national highways

# A12 Chelmsford to A120 widening scheme

## TR010060

# 8.6. Statement of Common Ground with Messing Cum Inworth Parish Council and Messing Inworth Action Group

Reg 8(1)(e)

Planning Act 2008
Infrastructure Planning (Examination Procedure) Regulations 2010

Volume 9

February 2023

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning
(Examination Procedure) Rules 2010

# A12 Chelmsford to A120 widening scheme

Development Consent Order 202[ ]

## Statement of Common Ground with Messing Cum Inworth Parish Council and Messing and Inworth Action Group

| | |
|---|---|
| **Regulation Reference** | Reg 8(1)(e) |
| **Planning** Inspectorate Scheme Reference | TR010060 |
| **Application Document Reference** | TR010060/EXAM/8.6 |
| **Author** | A12 Project Team and National Highways |

| Version | Date | Status of Version |
|---|---|---|
| P01.1 | 20/01/2023 | Draft V1 |

# STATEMENT OF COMMON GROUND

**This Statement of Common Ground has been prepared and agreed by (1) National Highways Limited and (2) Messing Cum Inworth Parish Council and (3) Messing and Inworth Action Group**

*This draft version of the Statement of Common Ground between National Highways and Messing Cum Inworth Parish Council and Messing and Inworth Action Group has been produced by National Highways and reflects National Highways understanding.*

*This version was shared with all parties on January 20th. Comments have not yet been received on this version. All content remains in draft as of 10.02.2023*

## CONTENTS



## APPENDICES



## LIST OF TABLES

# 1 Introduction

## 1.1 Purpose of this document

1.1.1 This Statement of Common Ground (SoCG) has been prepared in respect of the proposed A12 Chelmsford Widening (the Scheme). An application has been made by National Highways Limited (National Highways) to the Secretary of State for Transport (Secretary of State) for a Development Consent Order (the Order) under section 37 of the Planning Act 2008 (PA 2008).

1.1.2 The Order, if made, would authorise National Highways to widen the existing A12 to three lanes between junctions 19 and 25 in each direction, where it is not already three lanes. This would mainly involve online widening of the carriageway, with offline bypasses created between junctions 22 and 23 (Rivenhall End Bypass) and between junctions 24 and 25 (Kelvedon to Marks Tey). This would be accompanied by junction improvements (junction 19 and 25), construction of new junctions catering for traffic movements both north and southbound (junctions 21, 22 and 24), and removal of existing junctions (junction 20a, 20b and 23).

1.1.3 This SoCG does not seek to replicate information which is available elsewhere within the application documents. All documents are available in the deposit locations and/or the Planning Inspectorate website.

1.1.4 The SoCG has been produced to confirm to the Examining Authority (ExA) where agreement has been reached between the parties to it, and where agreement has not (yet) been reached and still under discussion, and areas of disagreement. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.

## 1.2 Parties to this Statement of Common Ground

1.2.1 This SoCG has been prepared by (1) **National Highways** (formally known as Highways England) as the Applicant and (2) **Messing Cum Inworth Parish Council** (MCI PC) and (3) **Messing and Inworth Action Group** (MIAG).

1.2.2 National Highways became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing National Highways made provision for all legal rights and obligations of the Highways Agency, including in respect of the Application, to be conferred upon or assumed by National Highways.

1.2.3 Messing Cum Inworth Parish Council is a prescribed consultee under Section 43 of the PA 2008.

## 1.3 Terminology

1.3.1 In the tables in the Issues chapter of this SoCG, "Not Agreed" indicates a final position, and "Under discussion" where these points will be the subject of on-going discussion wherever possible to resolve, or refine, the extent of disagreement between the parties. "Agreed" indicates where the issue has been resolved.

1.3.2 It can be taken that any matters not specifically referred to in the Issues chapter of this SoCG are not of material interest or relevance to Messing Cum Inworth Parish Council and/or Messing and Inworth Action Group and therefore have not been the subject of any discussion between the parties. As such, those matters can be read as agreed, only to the extent that they are either not of material interest or relevance to Messing Cum Inworth Parish Council and/or Messing and Inworth Action Group.

# 2 Record of Engagement

2.1.1 A summary of the meetings and correspondence that has taken place between National Highways and Messing Cum Inworth Parish Council in relation to the Application is outlined in table [2.1].

2.1.2 This record shows all emails received by the Applicant from Messing Cum Inworth Parish Council along with all emails sent to Messing Cum Inworth Parish Council from the Applicant.

2.1.3 This record shows any meetings, forums or online workshops attended by Messing Cum Inworth Parish Council, along with an outline as to what was discussed in those meetings, forums, or online workshops.

**Table 2.1 Record of Engagement**

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 10 August 2016 | Forum | Colchester and Maldon Community Forum<br>Introduced the A12 Widening scheme. |
| 26 September 2016 | Forum | Braintree and Chelmsford Community Forum<br>Informed forum members about the consultation and the principles of a good consultation, as well as providing a project update. |
| 1 December 2016 | Forum | Braintree and Chelmsford Community Forum |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| | | Informed forum members about traffic modelling and sifting, as well as providing a project update. |
| 1 August 2017 | Forum | Colchester and Maldon Community Forum<br>Informed forum members about the consultation and provided a project update |
| 30 January 2018 | Forum | East Community Forum<br>Provided forum members with a scheme update, forum format going forward and Environmental Impact Assessments |
| 24 July 2019 | Forum | West Community Forum<br>Provided an overview of the A12 scheme, including work that has taken place to date and provided an update on the way forward for the scheme |
| 10 October 2019 | Forum | East Community Forum<br>Provided an overview of the A12 scheme, including work that has taken place to date and provided an update on the way forward for the scheme, with a focus on the upcoming consultation |
| 24 August 2020 | Forum | East Community Forum<br>Provided a scheme update including an overview of how the schemes will now be drawn back together and when as PRA is announced, how it will be managed |
| 11 November 2020 | Online workshop | Provided an update on the scheme, proposals for junction 24 including traffic modelling and next steps for Inworth Road and an overview of the Statement of Community Consultation.<br>Main Alternative first suggested at meeting. Please see Appendix A. |
| 10 March 2021 | Online workshop | Provided a design update on junction 24, the community bypass assessment and the Inworth Road potential mitigation options.<br>The presentation outlined the conclusions of a technical assessment of the Parishes bypass proposals. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| | | The presentation from this meeting is included as Appendix B. |
| 6 April 2021 | Online workshop | To discuss mitigation measures on Inworth Road.<br>The presentation from this meeting in included as Appendix C. |
| 15 June 2021 | Forum | East Community Forum<br>Presented the arrangements for the statutory consultation |
| 5 August 2021 | Engagement Van event | Explained the proposed scheme with the local community. |
| 18 October 2021 | Online meeting | Discussed consultation feedback, provided a project update and discussed the supplementary consultation |
| 25 November 2021 | Public information event | Ran through the proposed scheme with the local community as part of the Supplementary Consultation. |
| 15 December 2021 | Email | Email from the Applicant to Messing Cum Inworth Parish Council (Kate Palmer) in response to detailed questions regarding traffic volumes, Hinds Bridge, social severance, heritage buildings and Messing. |
| 7 February 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) in response to email dated 15 December 2021.<br>Questions regarding traffic volumes, Hinds Bridge, social severance, heritage buildings and Messing. |
| 1 March 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Watson) requesting copies of drawings to be printed and posted to him. |
| 4 March 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) detailing agenda items the Parish Council would wish to discuss on 9 March 2022 meeting.<br>Confirmation of Parish Council attendees. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 7 March 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) to postpone meeting scheduled for 9 March 2022. |
| 7 March 2022 | Email | Email from the Applicant suggesting that meeting of 9 March 2022 continued as originally planned, with agenda sent by the Parish Council. |
| 7 March 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) asking that meeting postponed until a full response is received to email dated 7 February 2022. |
| 7 March 2022 | Email | Email from the Applicant to confirm a way forward and agree to the Parish Council's previous request in email of 7 March 2022. |
| 11 March 2022 | Email | Email from Clerk of Messing Cum Inworth Parish Council (Kate Palmer) attaching letter containing conditions of meeting with The Applicant. |
| 6 April 2022 | Email | Email from The Applicant – responding to the letter dated 11 March 2022 |
| 14 April 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) in response to email dated 6 April 2022. |
| 21 April 2022 | Email | Email from The Applicant – responding to email dated 14 April 2022 acknowledging receipt of email. |
| 22 April 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) – responding to email dated 21 April 2022 regarding communication methods. |
| 22 April 2022 | Email | Email from The Applicant – responding to email dated 22 April 2022 confirming communication methods. |
| 25 April 2022 | Email | Email from The Applicant – following up email dated 22 April 2022 proposing a meeting date. |
| 3 May 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) – responding to email dated 25 April 2022 acknowledging receipt of date. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 11 May 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish Council (Kate Palmer) regarding potential dates for meeting. |
| 13 May 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) regarding potential dates for meeting. |
| 17 May 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) to organise meeting date of 25 May 2022. |
| 19 May 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish (Kate Palmer) to confirm attendees at meeting on 25 May 2022. |
| 20 May 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish (Kate Palmer) to postpone meeting of 25 May 2022. |
| 17 June 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding) regarding the cancellation of meeting. |
| 27 June 2022 | Email | Email from the Applicant proposing new meeting date of 14 July 2022 to discuss the proposed scheme. |
| 29 June 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding)<br>Subject: FW: National Highways response - A12 Chelmsford to A120 widening scheme |
| 30 June 2022 | Email | Email from The Applicant – responding to email dated 17 June 2022 |
| 4 July 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding) – responding to email dated 30 June 2022 |
| 5 July 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) with confirmation of meeting date with A12 project team and the Parish Council. |
| 7 July 2022 | Email | Email from the Applicant with agenda and presentation ahead of meeting on 14 July 2022. Please see Appendix E for presentation. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 11 July 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) with stipulations ahead of proposed meeting. |
| 19 July 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding) regarding email dated 4 July 2022 |
| 27 July 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding)<br>Subject: RE: A12 Chelmsford A120 widening project |
| 4 August 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish (Kate Palmer) in response to email of 11 July 2022.<br>Includes three attachments:<br>1. Responses to questions raised by Messing Cum Inworth Parish Council<br>2. Technical Note, Inworth Road<br>3. Messing Cum Inworth Parish presentation |
| 9 August 2022 | Email | Email from Messing Parish Council (Kate Palmer) 'Proposed Meeting with Messing Cum Inworth Parish Council on 14th July 2022 to discuss the ongoing proposal for Jct 24, Kelvedon North – A12 Widening Scheme Preliminary Design' |
| 10 August 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer)<br>Subject: Re: National Highways response - A12 Chelmsford to A12 widening scheme, response to Messing-cum-Inworth Parish Council |
| 25 August 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer)<br>Subject: Re: National Highways response – A12 Chelmsford to A120 widening scheme, engagement with Messing-cum-Inworth Parish Council CRM:0790069 |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 2 September 2022 | Email | Email from The Applicant to Messing Cum Inworth Parish Council (Kate Palmer) Ref: CRM:079069,<br>Proposed dates for a meeting along with response to answering or meeting requirements put forward by the Parish Council |
| 15 September 2022 | Email | Email from The Applicant with attached agenda and attendee list 7 days ahead of meeting, as requested. Pinpointing relevant information and linked useful documents for meeting. Presentation to be shared also included.<br>This presentation can be seen as Appendix D. |
| 22 September 2022 | Email | Email from Messing Cum Inworth Parish Council (Kate Palmer) with attendee list for meeting 22 September 2022. |
| 22 September 2022 | Email | Email from the Applicant to ask for clarification on meeting attendees for meeting 22 September 2022. |
| 23 September 2022 | Email | Email from Messing Cum Inworth Parish Council (Bob Suckling) to express disappointment in meeting postponement. |
| 28 September 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish Council asking if they would like to meet ahead of proposed in-person event. |
| 3 October 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish Council following-up on email sent on 28 September 2022. |
| 6 October 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish Council (Bob Suckling) asking if they would like to meet ahead of in-person event on 21 October 2022. |
| 7 October 2022 | Email | Email from the Applicant to inform Messing Cum Inworth Parish Council that an in-person event would take place on 21 October 2022. |
| 11 October 2022 | Email | Email from the Applicant to inform Messing Cum Inworth Parish Council that postal |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| | | invitations to an in-person event (dated 21 October) have been sent and that residents will receive them shortly. Attached copy of invitation. |
| 11 October 2022 | Email | Email from Messing Cum Inworth Parish Council (Bob Suckling) – responding to email of 7 October. Strongly objecting to a public event being held on 21 October 2022. |
| 13 October 2022 | Email | Email from the Applicant – response to email dated 3 and 11 October 2022. Ref: CRM:0790117 |
| 17 October 2022 | Email | Email from Messing Cum Inworth Parish Council (Bob Suckling) – response to email dated 13 October 2022. |
| 21 October 2022 | Public information event | Public event to discuss junction 24, Inworth Road and relevant representations |
| 28 October 2022 | Email | Email from the Applicant reiterating request to meet with the Parish Council to discuss proposed plans. |
| 24 November 2022 | Email | Email from the Applicant to Messing Cum Inworth Parish Council regarding the set-up of a meeting to discuss the A12 Widening scheme. |
| 29 November 2022 | Email | Email from Messing Cum Inworth Parish Council (Linda Berrett-West) – responding to email dated 24 November 2022 regarding meeting proposal. |
| 2 December 2022 | Email | Email from the Applicant responding to email dated 29 November 2022 regarding meeting proposal. |
| 2 December 2022 | Email | Email from Messing Cum Inworth Parish Council (Linda Berrett-West) |
| 9 December 2022 | Email | Email from Messing Cum Inworth Parish Council (Linda Berrett-West) – response to email dated 2 December 2022. |
| 22 December 2022 | Email | Email from the Applicant – response to email dated 9 December 2022. (Ref: CRM:0163044) |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 3 January 2023 | Email | Email from Messing Cum Inworth Parish Council (Linda Berrett-West) – response to email dated 22 December 2022. |
| 11 January 2023 | Email | Email from Messing Cum Inworth Parish Council (Linda Berrett-West) – copy of correspondence from RT Hon Priti Patel ref: ZA80633 |
| 11 January 2023 | Email | Email from the Applicant to Messing Cum Inworth Parish Council (Lind Berrett-West) regarding a joint Statement of Common Ground with Messing Inworth Action Group. |

