternative route to make their journeys. We have assessed this and found that most vehicles would use School Road and London Road to make their journeys, with a small number using other routes. The map on page 37 shows that by closing access at Easthorpe Road traffic is more likely to use School Road, and London Road.



Predicted traffic levels in Easthorpe as a result of our updated design



Environmental assessment of Easthorpe Road closure

The assessment presented in the PEIR at our statutory consultation was based on Easthorpe Road being open to traffic from the existing A12 via the Easthorpe Road overbridge, allowing traffic from all directions to come to and from Easthorpe Road. We are now proposing to close Easthorpe Road to traffic to and from the A12. This change in design would potentially affect the assessment conclusions for the below environmental aspects.

Air quality

The PEIR air quality assessment concluded that there would be slight decreases in air quality along Easthorpe Road, and no breaches of air quality legal limits. With Easthorpe Road closed, there would be a beneficial impact along Easthorpe Road, and negligible changes in air quality along London Road and School Road.

Noise and vibration

With Easthorpe Road open, as assessed in our PEIR, there would be no significant noise effects throughout Easthorpe and no change along School Road or London Road. With Easthorpe Road closed, there would be a reduction in noise along Easthorpe Road. This would be a significant benefit. For properties along School Road and London Road, there would be a negligible increase in noise with Easthorpe Road closed. No additional mitigation measures are required with this design update.

Traffic on the right roads

We are confident that Easthorpe Road could have managed the projected increase in traffic we outlined in our statutory consultation. However, we have undertaken further assessments and have concluded that on balance, closing access for general traffic for Easthorpe Road would be beneficial for putting the right traffic on the right roads.