2.1.4 It is agreed by **National Highways** and **Messing Cum Inworth Parish Council** that this is an accurate record of the key meetings and consultation undertaken between (1) **National Highways** and (2) **Messing Cum Inworth Parish Council** in relation to the issues addressed in this SoCG.

2.1.5 A summary of the meetings and correspondence that has taken place between National Highways and Messing and Inworth Action Group in relation to the Application is outlined in table [2.2].

2.1.6 This record shows all emails received by National Highways from Messing and Inworth Action Group along with all emails sent to Messing and Inworth Action Group.

**Table 2.2 Record of Engagement**

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 28 February 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding junction 24 and providing Messing Action Group – Report |
| 4 March 2022 | Email | Email to various members of the project team from Messing and Inworth Action Group (Andrew Harding), providing Messing Action Group – Report |
| 8 March 2022 | Email | Email from Messing Inworth Action Group (Mark Tonge) regarding consultation event and traffic figures presented. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 8 March 2022 | Email | Email from The Applicant – response to email dated 28 February 2022. |
| 8 March 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) – response to email dated 8 March 2022 |
| 11 March 2022 | Email | Email from The Applicant – response to email dated 8 March 2022 confirming best communication channels |
| 16 March 2022 | Email | Email from The Applicant – response to Messing Action Group – Report provided in email dated 28 February 2022 |
| 18 March 2022 | Email | Email from the Applicant responding to email from Messing Inworth Action Group (Mark Tonge) dated 8 March 2022. |
| 18 March 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) in response to email of 16 March 2022. |
| 22 March 2022 | Email | Email from the Applicant responding to emails sent to National Highways officers, including Chief Executive Officer, regarding consultation. |
| 28 March 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) regarding complaint escalation regarding consultation. |
| 29 March 2022 | Email | Email from Messing and Inworth Action Group regarding meeting with the Chief Executive Officer of National Highways (formerly Highways England) |
| 1 April 2022 | Email | Email from the Applicant in response to meeting with Chief Executive Officer of National Highways. |
| 5 April 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) expressing dissatisfaction with email of 1 April 2022. Requesting a full copy of the National Highways Code of Conduct. |
| 16 April 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 6 April 2022. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 20 April 2022 | Email | Email from the Applicant to Messing and Inworth Action Group in response to email received on 5 April 2022. |
| 22 April 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) disputing information given in response of 20 April 2022. |
| 23 April 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) asking further questions regarding the proposed scheme, requesting an immediate response. |
| 3 May 2022 | Email | Emails from Messing and Inworth Action Group (Andrew Harding and Mark Tonge) inviting directors from National Highways to visit the village and discuss the A12 project. |
| 3 May 2022 | Email | Email from the Applicant responding to email dated 16 April 2022. |
| 4 May 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) asking for a response to last email by the 8 May 2022. |
| 5 May 2022 | Email | Email from the Applicant to Messing and Inworth Action Group in response to emails received on 22 & 23 April and 4 May 2022. |
| 6 May 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) asking for a response to email sent on 3 May inviting National Highways to the village. |
| 20 May 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Andrew Harding) in response to email dated 6 May 2022. |
| 24 May 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 3 May 2022 and escalating the complaint. |
| 24 May 2022 | Email | Emails from the Applicant responding to email dated 3 May 2022, acknowledging complaint escalation. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 26 May 2022 | Email | Email from the Applicant confirming postponement of meeting with Messing Cum Inworth Parish Council. |
| 31 May 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding the cancellation of the meeting with Messing Cum Inworth Parish Council |
| 31 May 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding the postponement of the last meeting with Messing Cum Inworth Parish Council. |
| 31 May 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 26 May 2022 regarding Parish meeting postponement and sharing further correspondence with ICA. |
| 31 May 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Mark Tonge) confirming sharing of correspondence with ICA. |
| 15 June 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) to say that a response is now due from the Applicant to email of 31 May 2022. |
| 15 June 2022 | Email | Email from Messing Cum Inworth Parish Council (Andrew Harding) regarding the email dated 31 May 2022. |
| 16 June 2022 | Email | Email from the Applicant in response to emails received on 31 May 2022. |
| 17 June 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) asking for further detail around ECC request to postpone a meeting, |
| 17 June 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding traffic figures sent to Essex County Council. |
| 17 June 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 31 May 2022, regarding postponed meeting with Messing Cum Inworth Parish Council. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 28 June 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding traffic figures and differences between figures. |
| 30 June 2022 | Email | Email from The Applicant to Messing and Inworth Action Group (Andrew Harding) – responding to email dated 17 June 2022. |
| 30 June 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Mark Tonge) responding to email dated 17 June 2022. |
| 4 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding traffic numbers and methodology. |
| 6 July 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 30 June 2022 regarding MIAG reports. |
| 6 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) providing the following reports:<br>• Report on Technical Aspects of Junction 24<br>• Report on Alternative Route – The Main Alternative<br>Inworth Roundabout Design Check |
| 8 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) listing 26 outstanding concerns. |
| 12 July 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) responding to email dated 6 July 2022. |
| 12 July 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Andrew Harding)<br>Response to emails dated 28 June and 4 July 2022 explaining that due to the size and detail of the report, a full response will take longer than 10 days |
| 13 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) raising questions regarding traffic counts. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 14 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) in response to email of 12 July 2022, asking why the response will take longer than the 10 days. |
| 14 July 2022 | Email | Email from Messing and Inworth Action Group (Mark Tonge) in response to email dated 12 July 2022, regarding engagement of the proposed scheme. |
| 14 July 2022 | Email | Email from the Applicant explaining that due to the multi-discipline response to the report, it is often that larger requests take longer than 10 days. |
| 15 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) raising questions regarding the proposed scheme. |
| 19 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding previous email dated 4 July 2022. |
| 19 July 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Andrew Harding) responding to email of 4 July, resending information sent on 12 July 2022. |
| 22 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding outstanding responses to previous email. |
| 22 July 2022 | Email | Email from the Applicant. Holding response to email received from Messing Inworth Action Group on 8 July 2022. |
| 22 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) suggesting that emails from MIAG have been ignored. |
| 22 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding technical questions. |
| 25 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding DCO submission date. |
| 25 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) regarding response to MIAG Reports. |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 27 July 2022 | Email | Email from the Applicant (Nick Harris) to Messing and Inworth Action Group (Andrew Harding) apologising from delay in response. |
| 27 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) in response to Nick Harris asking for complaint to be escalated. |
| 28 July 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) recalling previous email and asking for response. |
| 1 August 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) asking for a response. |
| 4 August 2022 | Email | Email from the Applicant to Messing and Inworth Action Group (Andrew Harding)<br>Response to email of 13 July responding to 11 questions. |
| 5 August 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) responding to email dated 4 August 2022 regarding traffic counts. |
| 12 August 2022 | Email | Email from The Applicant acknowledging receipt of email dated 25 July 2022 |
| 16 August 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding)<br>Subject: FW: National Highways response - A12 Chelmsford to A120 widening scheme |
| 18 August 2022 | Email | Email from Messing and Inworth Action Group (Andrew Harding) responding to questions raised in email dated 22 July 2022. |
| 18 August 2022 | Email | Email from The Applicant – responding to email dated 5 August 2022 acknowledging receipt of email. |
| 18 August 2022 | Email | Email from the Applicant sharing the response to MIAG technical reports with Messing Inworth Action Group (Mark Tonge) |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| 22 August 2022 | Email | Email from The Applicant – responding to email dated 5 August 2022 outlining delay to response. |
| 31 August 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding) responding to email dated 22 August 2022 regarding earlier emails. |
| 5 September 2022 | Email | Email from The Applicant – responding to email dated 31 August 2022 attaching the General Arrangement Plans requested |
| 15 September 2022 | Email | Email from The Applicant – responding to the email dated 8 July 2022 regarding the 26 questions raised |
| 14 October 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding) regarding strong objection to in-person event to be held on 21 October 2022. |
| 19 October 2022 | Email | Email from the Applicant to Messing Inworth Action Group (Andrew Harding) advising that upcoming in-person event is to share proposals with the local community. |
| 25 October 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding) requestion copies of the information presented to residents during in-person event on 21 October 2022. |
| 26 October 2022 | Email | Email from the Applicant to Messing Inworth Action Group outlining a list of all documents on display at in-person event and a link to their location on the Planning Inspectorate website. |
| 27 October 2022 | Email | Email from Messing Inworth Action Group to confirm receipt of 26 October email. |
| 15 November 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding)<br>A12 project copied into email sent to Ms Patel MP from MIAG Ref; ZA77794. |
| 16 November 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding) |

| Date | Form of correspondence | Key Topic discussed and key outcomes (the topics should align with the Issues tables) |
|---|---|---|
| | | A12 project copied into email sent to Ms Patel MP from MIAG ref: ZA77794 |
| 1 December 2022 | Email | Email from Messing Inworth Action Group (Andrew Harding)<br>A12 project copied into email sent to Ms Patel MP from MIAG ref: ZA77794 |

2.1.7 It is agreed **National Highways** and **Messing and Inworth Action Group** that this is an accurate record of the key meetings and consultation undertaken between (1) National Highways and (3) **Messing and Inworth Action Group** in relation to the issues addressed in this SoCG.

# 3 Issues

## 3.1 Introduction

3.1.1 This section summarises the key issues explored by Messing Cum Inworth Parish Council, Messing and Inworth Action Group and National Highways.

3.1.2 Section 3.2 summarises the key issues noted between Messing Cum Inworth Parish Council and National Highways.

3.1.3 Section 3.3 summarises the key issues currently under discussion with Messing Cum Inworth Parish Council.

3.1.4 Section 3.4 summarises the key issues noted between Messing and Inworth Action Group and National Highways.

## 3.2 Issues noted with Messing Cum Inworth Parish Council

**Table 3.1 Issues noted with Messing Cum Inworth Parish Council**

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| 1.1 | Support of the issues raised by Messing Inworth Action Group (MIAG) | N/A | The Parish Council would like it noted that it supports the issues raised by – and shares the concerns of – the MIAG. The MIAG has requested to be treated as an Interested Party in respect of the application and the Parish Council considers that the MIAG will raise the majority of issues which are of concern | National Highways acknowledges further representations are to be made during the examination process and will keep the Parish Council informed during the DCO process. | Noted. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | to the local residents of Messing and Inworth. | | | |

## 3.3 Issues under discussion with Messing Cum Inworth Parish Council

**Table 3.2 Issues under discussion with Messing Cum Inworth Parish Council**

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| 2.1 | The 'Main Alternative' | Appendix 3.3: Junction 24, Inworth Road and Community Bypass Technical Report, of the Environmental Statement [APP-095]. | The Parish Council is particularly supportive of what is termed the Main Alternative; an alternative to the route proposed by National Highways in the application near Inworth. | The Applicant has undertaken a holistic assessment of alternatives regarding the proposed position of Junction 24, how this is expected to influence driver decision making, and the consequences of providing bypasses suggested by local residents, including the 'Main Alternative'. The findings of this assessment are presented within | In discussion | 13/01/23 |

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | Appendix 3.3: Junction 24, Inworth Road and Community Bypass Technical Report, of the Environmental Statement [APP-095].<br><br>In summary, the assessment found that while the Main Alternative bypass option with a southern and northern link reduces the traffic in Inworth Village and Messing, this option increases traffic in Tiptree, Feering and the B1023 to the north of junction 24. While a bypass does solve issues of traffic in some locations, it would create the same issues in other locations, to other communities. In addition to this, a bypass would add an additional | | |

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | approximate cost of £10m to the proposed scheme and require approximately 40% more land to construct the bypass road. | | |
| 2.2 | Road network towards Messing. | Appendix 3.3: Junction 24, Inworth Road and Community Bypass Technical Report, of the Environmental Statement [APP-095]. | The Parish Council has concern regarding the lack of proposed changes to the road network towards Messing. | The proposed scheme's traffic model predicts a flow of two vehicles per minute through Messing during the highest peak hour. As this is well within the capacity of the local road network, the Applicant is not proposing any further interventions beyond those proposed for the B1023.<br>The Applicant is aware that Essex County Council has contacted the parish about additional interventions but is yet to receive feedback on them. | In discussion. | 13/01/23 |

| Ref | Issue | Doc Reference | Messing Cum Inworth Parish Council Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | The Applicant has exchanged correspondence with Essex County Council, and these can be found in Appendix A of Applicant's Response to Relevant Representations PDA-004 | | |

## 3.4 Issues noted with Messing and Inworth Action Group

**Table 3.3 Issues noted with Messing and Inworth Action Group**

| Ref | Issue | Doc Reference | Messing and Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| 3.1 | MIAG represents a number of residents from the villages of | N/A | MIAG has been incorporated specifically to participate in this DCO application. MIAG represents a number of residents from the villages of Messing and Inworth who have concerns with the | Noted. | Noted. | 13/01/23 |

| Ref | Issue | Doc Reference | Messing and Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | Messing and Inworth | | proposals put forward by National Highways; particularly the proposals (and effects of the works) at and around the newly proposed junction 24. The Parish Council of Messing and Inworth has provided a separate relevant representation and it endorses MIAG's position | | | |
| | | | | | | |