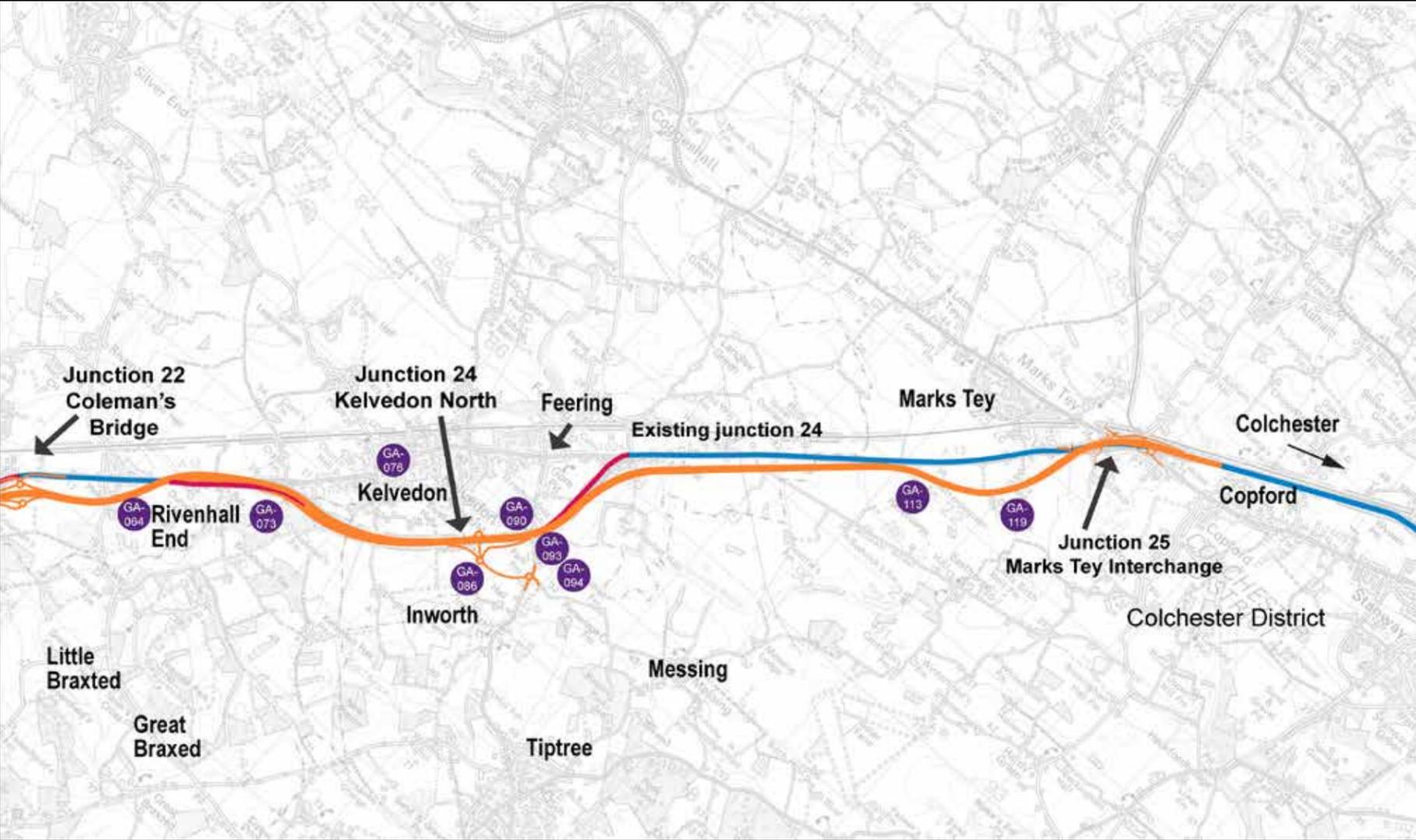
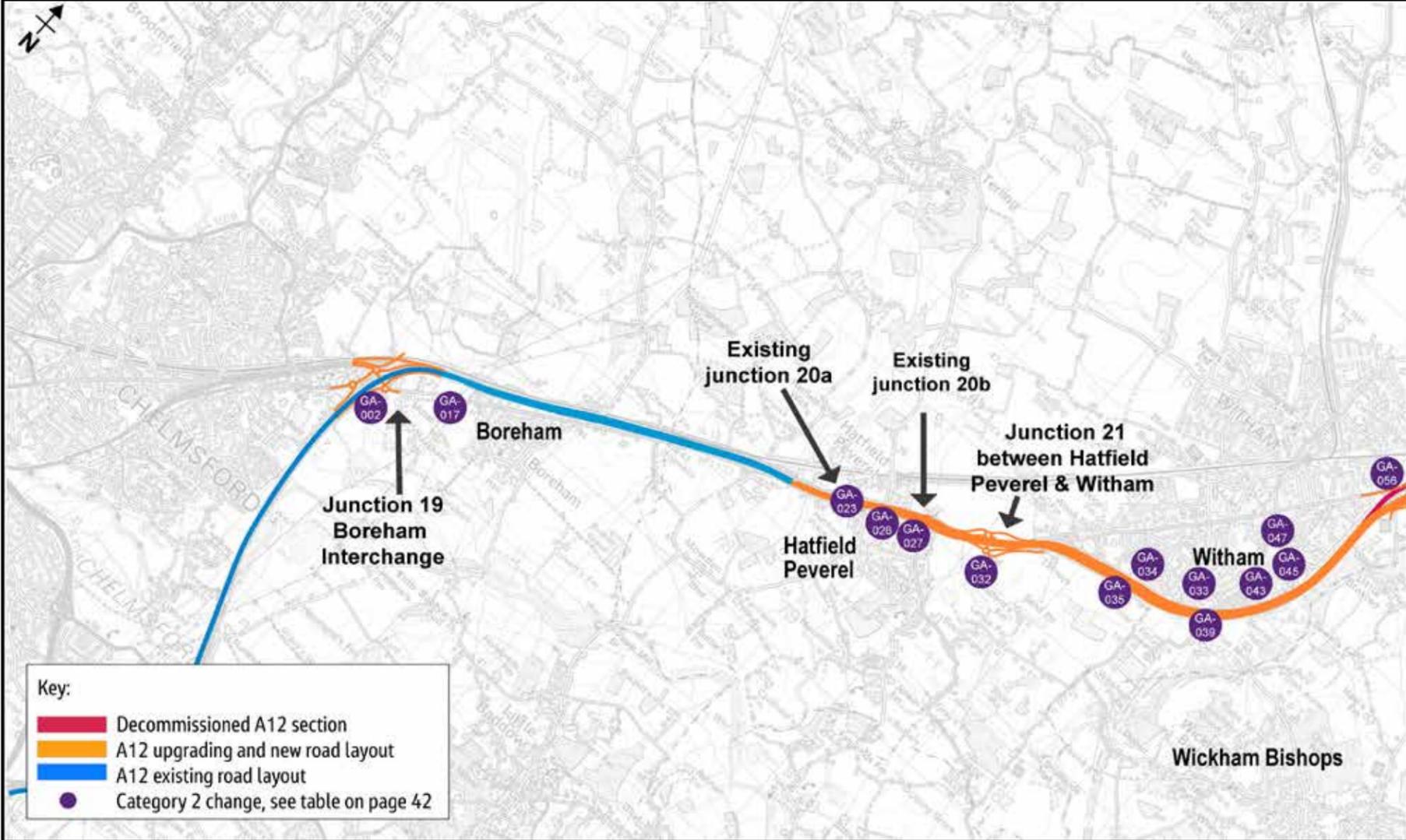
Walking, cycling and horse riding (WCH)

The WCH connectivity as detailed in our statutory consultation is being retained at Easthorpe Road and is therefore not affected by the proposed changes.

Safety and operations

A safety assessment has taken place and there have been no immediate issues identified.

Category 2 changes



The table below lists out the category 2 changes. These are changes that may also involve an environmental change but changes of a degree that we consider are less significant in environmental terms and which are potentially more localised.

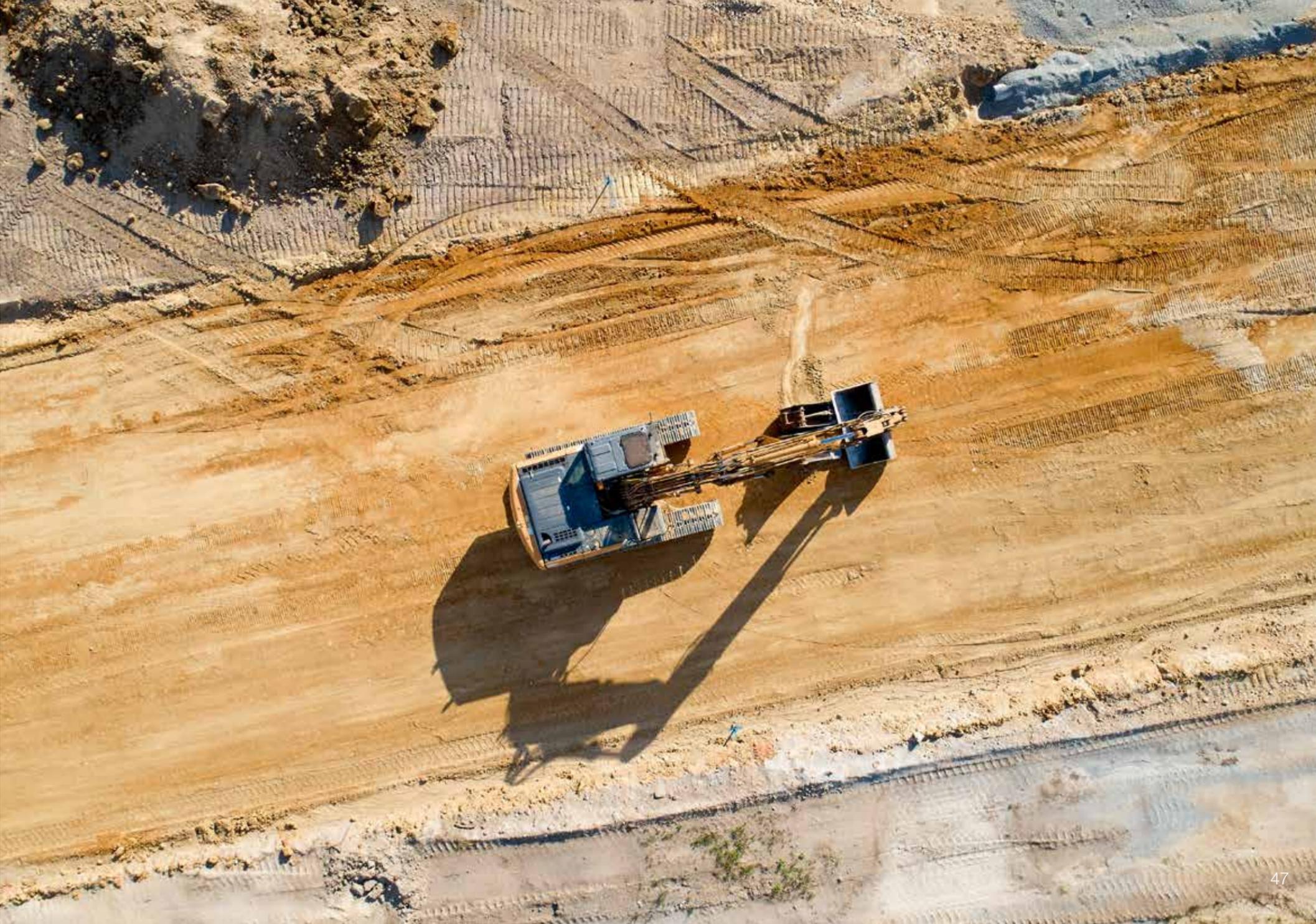
REF	Location of the proposed change	Summary of the change	Reason for the change	Effect of the change
GA-002	South-east of junction 19	Change in the location of land to accommodate ecological mitigation.	The position of ecological mitigation land has been updated following ongoing discussions with landowners.	As the mitigation area has been relocated and not fundamentally changed, there are no changes to impacts expected. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-017	Main Road, Boreham/Hatfield Peverel	Additional land for works to introduce a reduced speed limit on Main Road.	To address concerns regarding increased traffic through Boreham.	No material change from environmental assessment conclusions in the PEIR anticipated.
GA-023	Bury Lane, Hatfield Peverel	Additional land required for permanent acquisition.	To provide driveway at revised levels and ensure safety of residents during construction of the new Bury Lane Bridge.	Permanent land use impact to the property but no material change from environmental assessment conclusions in the PEIR anticipated.
GA-026	Station Road, Hatfield Peverel	Additional land required for temporary possession.	To provide temporary access to other properties during construction of Station Road Bridge.	Short-term occupation of parts of the residential garden to facilitate construction. This impact would be temporary limited to the construction period and would not be a significant effect. No material change from environmental assessment conclusions in the PEIR anticipated.
GA-027	Station Road, Hatfield Peverel	Additional land required for permanent acquisition.	Access to the property cannot be maintained throughout construction.	Permanent land use impact to property but no material change from environmental assessment conclusions in the PEIR anticipated.
GA-032	South of proposed junction 21	Addition of land to accommodate additional ecological mitigation. Change in the location of land to accommodate ecological mitigation change.	Additional ecological mitigation required. Combining the associated planting area with the new junction planting area to help with overall landscape integration. The position of ecological mitigation land has been updated following ongoing discussions with landowners.	Change to mitigation area and therefore no change to impacts. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change. As the mitigation area has been relocated and not fundamentally changed, there are no changes to impacts expected. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.