## 3.5 Issues under discussion with Messing Inworth Action Group

**Table 3.4 Issues under discussion with Messing Inworth Action Group**

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| 4.1 | Traffic levels in Messing and Inworth | Transport Assessment [APP-253]. | MIAG has concern regarding the increased levels of traffic that will be experienced in Messing and Inworth; how this has been assessed, the anticipated impacts of this | National Highways has undertaken extensive traffic modelling to understand the impact of the proposed scheme on the strategic and local | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | increased traffic on residents and users of the highways and the mitigation proposed in response to those impacts. | road network. Details and the methodologies for these assessments can be found in the Transport Assessment [APP-253].<br><br>The forecast increase in traffic on the B1023 Kelvedon Road through Inworth as a result of the proposed scheme is equivalent to approximately an additional five vehicles per minute in peak hours. The Applicant has proposed upgrades to the B1023 to address a number of concerns raised by both the community and identified in the proposed scheme's assessment. The proposed upgrades include | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | - widening of the carriageway in places to address historical pinch points by allowing two large vehicles to safely pass one another around bends and to improve the capacity of the existing road to cater for the proposed scheme's forecast increased traffic volumes.<br><br>Analysis, including microsimulation of the road, has confirmed that the proposed scheme would address both the historic capacity issues as well as those caused by the projected increase in traffic.<br><br>The proposed scheme's traffic model predicts a small increase in traffic | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | flow that equates to two vehicles per minute through Messing during the highest peak hour. As this is well within the capacity of the local road network, the Applicant is not proposing any further interventions beyond those proposed for the B1023.<br><br>The Applicant has previously responded to correspondence from MIAG in regard to concerns on the changes made to the traffic modelling results as the proposed scheme has progressed. Please note that a technical note explaining these developments is currently being produced and will | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | be made available shortly. | | |
| 4.2 | Assessment of the Main Alternative. | Appendix 3.3: Junction 24, Inworth Road and Community Bypass Technical Report [APP-095] | MIAG has concern regarding National Highways's position on MIAG's proposed bypass from new junction 24 to the South of Inworth village (known as the Main Alternative) and its assessment to discount this proposal. National Highways's position regarding the Main Alternative is set out in APP-095. MIAG has concerns with the justification and rationale provided in this report and would like an opportunity to raise these during the Examination. | The Applicant notes that a bypass was first suggested by Messing-cum-Inworth Parish Council in late 2020. In response to this the Applicant undertook a cross discipline assessment of the proposal and presented its findings to the council in March 2021. The presentation can be found in Appendix B.<br><br>In response to the Statutory and Supplementary Consultation the Parish Council submitted Plans for the "Main Alternative", which was a refinement of the initial bypass proposed in November 2020, as detailed in | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | Annex. The Applicant has undertaken an objective assessment of the Main Alternative proposal and other bypass options in- Appendix 3.3: Junction 24, Inworth Road and Community Bypass Technical Report [APP-095] and considers that the outcome of the assessment is sound. The Applicant will further engage with MIAG to understand their concerns. | | |
| 4.3 | Extent of proposed works. | | The nature and extent of the proposed works in and around Inworth village, including the lack of proposed works in and around Messing. | As previously mentioned in 4.1 the small traffic increase in Messing as a result of the proposed scheme is within the capacity of the existing road network and the Applicant is not proposing any further interventions | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | beyond those proposed for the B1023.<br>The Applicant is aware that Essex County Council has contacted the parish about additional interventions but is yet to receive feedback on them.<br>The Applicant has exchanged correspondence with Essex County Council, and these can be found in Appendix A of Applicant's Response to Relevant Representations PDA-004 | | |
| 4.4 | Pinch points in Inworth. | | MIAG also has concern with a number of other pinch points where it considers works should be undertaken to avoid/reduce/mitigate safety and traffic issues. | Localised widening at pinch points in Inworth is proposed to improve safety for pedestrians at those locations because it reduces the likelihood | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | of vehicles overhanging or over-running the footway to pass oncoming vehicles. Widening is intentionally limited in scope to minimise the likelihood of increasing vehicle speeds. The widening extents are limited to the section with footway in the village of Inworth, to minimise the likelihood of a vehicle over-running the footway. | | |
| 4.5 | Assessment of noise and vibration. | Chapter 17: Summary, of the Environmental Statement [APP-084].<br>Section 12.11 of Chapter 12: Noise and vibration, of the Environmental | The assessment of noise (including the accessibility of the datasets used for those assessments) and the anticipated effects and level of mitigation proposed. | Environmental issues have been considered at every stage of the proposed scheme development, including options identification, option selection, and the development of the proposed scheme preliminary design. | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | Statement [APP-079] | | An Environmental Statement was submitted with the application. This has been produced in line with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and National Networks National Policy Statement.<br><br>The Environmental Statement reports the results of the environmental assessment that has been undertaken for the proposed scheme, including the identification of likely significant environmental effects. The assessment has been informed by desk-based studies, surveys, | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | modelling, and engagement with stakeholders. Where likely significant effects were predicted, mitigation measures have been proposed to avoid, reduce, or offset the effects.<br>While the Applicant has sought to mitigate significant effects wherever practicable, some significant effects remain after the application of mitigation measures. These are known as the residual effects. Significant residual effects have been clearly stated at the end of each topic chapter of the Environmental Statement and summarised in Chapter 17: Summary, of the | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | Environmental Statement [APP-084]. Significant residual effects will be material issues for the Examining Authority to consider during the Examination and will be weighed against the overall benefits that the proposed scheme would deliver.<br><br>**Noise and vibration assessment**<br>Section 12.11 of Chapter 12: Noise and vibration, of the Environmental Statement [APP-079] presents the assessment of impacts of road traffic noise following the completion of the proposed scheme. Figure 12.5 of the Environmental Statement [APP-232] | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | shows the locations of significant effects.<br><br>**Messing**<br>Paragraph 12.11.47 of Chapter 12: Noise and vibration [APP-079] discusses predicted road traffic noise changes around Messing. -There are 71 dwellings and three other sensitive receptors along the route from Inworth Road to the B1022 (via Kelvedon Road, through Messing and then Harborough Road) where a significant adverse effect is predicted. The increases in road traffic noise include a moderate (3 to 5dB(A)) increase in noise at 16 dwellings and a major (+5dB(A)) increase at 55 dwellings. The | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | increase in noise would be caused by an increase in traffic volume along this route, although it should be noted that the 18-hour daily traffic volumes are predicted to change from around 380 vehicles without the proposed scheme to 1,210 vehicles with the proposed scheme. Over the 18-hour period considered for a daytime noise assessment, this would equate to around two vehicles every five minutes without the proposed scheme and six vehicles every five minutes with the proposed scheme. The daytime absolute noise level at those dwellings closest to Kelvedon Road / The Street would be | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | between 58 and 62 dB(A), which is below the significant observed adverse effect level (SOAEL). Further from these roads the noise levels would be lower. The acoustic character and context of the noise is not expected to change with the proposed scheme, as the noise would still be from road traffic on the same façade of a sensitive receptor as before.<br><br>**Inworth**<br>Paragraphs 12.11.44 and 12.11.45 of Chapter 12: Noise and vibration [APP-079] discuss predicted road traffic noise changes in Inworth. -Along Inworth Road there are four dwellings where the | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | absolute noise level would be just above the SOAEL and there would be up to a 1.3dB(A) (minor) increase in noise. In accordance with the Department for Transport's Design Manual for Roads and Bridges (DMRB) LA 111, this would be a significant adverse effect. It is not possible to mitigate these significant effects for the reasons discussed in Paragraph 12.11.44 of Chapter 12 [APP-079]. There are also seven dwellings within Inworth that would experience a significant beneficial effect due to the resurfacing of the concrete road surface on the existing A12 providing | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | noise reduction at the rear of these dwellings. At both Messing and Inworth it has not been possible to provide mitigation for road traffic noise for the following reasons:<br>• A low noise surface is only considered to be effective by DMRB LA 111 when average speeds are above 75km/h. The predicted average traffic speed along the roads through Messing and Inworth are around 30 – 40 km/h and so a low noise | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | surface would not be effective.<br>• To be effective, a noise barrier needs to be unbroken. In these locations, where access is required from the road to sensitive receptors, it is not possible to have a barrier that is unbroken. Noise barriers within the middle of a village and surrounding dwellings would also likely have | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | adverse visual effects. | | |
| 4.6 | Assessment of air quality. | Chapter 17: Summary, of the Environmental Statement [APP-084].<br>Figure 12.5 of the Environmental Statement [APP-232]<br>Chapter 6 of the Environmental Statement [APP-073]<br>Appendix 6.5 [APP-104]<br>Figures 6.9 [APP-213] and 6.10 [APP-214], of the Environmental Statement). | The assessment of air quality (including the accessibility of the datasets used for those assessments) and the anticipated effects and level of mitigation proposed. | Environmental issues have been considered at every stage of the proposed scheme development, including options identification, option selection, and the development of the proposed scheme preliminary design.<br>An Environmental Statement was submitted with the application. This has been produced in line with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and National Networks National Policy Statement. | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | Chapter 9: Biodiversity, of the Environmental Statement [APP-076]<br>Figure 2.1 Environmental Masterplan [App-086] | | The Environmental Statement reports the results of the environmental assessment that has been undertaken for the proposed scheme, including the identification of likely significant environmental effects. The assessment has been informed by desk-based studies, surveys, modelling, and engagement with stakeholders. Where likely significant effects were predicted, mitigation measures have been proposed to avoid, reduce, or offset the effects.<br>While the Applicant has sought to mitigate significant effects | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | wherever practicable, some significant effects remain after the application of mitigation measures. These are known as the residual effects. Significant residual effects have been clearly stated at the end of each topic chapter of the Environmental Statement and summarised in Chapter 17: Summary, of the Environmental Statement [APP-084]. Significant residual effects will be material issues for the Examining Authority to consider during the Examination and will be weighed against the overall benefits that the proposed scheme would deliver. | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | **Air quality assessment – Messing and Inworth**<br>The main concerns relating to air quality is a worsening and subsequent increase in pollutant concentrations owing to increases in traffic, which could be harmful to health. The UK Air Quality Standards (Air Quality Standards Regulations 2010) are a range of pollutant concentrations recorded over a given time period, which are considered to be acceptable in terms of what is scientifically known about the effects of each pollutant on health and on the environment.<br>Air quality modelling predictions have indicated areas where | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | pollutant concentrations across the proposed scheme study area have increased owing to the construction and operational phases. However, areas are also predicted to experience decreases in concentrations and subsequent improvements in air quality. The air quality assessment outlined in Chapter 6 of the Environmental Statement [APP-073] considered all changes in emissions with respect to the predicted total concentrations.<br>The largest increases in predicted annual mean nitrogen dioxide ($NO_2$) and Particulate matter ($PM_{10}$) concentrations at | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | properties along the B1023 (between Maypole Road and the proposed new access onto the A12), were 1.3µg/$m^3$ and 0.3µg/$m^3$ respectively which equate to small and imperceptible changes. The maximum annual mean $NO_2$ concentration predicted between these junctions was 16.9 µg/$m^3$ which is below the air quality objective of 40 µg/$m^3$ determined for the protection of human health (please refer to the air quality results in Appendix 6.5 [APP-104] and Figures 6.9 [APP-213] and 6.10 [APP-214], of the Environmental Statement). | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | The air quality assessment concluded there would be no significant effects to human health during the construction and operation of the proposed scheme, in accordance with DMRB LA 105 significance criteria.<br><br>The traffic model results feeding into the air quality assessment indicated that exposure to the residents of Messing would not be adversely or positively impacted by road traffic emissions owing to the proposed scheme in accordance with scoping criteria described in Section 2.1 of the DMRB LA 105 guidance. | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| 4.7 | Road safety | | Road safety concerns particularly in the context of existing collision and fatality numbers. | Personal Injury Collision data has been analysed for the B1023 from the B1024 to Oak Road junction on the northern edge of Tiptree and all other local roads in the parish of Messing cum Inworth. The summary information for all recorded personal injury collisions is publicly accessible on [redacted]<br><br>This information shows no fatal collisions in that whole area in the last five years (2017 to 2021 inclusive), and two serious injury collisions in that time.- One serious collision occurred in 2018 on the B1023 at the | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | location of the proposed roundabout connecting to A12 junction 24 where the proposed road layout would be very different to that present now and does not raise any road safety issues relevant to the proposed future network. -The other serious injury incident was a single-vehicle crash in 2019 on a frosty or icy road surface in the Inworth settlement. -Similarly, this is not considered to indicate any reason why the proposed scheme would increase the likelihood of such a single vehicle collision. There were no slight injury collisions in the whole five-year period on the B1023 from the | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | B1024 to Oak Road on the boundary of Tiptree. -There were no slight injuries in the village of Messing or Kelvedon Road connecting to the B1024. There was a slight injury collision in 2017 on New Road between the village and the B1022 junction, and approximately one slight injury collision per year on the section of the B1022 within the parish.<br><br>In summary, these frequencies and severities of collisions on local roads in the parish, and the wider extent of the B1023, do not indicate road safety problems which raise concerns with respect to | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | the effect of the proposed scheme on such incidents in future. | | |
| 4.8 | Junction 23 and 24. | | The impacts and assessment of these from the proposed closure of the existing junctions 23 and 24 on the new junction 24. | It is unclear in the relevant representation as to what 'these' refers but the below refers to environment.<br><br>The proposed scheme, including the closure of junction 23 and relocation of junction 24, has been assessed-in line with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and National Networks National Policy Statement.<br>The Environmental Statement reports the results of the environmental | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | assessment that has been undertaken for the proposed scheme, including the identification of likely significant environmental effects. | | |
| 4.9 | Flooding on local roads. | Flood Risk Assessment (FRA) [APP-162]<br>Surface Water Drainage Strategy [APP-174] | Flooding on the local roads in the vicinity of new junction 24. | The Applicant has undertaken a Flood Risk Assessment (FRA) [APP-162] –to inform the Environmental Assessment for the proposed scheme. The FRA [APP-162] is supported by the proposed scheme Surface Water Drainage Strategy [APP-174] which demonstrates that the proposed scheme includes mitigation measures where appropriate to not increase the levels of flood risk (including an | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | allowance for the predicted impacts of climate change over its design life). | | |
| 4.10 | All Saints Church, Inworth. | Chapter 7: Cultural heritage, of the Environmental Statement [APP-074]<br>Appendix 7.9: Cultural heritage impact assessment summary tables, of the Environmental Statement [APP-117]<br>Register of Environmental Actions and Commitments, which is part of the first iteration | The impacts and effects of the proposals on All Saints Church, Inworth. | The results of the built heritage impact assessment are provided in Chapter 7: Cultural heritage, of the Environmental Statement [APP-074] and Appendix 7.9: Cultural heritage impact assessment summary tables, of the Environmental Statement [APP-117].<br>The widening of Inworth Road would require the enlargement of the lay-by in front of the All Saints Church Grade I listed building (Asset 708), which may result in the removal of trees. In addition, there would be | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | Environmental Management Plan [APP-185]. | | removal of roadside vegetation to an adjacent field for a new flood compensation area and excavation of a further attenuation pond. The construction activities for the associated earthworks would result in harm from associated noise and dust, plus visual intrusion from construction machinery and traffic. The magnitude of impact would be moderate on a high value asset resulting in a moderate adverse significance of effect. Mitigation would include replanting of church boundary and adjacent field boundary plus standard considerate contractor measures and noise mitigation | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | measures applied during construction through the Register of Environmental Actions and Commitments, which is part of the first iteration Environmental Management Plan [APP-185].<br>During operation there would be no significant effects on the All-Saints Church Grade I listed building. | | |
| 4.11 | Draft DCO | | The extent of the powers sought in the draft DCO; their precision, necessity and scope. | National Highways has written to MIAG asking that further details are provided so that MIAG's concerns can be considered. | Under discussion. | 13/01/23. |
| 4.12 | Compulsory acquisition. | | The extent of the proposed compulsory acquisition in Inworth. | Land is required to develop the flood storage areas within Inworth. By doing so, the proposed mitigation areas would | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | reduce the existing flood risk to the road and protect the road from surface water flood events up to a 1% (1 in 100) AEP event plus climate change allowance. | | |
| 4.13 | Engagement. | Chapter 4 of the Consultation Report [APP-045] | The lack of engagement from National Highways. | Detailed engagement activity can be seen in Tables 2.1 and 2.2 above.<br><br>In June 2021, the statutory consultation ran for eight weeks and included six public events, as well as six webinars and a virtual exhibition available 24 hours a day during the consultation period. An extensive letter drop took place, advertising the consultation to over | Under discussion. | 13/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | 33,000 households in the area.<br><br>More generally, with regard to the statutory consultation as outlined in Section 8 'How will we consult' of the Statement of Community Consultation 2021, multiple channels were provided to engage in the consultation.<br><br>In November 2021, a supplementary consultation was held for a duration of six weeks and included three public events, one of which was held in Messing. An extensive letter drop took place, three webinars were held, and a virtual exhibition was made available 24 hours a day | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | during the consultation period.<br><br>For further information on the Statement of Community Consultation, see Chapter 4 of the Consultation Report [APP-045].<br><br>Furthermore, on Friday 21 October 2022, a public information event was held at Messing Village Hall. This event was advertised via letter drop with all residents of Messing and Inworth.<br><br>Several attempts have also been made to reach out to Messing Cum Inworth Parish Council, of which some councillors form part of the Messing and Inworth Action Group | | |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | Limited and provide them with a presentation on the proposed scheme that has been submitted for development consent, as well as the Applicants decision not to provide a bypass for the B1023. Unfortunately, for various reasons these meetings have been postponed.-<br><br>It is further worth noting that within 2022 up to November, National Highways had over 60 email exchanges with registered officers of the action group. | | |
| 4.14 | Speeding | | | In Inworth, the increase in traffic would not be likely to increase flow, because heavier traffic flow typically reduces mean and peak speeds of vehicles. The widening | Under discussion. | 18/01/23. |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | of pinch points has been carefully designed to reduce footway over-run but without the likelihood of encouraging higher speeds.<br><br>In Messing and surrounding roads, the numbers of additional vehicles per hour resulting from A12 scheme is very small and therefore not likely to have any effect on vehicle speeds. Any existing issues should therefore be raised with Essex County Council as the Local Highway Authority. | | |
| 4.15 | Design of Inworth Road roundabout | | | The Applicant notes that the MIAG raised concerns over the design of Inworth Roundabout during the Open Floor | Under discussion. | 18/01/2023 |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | Hearings on 12 January 2023. The Applicant awaits further explanation as to what these concerns are. | | |
| 4.16 | Assessment of bypasses | | | The Applicant notes that the MIAG raised concerns over the assessment of the bypass during the Open Floor Hearings on 12 January 2023. The Applicant awaits further explanation as to what these concerns are. | Under discussion. | 18/01/2023 |
| 4.17 | Monitoring | | | The Applicant notes that the MIAG raised concerns over monitoring during construction and operation during the Open Floor Hearings on 12 January 2023. As part of the delivery of road schemes, National Highways does undertake post opening | Under discussion. | 18/01/2023 |

| Ref | Issue | Doc Reference | Messing Inworth Action Group Position | National Highways Position | Status | Date |
|---|---|---|---|---|---|---|
| | | | | project evaluations. A example of this can be found for the A556 Knutsford to Bowdon improvement scheme: [redacted] | | |

# Acronyms

| Abbreviation | Term |
|---|---|
| DCO | Development Consent Order |
| DfT | Department for Transport |
| DMRB | Design Manual for Roads and Bridges |
| ECC | Essex County Council |
| EMP | Environmental Management Plan |
| ExA | Examining Authority |
| LEMP | Landscape and Ecology Management Plan |
| LOAEL | Lowest Observed Adverse Effect Level |
| LPAs | Local Planning Authorities |
| NNNPS | National Policy Statement for National Networks |
| PA 2008 | Planning Act 2008 |
| PEIR | Preliminary Environmental Information Report |
| PRA | Preferred Route Announcement |
| REAC | Register of Environmental Actions and Commitments |
| SOAEL | Significant Observed Adverse Effect Level |
| SoCC | Statement of Community Consultation |
| SoCG | Statement of Common Ground |

# References

Crashmap, collision data. Accessed February 2023 Available at:
[redacted]

National Highways. A556 Knutsford to Bowdon improvement scheme. Accessed February 2022. Available at:
[redacted]

# Appendix A – **Presentation 11 November 2020**

A.1.1 Appendix A is a copy of a presentation given to Messing Cum Inworth Parish Council on 11 November 2020.

# Appendix B – **Presentation 10 March 2021**

B.1.1 Appendix B is a copy of a presentation given to Messing Cum Inworth Parish Council on 10 March 2021.

# Appendix C – **Presentation 6 April 2021**

C.1.1 Appendix C is a copy of a presentation given to Messing Cum Inworth Parish Council on 6 April 2021.

# Appendix D – **Presentation 22 September 2022**

D.1.1 Appendix D is a copy of the presentation planned to be given to Messing Cum Inworth Parish Council on 22 September 2022. This has been included for information.