REF	Location of the proposed change	Summary of the change	Reason for the change	Effect of the change
GA-033	Witham	Addition of land for the diversion of communications utilities.	New proposed diversion route for communications utilities.	Utility diversion works would be temporary, transient (i.e., works would only be in one area for a short period of time before moving on) and would consist of street works only. Temporary impacts and nuisance during the diversion works would be managed through standard mitigation and good site practice. As such, no significant environmental effects are anticipated.
GA-034	Hawkes Road	Addition of land required temporarily on Hawkes Road by the proposed traffic management and recovery compound.	Provision of safe access into traffic management and recovery compound.	Potential additional loss of vegetation with the extension of the Provisional Order Limits. However, this would only have a slight impact. There are no material changes from the environmental assessment conclusions in the PEIR as a result of this change.
GA-035	West of Howbridge Hall Road	Reduction in the extent of land required to accommodate the mainline widening.	In this location, asymmetric widening of the A12 is now proposed to minimise impacts to Dengie farm.	Positive impact on Dengie Farm due to reduced land take. There would be increased loss of vegetation north of the A12, however, this would be temporary as this vegetation would be replanted. There are therefore no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-039	Pantile Close	Addition of land required temporarily at Pantile Close and the Church of Jesus Christ Latter-Day Saints car park.	Provision of vehicular access into works.	Increased impact to the church due to loss of parking space. This impact would be temporary and limited to the construction period, and would not be a significant environmental effect. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-043	Constance Close/Carraways. Adjacent to B1018.	Addition of land required temporarily for access to Brain Bridge.	Enabling safe vehicular access to the south side of Brain Bridge.	Additional vegetation loss, loss of habitats and disturbance to protected species such as water vole, otter and terrestrial invertebrates with the extension of the Provisional Order Limits for the compound/laydown area and temporary access to Brain Bridge. Impacts will be mitigated through standard mitigations as set out in the PEIR and therefore no material change from environmental assessment conclusions in the PEIR are anticipated.
GA-045	South of Blackwater Lane, adjacent to the A12	Addition of land required temporarily for a construction compound/laydown area.	To accommodate construction and utility works to the bridge extension north of the river Brain, a compound / laydown area is required.	

REF	Location of the proposed change	Summary of the change	Reason for the change	Effect of the change
GA-047	Blackwater Lane	Addition of land required temporarily for access to Brain Bridge.	To provide access to the northern side of Brain bridge for works at the structure, retaining walls and utility diversion.	This will utilise an existing access road and therefore no new significant environmental effects are anticipated.
GA-056	Eastways	Addition of land for temporary diversion of utilities.	New proposed temporary diversion route for utilities.	Utility diversion works would be temporary, transient (i.e. works would only be in one area for a short period of time before moving on) and would consist of street works only. Temporary impacts and nuisance during the diversion works would be managed through standard mitigation and good site practice. As such, no significant environmental effects are anticipated.
GA-064	South-west of Rivenhall End	Addition of land to accommodate ecological mitigation change.	The previous landscaping proposal did not allow adequate access for the landowner. The new location allows access to be maintained and is more suitable for wildlife.	Change to mitigation and therefore no change to impacts. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-073	River Blackwater	Addition of land for drainage.	Addition of a ditch as part of minor watercourse 21 flood mitigation. Blackwater bypass (other works in this area – eg the walking, cycling and horse riding route – shifted south as a result) requiring extended Provisional Order Limits to the south).	Addition of bypass ditch into Blackwater floodplain (and relocated walking, cycling and horse riding footbridge) being included in hydraulic modelling of scheme to assess any potential flood risk impacts.

REF	Location of the proposed change	Summary of the change	Reason for the change	Effect of the change
GA-076	Kelvedon	Addition of land for the diversion of communications utilities.	New proposed diversion route for communications utilities.	Utility diversion work would be temporary, transient (ie work would only be in one area for a short period of time before moving on) and would consist of street works only. Temporary impacts and nuisance during the diversion works would be managed through standard mitigation and good site practice. As such, no significant environmental effects are anticipated.
GA-086	Proposed junction 24, west of Inworth Road	Southern roundabout moved further south.	Southern dumbbell roundabout has been relocated approximately 80m from the proposed scheme and raised approximately 2.5m above the position presented at statutory consultation to allow the southbound slip road to begin further south and reduce the widening burden of Park Bridge and the area immediately north adjacent to Brick Kiln Farm, Inworth Road.	Design change does not impact the Provisional Order Limits and does not introduce any changes to environmental impacts. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-090	Adjacent to Park Bridge, west of Inworth road North of the A12	Addition of land required temporarily for construction work on Park Bridge.	Provision of safe working space to construct retaining walls.	The PEIR presented at statutory consultation assumed vegetation loss up to the property and therefore the extension to the Provisional Order Limits here would not have any additional impact. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.

REF	Location of the proposed change	Summary of the change	Reason for the change	Effect of the change
GA-093	East of Inworth Road	Additional land required to facilitate construction, including a retaining wall and reduced bridge widening.	To provide options to minimise impact on the building. Further design and consultation with the landowner is ongoing.	There will be additional loss of vegetation with the extension of the Provisional Order Limits. However, this would be a negligible impact. As such, there are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-094	East of B1023	Additional land required to facilitate construction, including an access to a balancing pond.	To provide options to minimise impact on buildings. Further design and consultation with the landowner is ongoing.	Minor land use impact from loss of agricultural land. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-113	Easthorpe Road, West of Easthorpe	Addition of land for pond access.	Additional land is required in order to provide sufficient space to construct the T-junction.	There are no new impacts anticipated from the design change. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.
GA-119	South of Marks Tey	Change in the location of land to accommodate ecological mitigation.	The position of ecological mitigation land has been updated following ongoing discussions with landowners.	As the mitigation area has been relocated and not fundamentally changed, there are no changes to impacts expected. There are no material changes from the environmental assessment conclusions in the PEIR anticipated as a result of this change.



Category 3 changes

Category 3 design updates are minor changes as a result of our updated design. The majority of these will not involve a change to the environmental information we presented at statutory consultation and which are generally more localised in nature. These updates can be found in a table in our **Map books: general arrangement plans and land use plans** which are available online at www.nationalhighways.co.uk/A12