# Appendix E – **Presentation 14 July 2022**

E.1.1 Appendix E is a copy of the presentation planned to be given to Messing Cum Inworth Parish Council on 14 July 2022. This has been included for information.

# Messing-cum-Inworth Parish Council workshop

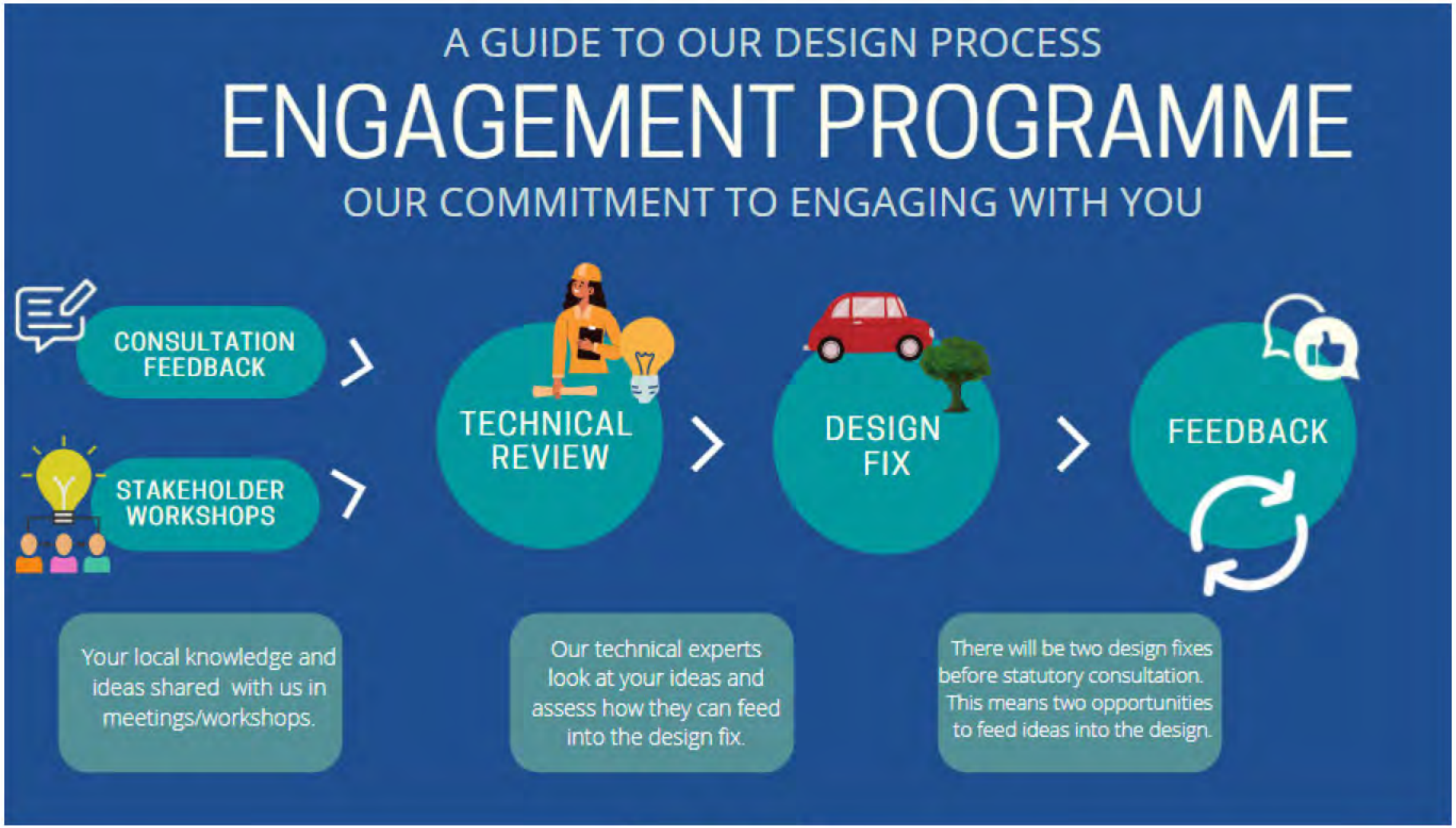
## 11 November 2020

A12

# Agenda

- Introductions
- Background – 2017 Consultation
- Junction 24 proposals
- Inworth Road
- Next steps
- Statement of Community Consultation

# 2020 engagement

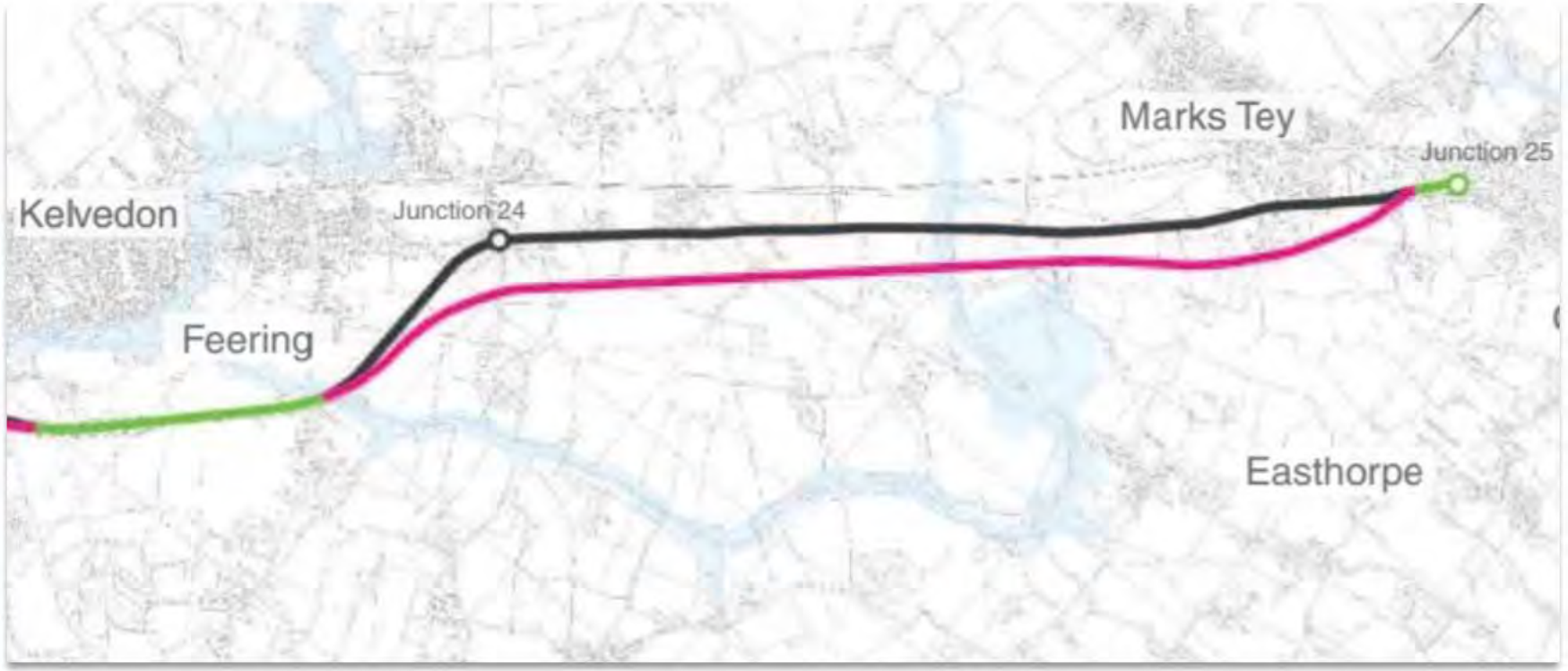



COSTAIN Jacobs A12 highways england

# 2017 Consultation

The consultation presented two possible alignments in proximity to the existing junction 24 and showed the existing junction location.

We asked: "Do you think that improvements are needed to junction 24?"
"Please explain..."
**729** people responded to this question




7. Do you think that improvements are needed to junction 24? Yes ☐ No ☐

Please explain the reason for your response: .....

.....

COSTAIN Jacobs A12 highways england

# Response to 2017 consultation – junction 24

- **60%** of respondents felt junction 24 needed improvements
- Many key stakeholders noted the limitations of the current arrangement

*"A north and south bound junction at this point is particularly important."* Maldon DC

*"Councillors also discussed the need for a 4-way junction at jct. 24. This would reduce traffic through Kelvedon High Street and by taking the heavy traffic from Tiptree away."* Feering Parish Council

*"A new junction 24 with access from the B1023 Inworth Road will allow for the traffic from Tiptree and surrounding areas to access the A12 without the need to pass through Kelvedon and Feering."* Colchester BC

*"An all-movements junction at junction 24 is an absolutely essential requirement."* Braintree DC

*"A new multi-direction junction is needed to cater for the expanding traffic potential from Tiptree. Ideally this junction should be off the Inworth Rd thus diverting traffic way from Feering and Kelvedon"* VTAG

*"Best solution for Kelvedon north would be to have a new all movements junction"* Essex CC

*"The current slip-roads are not bi-directional..... the B1023 can simply not take any more traffic volume."* Messing Cum Inworth PC

*"..steps need taking to cater for traffic from Tiptree to access the A12 without going through Kelvedon/Feering."* Marks Tey PC

*"It is imperative that this becomes a four way junction."* Kelvedon PC

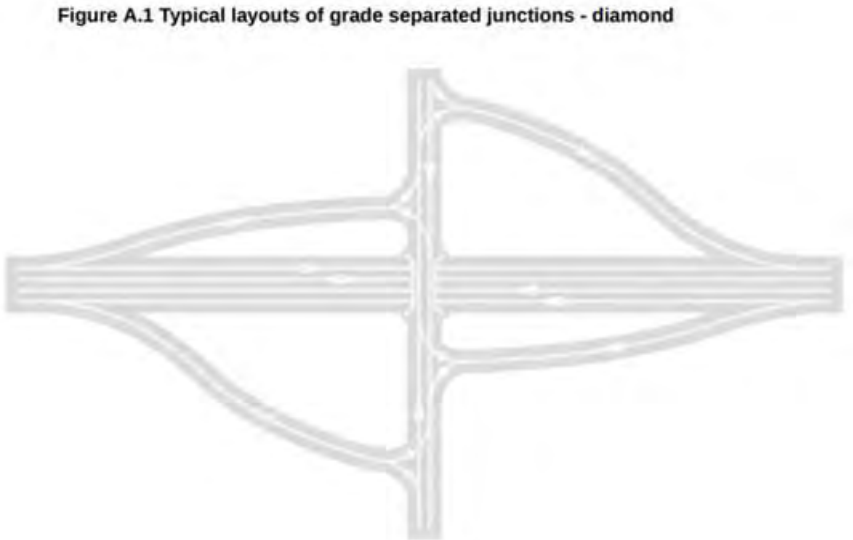
COSTAIN Jacobs

# Our response

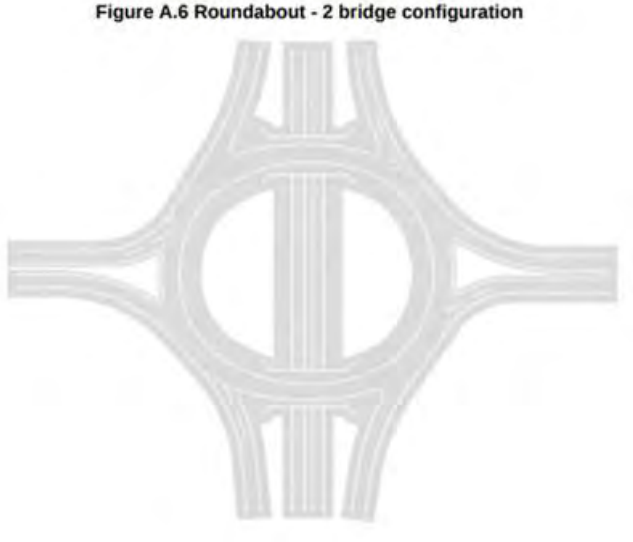
- Consultation feedback confirmed our initial view that an all-movements junction was required for junction 24.
- However, there are several types of all-movement junctions.


Dumbbell

Our preferred option




Diamond




Two bridge

A12

highways england

# Example of junctions

## Dumbbell

- Junction over mainline
  - A12 Junction 28

Our preferred option

## Diamond

- Junction over mainline
  - M90 Junction 4


## Gyratory (two bridge)

- Junction over mainline
  - A12 Junction 26


ghways
gland

# Why a dumbbell arrangement?

- The size of a dumbbell junction is dictated by the traffic it needs to cope with – roundabouts, length of slip roads, number of lanes etc.
- However;
  - as an approach to a junction, the dumbbell requires less land than a diamond or two bridge arrangement.
- And, the smaller the better for the scheme as:
  - it reduces land take
  - it generally has less environmental impacts
  - it has lower costs
  - reduced paved area reduces drainage requirements
- Our junction 24 proposal is comparable in size to our junction 21 and 22

# Finding the best location for our all-movements junction


Our initial thought process was to place the junction broadly where the current junction 24 is and the image to the left is what we call our "PCF stage 2" arrangement. It did have benefits such as:

- An all-movements junction
- Reduced traffic on Kelvedon High Street

**However:**

- The height of junction would be considerable.
- It would have had a considerable impact on the setting of Prested Hall.
- Access to Prested Hall would have suboptimal performance.
- It would prove challenging for our cut and fill balance.

**And** several statutory and key stakeholders suggested a preference for either a connection with Inworth Road or the junction on Inworth Road.

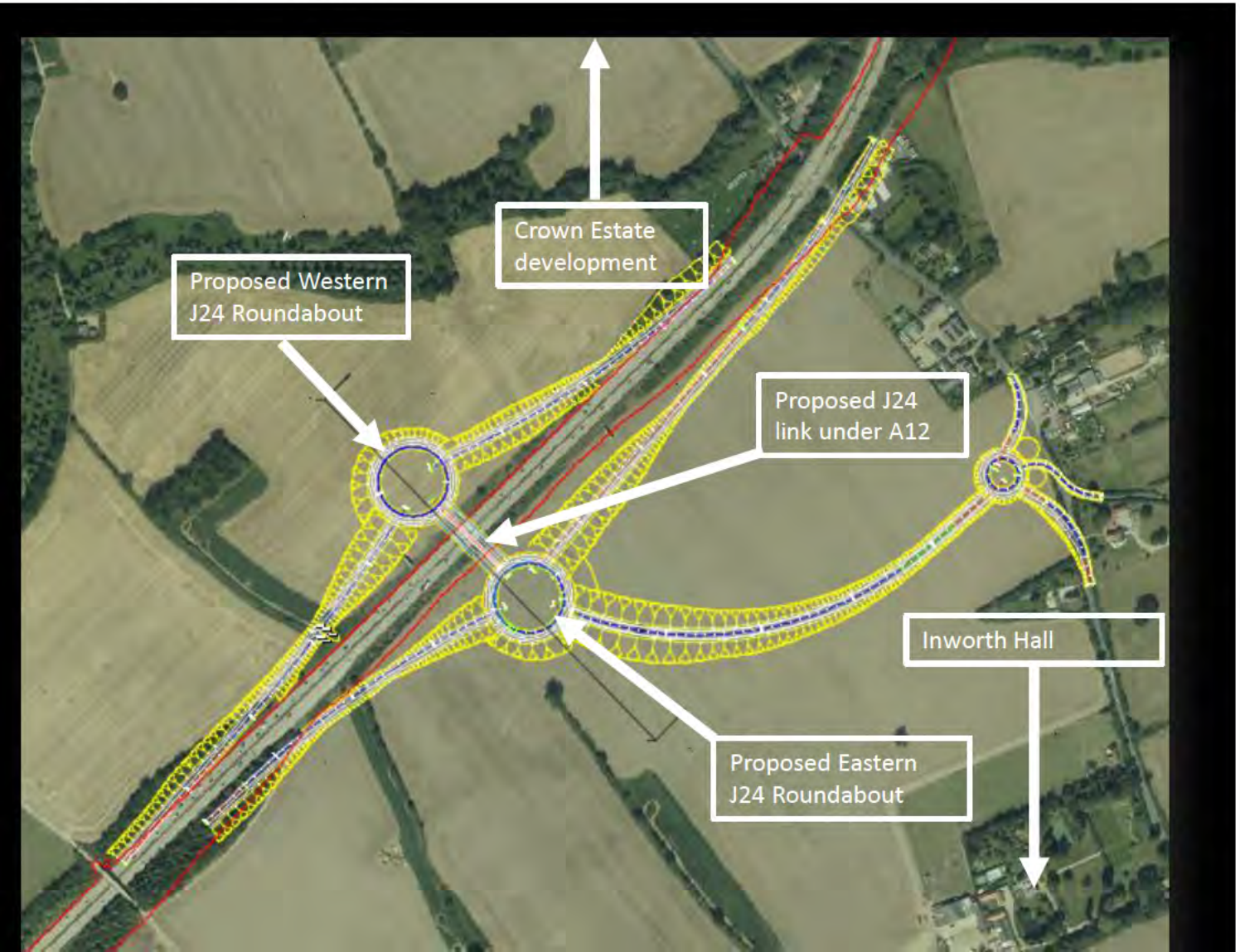
*"A new junction 24 with access from the B1023 Inworth Road will allow for the traffic from Tiptree and surrounding areas to access the A12 without the need to pass through Kelvedon and Feering".*

*"Under this scenario (A120 route D&E) the best solution for Kelvedon North would be to have a new all movements junction at Inworth Road".*

COSTAIN Jacobs highways england

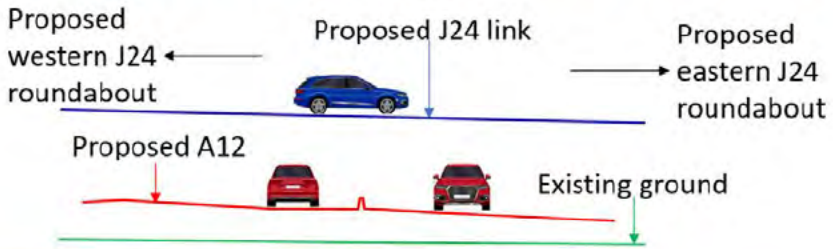
# Inworth road - our preferred option

- Through a detailed piece of technical work, we developed a proposal for a location on Inworth Road. This allowed us to see whether it should be our preferred location. After comparing to PCF stage 2 option, our technical experts concluded this as the preferred location.

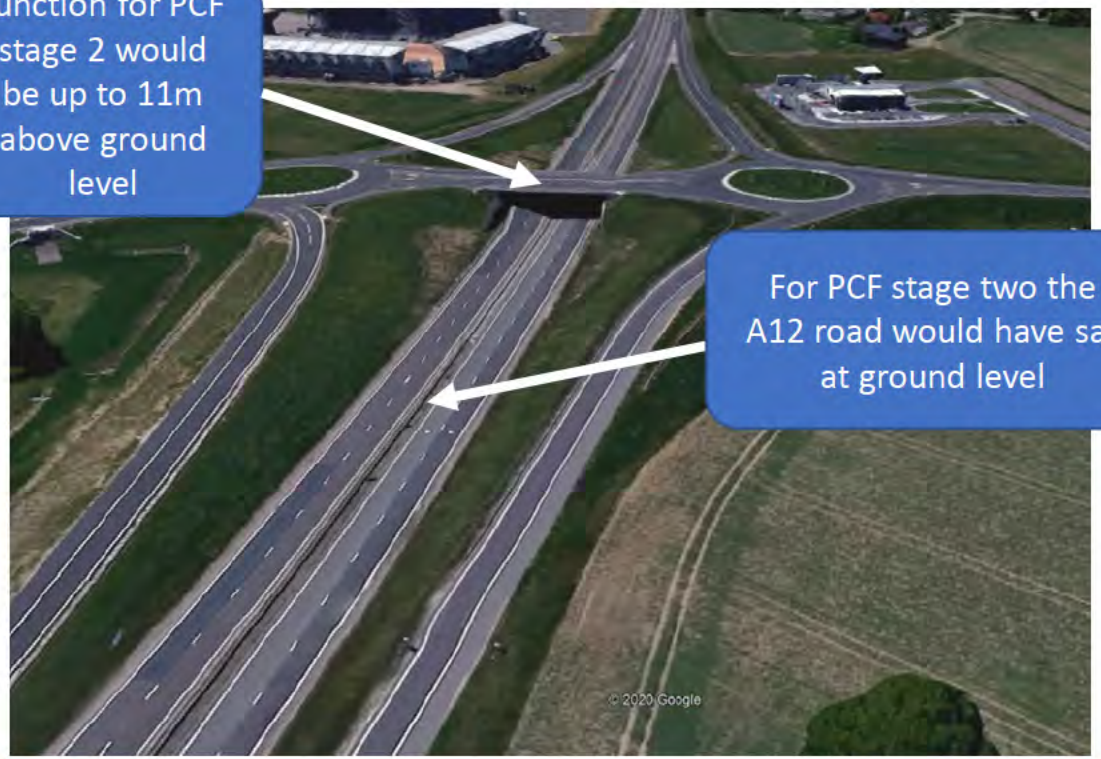



| | |
|---|---|
| Reduces traffic on Kelvedon High Street | ✓ |
| Addresses suboptimal performance of access to Prested Hall | ✓ |
| Reduces height of junction in landscape | ✓ |
| Utilises existing potential borrow pit location | ✓ |
| Minor reduced impact on Prested Hall | ✓ |
| Promotes right traffic on right roads | ✓ |
| Responds to stat stakeholders' ask | ✓ |

# Elevation – PCF stage 2 vs our proposed option

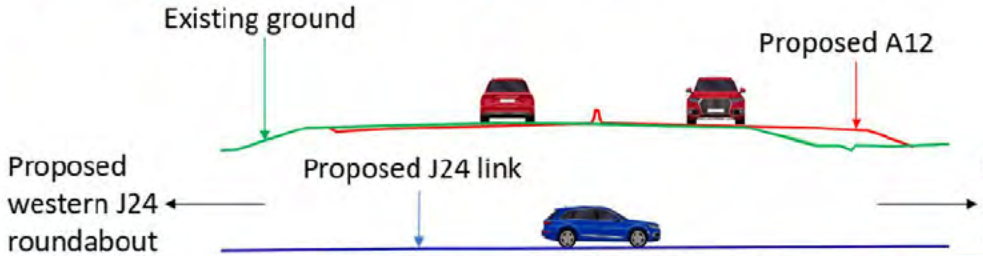



Junction for PCF stage 2 would be up to 11m above ground level

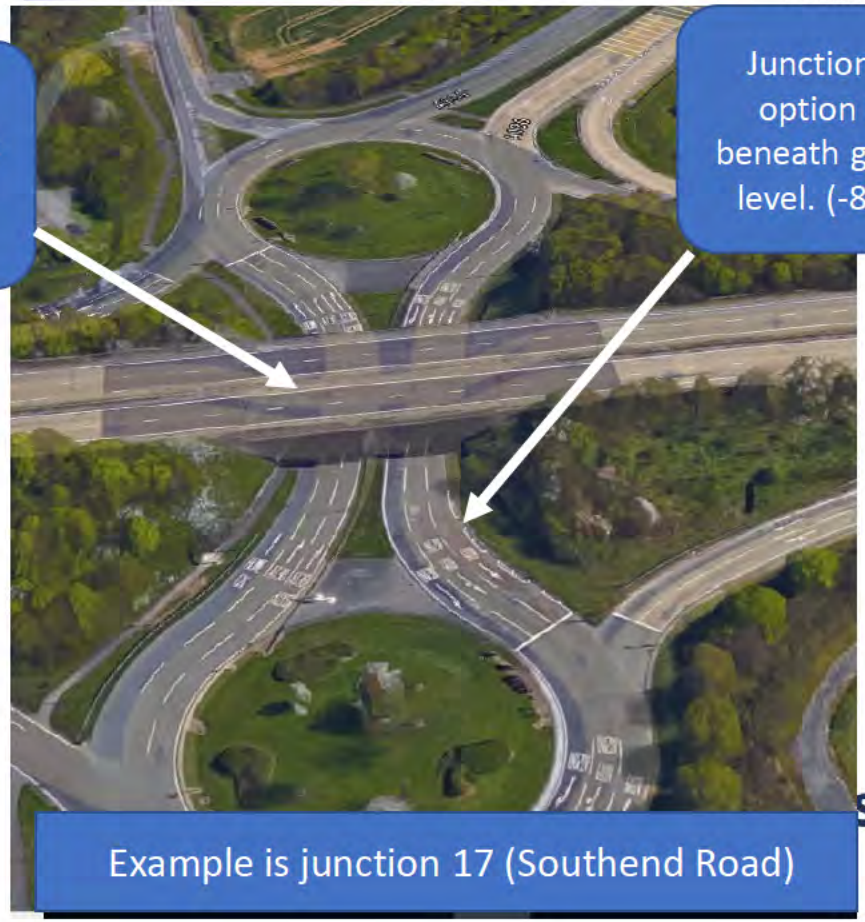



For PCF stage two the A12 road would have sat at ground level

Example is junction 28 (Colchester Stadium)