Next steps

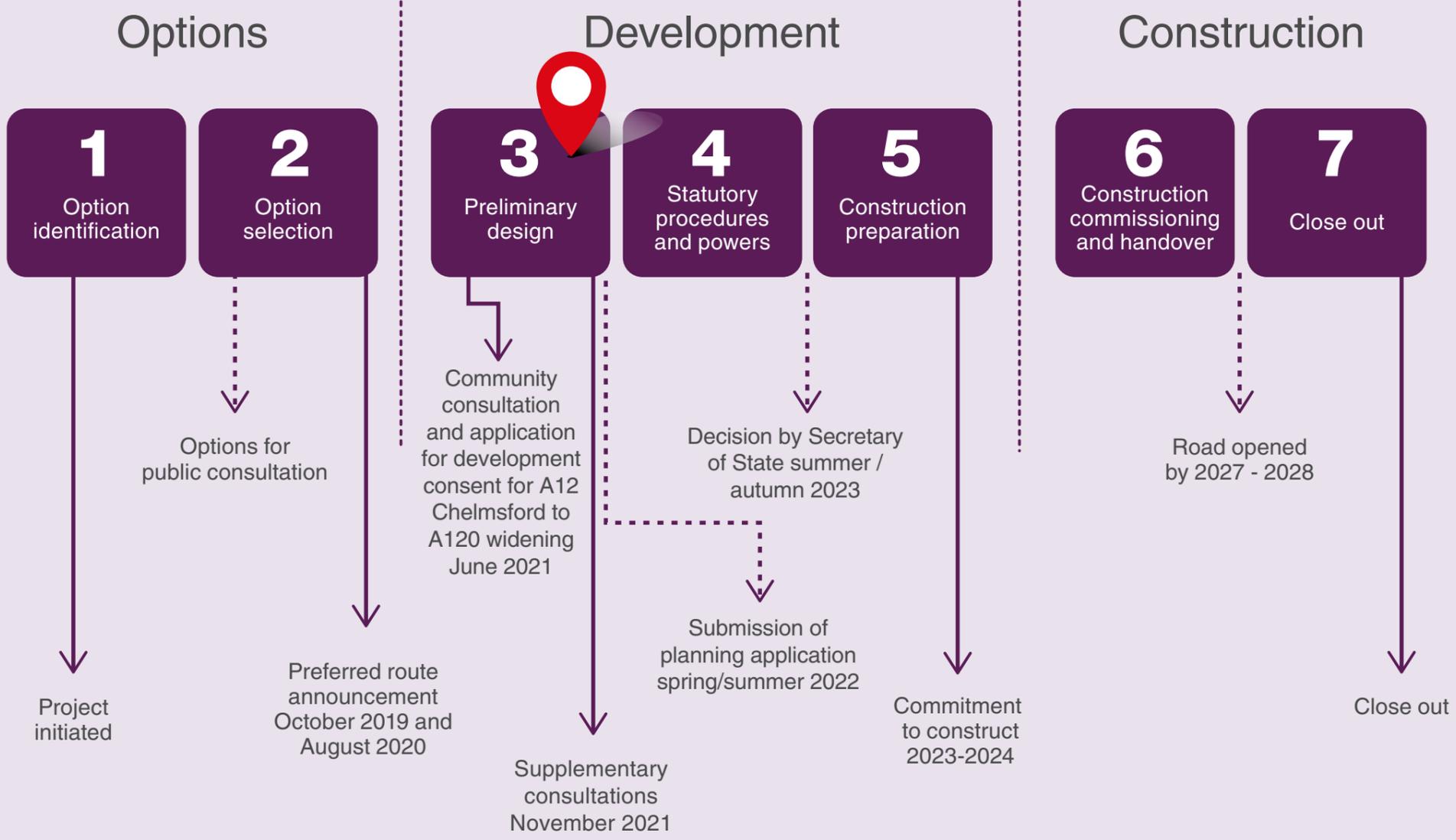
Once the consultation closes on Sunday 19 December 2021 at 11.59pm, we will review all the suggestions and comments received. We will take time to analyse and consider your feedback when making further refinements to the proposed design and to develop our planned mitigation measures. We will set out a summary of the responses and describe how the proposals have been informed by and influenced by them in a consultation report. This will form part of our application for development consent and will also be available to the public following submission of the application.

Applications to build schemes like these are submitted to the Planning Inspectorate on behalf of the Secretary of State for Transport, rather than the local planning authorities. If the application is successful, the consent granted is called a Development Consent Order (DCO). Before an application for a DCO is submitted, the local community and other stakeholders must be formally consulted on our proposals for the scheme and the likely significant environmental effects based on the information available at the time.

We expect to submit the application by spring/summer 2022 and, provided consent is granted, construction work is expected to start in 2023. More information can be found on the Planning Inspectorate's website at <https://infrastructure.planninginspectorate.gov.uk/projects/eastern/a12-chelmsford-to-a120-widening-scheme>

In addition to this consultation process, we will continue to engage with anyone interested in or impacted by the proposed scheme. To help us shape the final design in preparation of the submission to the Planning Inspectorate, it is important you are involved now and submit your response by **11.59pm on Sunday 19 December 2021**.

Once we submit the application, the Planning Inspectorate (acting on behalf of the Secretary of State) will examine the application and hold some public hearings, before making a recommendation to the Secretary of State for Transport, who will decide on whether or not to proceed with the proposed scheme.



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