A12 road will sit at ground level

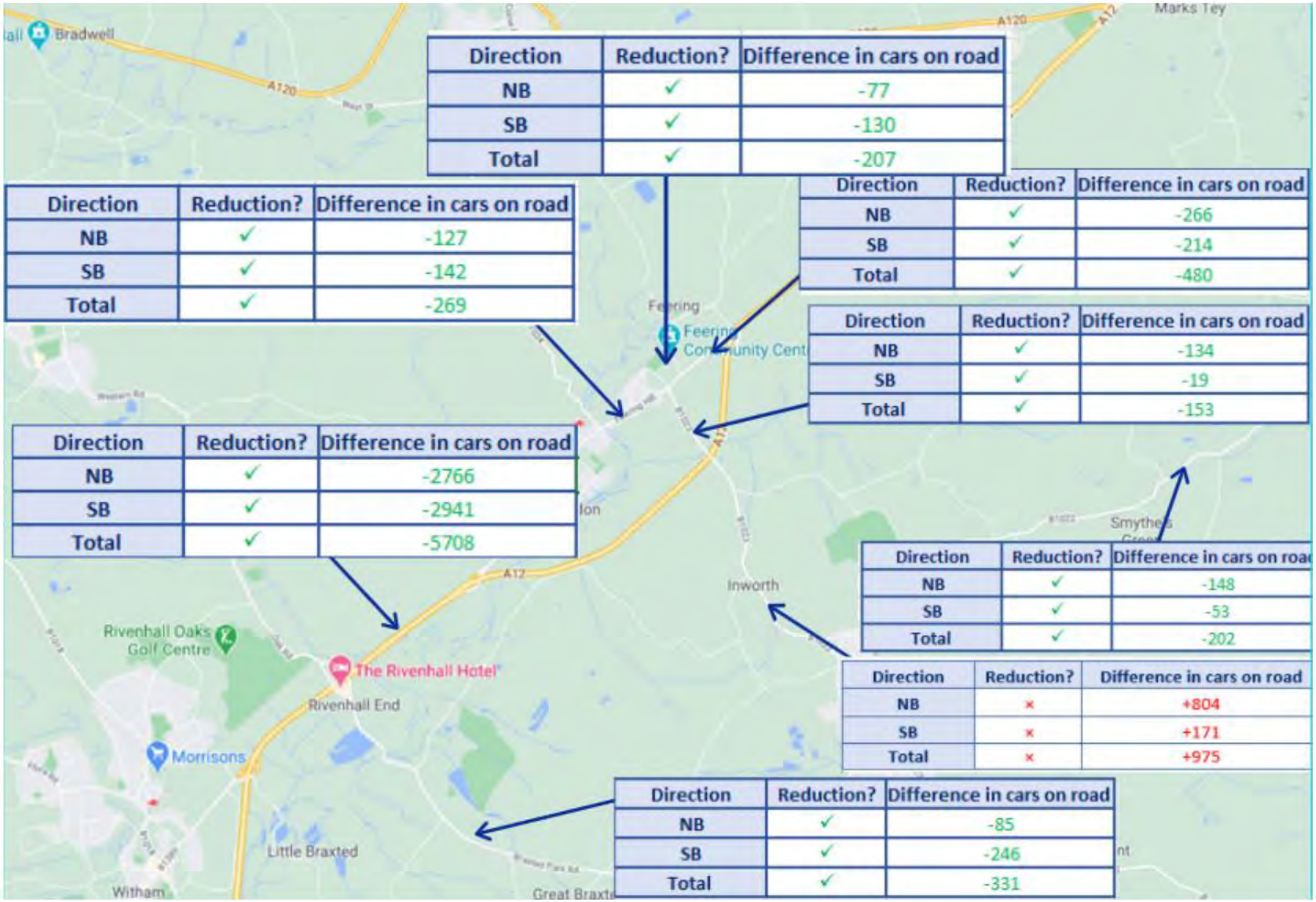


Junction for option F is beneath ground level. (-8.5m)

Example is junction 17 (Southend Road)

# Traffic AM 2027

The map to the right shows how the traffic reacts to our junction at the AM peak in 2027 (day of opening).




| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -77 |
| SB | ✓ | -130 |
| Total | ✓ | -207 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -127 |
| SB | ✓ | -142 |
| Total | ✓ | -269 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -266 |
| SB | ✓ | -214 |
| Total | ✓ | -480 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -134 |
| SB | ✓ | -19 |
| Total | ✓ | -153 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -2766 |
| SB | ✓ | -2941 |
| Total | ✓ | -5708 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -148 |
| SB | ✓ | -53 |
| Total | ✓ | -202 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | × | +804 |
| SB | × | +171 |
| Total | × | +975 |

| Direction | Reduction? | Difference in cars on road |
|---|---|---|
| NB | ✓ | -85 |
| SB | ✓ | -246 |
| Total | ✓ | -331 |

# Inworth Road next steps

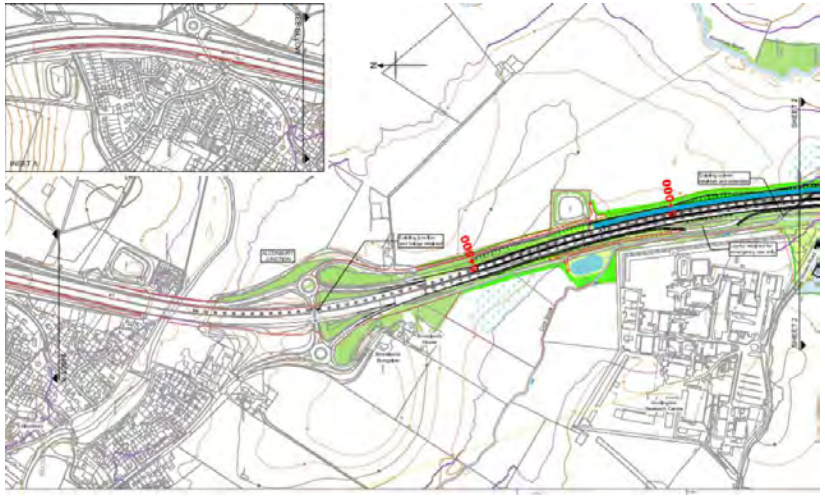
- We do anticipate that traffic on Inworth Road, south of the exiting A12, will increase as a result of our proposals. However, based on the current A12 Strategic Traffic Model, it appears that the existing Inworth Road cross section single carriageway with one lane in each direction would still be sufficient to cope with the forecasted traffic demand.
- During the next stage we will:

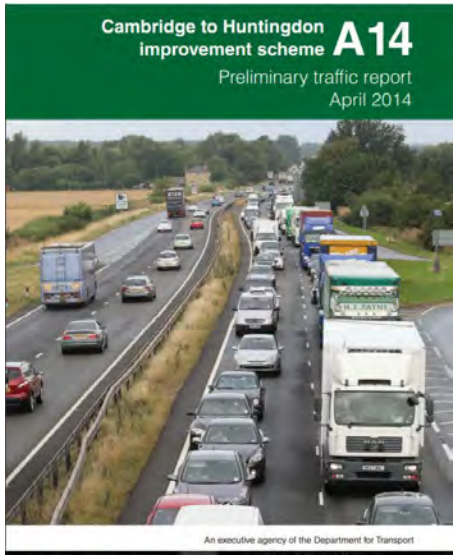
  - Continue to work closely with Essex County Council and other stakeholders, including your parishes
  - Undertake speed surveys on the road
  - Further assess its suitability to deal with additional traffic
  - Undertake further engagement with Crown Estates in collaboration with ECC, and BDC
  - Assess the double roundabout at Tiptree
  - Consider what suitable interventions may be required to ensure the road can manage additional traffic
  - Create a local roads strategy
  - Outline proposals at our Statutory Consultation for formal comment from all our stakeholders

# Statement of Community Consultation

# Statement of Community Consultation

- Events
  - Virtual
  - In person events
- Mailing area
- Deposit point locations




Examples of documents

A12

COSTAIN Jacobs highways england

# A12 Chelmsford to A120 widening

## Messing-cum-Inworth Parish workshop

10 March 2021

The information shared in this presentation represents the most up to date proposals. This may evolve for several reasons, and as such, may be subject to change.

highways england

# Agenda

- Introductions
- Purpose of workshop – a reminder
- Junction 24
  - Design update
  - Community bypass assessment
  - Inworth Road potential mitigation options discussion
- AOB and close

highways england

# Junction 24

# Our proposed location provides several benefits

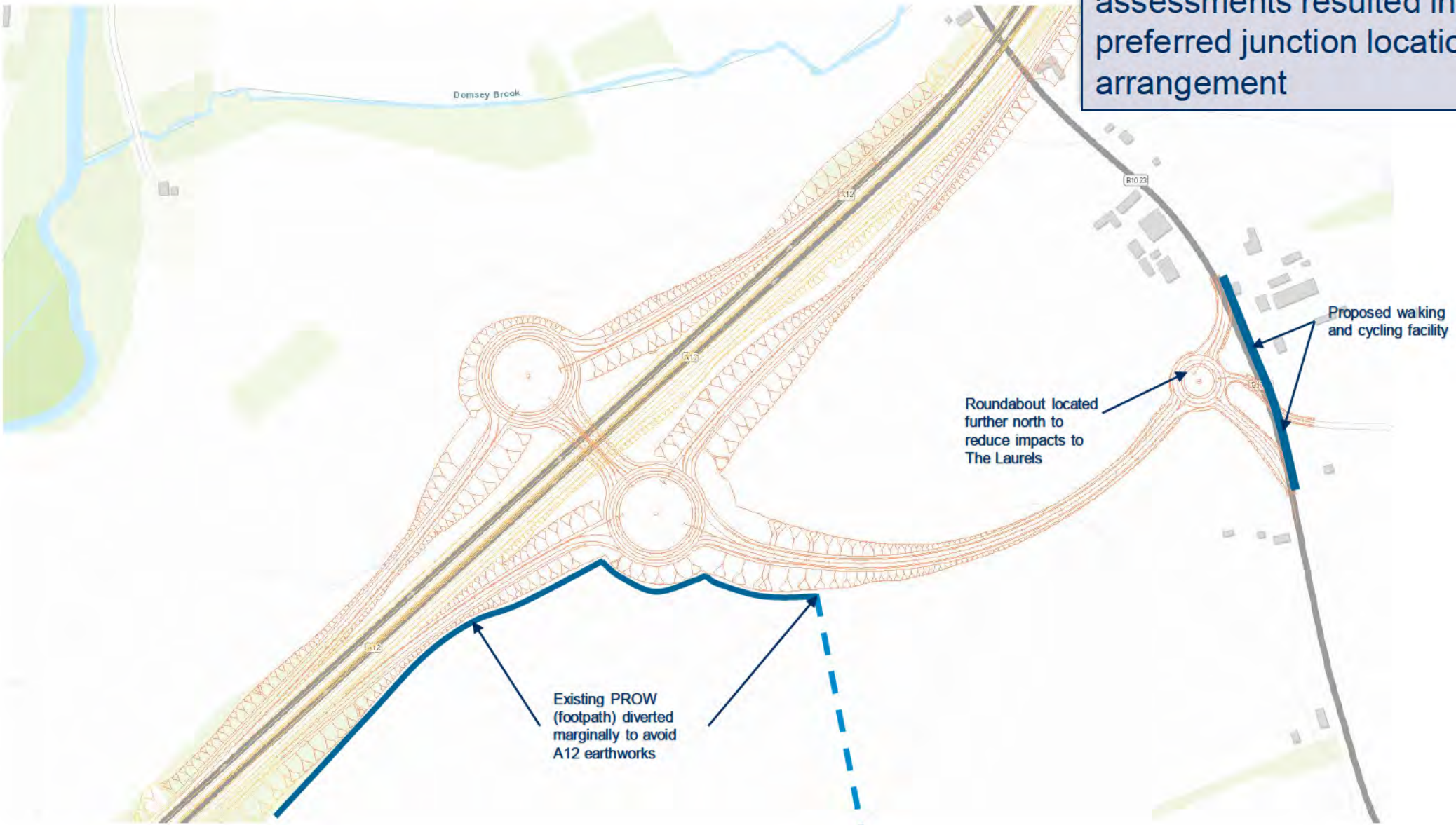
| Benefits | |
|---|---|
| Reduces traffic on Kelvedon High Street | ✓ |
| Addresses suboptimal performance of access to Prested Hall | ✓ |
| Reduces height of junction in landscape | ✓ |
| Utilises existing potential borrow pit location | ✓ |
| Minor reduced impact on Prested Hall | ✓ |
| Promotes right traffic on right roads | ✓ |
| Responds to statutory stakeholders' ask | ✓ |

**However,** it does provide a significant increase in traffic on Inworth Road and we appreciate that this has raised concerns with those who live on it.

highways england

# Junction 24 - brief reminder DF 1 (design fix 1)

A combination of stakeholder feedback and technical assessments resulted in our preferred junction location and arrangement



# Community's bypass proposal

In light of the presentation we provided to the parish council on 11 Nov, we received an alternative bypass proposal from several members of the local community.


Community's bypass

Community's bypass modelled in 2d

highways england

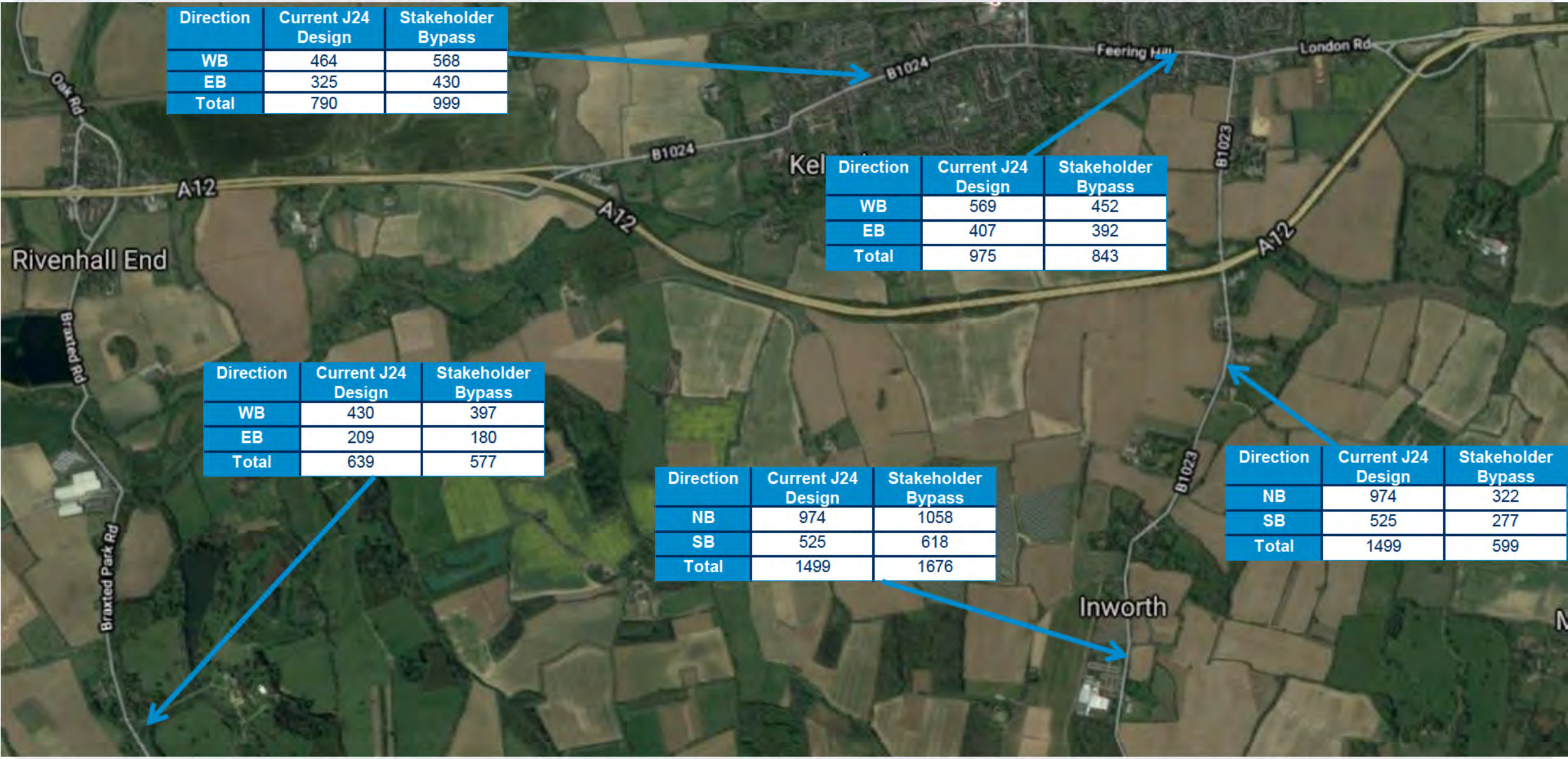
# Technical assessment

In light of the proposals and honest assurances to consider it, a detailed technical review took place. The next few slides cover the key findings.

**Traffic**

As expected, we did find that there was a reduction in traffic on Inworth Road and that this would create benefits for those properties next to the road. However, we also found that the alternative bypass meant that almost no vehicles from Kelvedon accessed the A12 from our new junction 24. Instead, they used the de-trunked A12 to get to junction 25, or Kelvedon High Street to access the de-trunked A12 at Rivenhall to get to the new junction 22.

# Traffic




| Direction | Current J24 Design | Stakeholder Bypass |
|---|---|---|
| WB | 464 | 568 |
| EB | 325 | 430 |
| Total | 790 | 999 |

| Direction | Current J24 Design | Stakeholder Bypass |
|---|---|---|
| WB | 569 | 452 |
| EB | 407 | 392 |
| Total | 975 | 843 |

| Direction | Current J24 Design | Stakeholder Bypass |
|---|---|---|
| WB | 430 | 397 |
| EB | 209 | 180 |
| Total | 639 | 577 |

| Direction | Current J24 Design | Stakeholder Bypass |
|---|---|---|
| NB | 974 | 1058 |
| SB | 525 | 618 |
| Total | 1499 | 1676 |

| Direction | Current J24 Design | Stakeholder Bypass |
|---|---|---|
| NB | 974 | 322 |
| SB | 525 | 277 |
| Total | 1499 | 599 |

# Environment and planning

## Environment

In terms of environmental impact, there would be benefits for air quality, noise and vibration for those living on the bypassed section of Inworth Road, but some of these benefits would be to the detriment of Kelvedon High Street. The proposed bypass would broadly follow an abandoned railway line which would be expected to have little environmental value. However, it is expected that those living on the west side of Inworth Road may experience adverse effects as a result of being sandwiched between local traffic on Inworth Road, as well as strategic traffic running behind their properties

In addition, the bypass would likely have a negative impact to the Grade I listed Church building in Inworth by creating a carriageway to the rear and a new roundabout junction nearby.

On balance, the bypass would create greater environmental impacts than the existing proposed A12 scheme.

## Planning

In order to achieve a successful DCO, land acquisition needs to be fully justified and kept to a minimum. The bypass would increase the land required, and against the scheme's position that the increased traffic on Inworth Road can be managed, would be unjustifiable. As such, the bypass proposal would create greater planning risk than the existing A12 scheme.

highways england

# Safety and walking cycling and horse riding (WCH)

## Operational Safety

The alternative bypass does show an overall benefit to the residents of Inworth, which will reduce traffic through Inworth and help to mitigate issues with pinch points and safety concerns with vehicles reversing from driveways in a constrained area.

In general, new roads will always provide more safety benefits. As such, a new bypass would score marginally better than the existing proposed A12 scheme.

## Walking cycling and horse riding

There are existing constraints along Inworth Road which could limited WCH provision. A new bypass could provide the opportunity to create a cross section that could support WCH provision. As such, the bypass would score more highly under this criteria than the existing proposed A12 scheme.

highways england

# Flooding and construction

## Flooding

While it's not reflected in local (Colchester) strategic flood risk assessments or Essex flood records, we have received many images from the community about flooding on Inworth Road, and as such, it appears the local drainage network may be disrepair or unable to accommodate the runoff.

The bypass avoids the majority of the area highlighted by the EA mapping as being susceptible to flooding, and so therefore has a benefit over the current junction 24 proposal. However, further investigation of the local drainage network is required, including surveys of the existing condition.

It is worth noting that the bypass would not address the apparent flooding issues which currently exist. Nevertheless, overall the bypass would have a minor benefit for flooding in comparison to the existing proposed A12 scheme.

## Construction

Overall the bypass would require more construction work and as such this would potentially lead to more construction noise and HGVs, as well as additional working hours and potential cut and fill volumes. As such, the bypass would have a negative impact in comparison to the existing proposed A12 scheme.

highways england

# Cost and conclusion*

A high level cost analysis was undertaken on the bypass option. On the basis that the bypass is nearly twice the length (1.3km) of the existing proposed A12 scheme link to the new junction 24 (0.7km), we can reasonably expect that the cost will be nearly double.

Considering the assessment on the previous slides, and the additional costs, we cannot justify the inclusion of the bypass in our scheme and as such, we will continue to focus on what potential mitigation measures may be required for Inworth Road.

# Providing the community link road and proposed junction 24 link

Considering the conclusion of our technical review, we also considered what would happen if we not only did the proposed bypass, but also retained our existing link road too, essentially providing two link roads. The summary table is listed on the next slide

With two links.

# Providing community link road with the existing proposal

Considering the conclusion of our technical review, we also considered what would happen if we not only did the proposed bypass, but also retained our existing link road too, essentially providing two link roads.

The additional infrastructure could increase impacts on the local environment, but this may be offset by reduced impact on Kelvedon High Street and Inworth Road. This approach would, however, improve the traffic situation. As such, the community bypass with the existing proposal could score better than just providing the bypass.

However, considering all factors of the proposal and with the additional costs (which we estimate could be three times the cost of our proposal), we simply cannot justify providing two link roads in order to avoid traffic increases in Inworth.

highways england

# Potential mitigation options – for discussion

Under our proposals, traffic will increase on Inworth Road at its peak hour from 779 to 1499, with more traffic (974) travelling northbound. Against standards, the road is suitable for these flows, but may need some interventions.

## B1023 northern section – north of new junction 24

- **Speed limit reduction/extension to 30mph to the junction 24 connector road junction**
  - Further early discussions with ECC and the Essex Highways network management team
  - Speed surveys and additional investigation supporting the reduction are required.
  - Self-enforcement options to be considered (repeater signs, VAD, road markings/roundels).
- **Improve pedestrian connectivity**
  - Localised improvements where possible within space constraints

highways england

# Potential mitigation options – for discussion

## B1023 southern section – south of new junction 24

- **Speed limit reduction/extension to 30mph throughout as per previous slide**
- **Widening of carriageway to address traffic volume and pinch points**
  - Pinch points to approximately 5.5m existing (outside Thatched Cottage for example)
  - Widening in order to improve the capacity of B1023 to cope with increased traffic volumes
  - May require third party land
- **Further traffic management measures**
- **Maintenance (surfacing, drainage & lighting) matters raised by the local community about the current condition of the road (ECC)**

highways england

# Potential mitigations – for discussion

- Further assessment of additional pinch points and carriageway width ongoing to south of the A12 along the B1023
- Further assessment of available width for widening within verge along B1023 to the south of the A12



highways england

# AOB and close


# A12 Chelmsford to A120 widening

## Messing-cum-Inworth

## Parish Workshop

## 6 April 2021

The information shared in this presentation represents the most up to date proposals. This may evolve for several reasons, and as such, may be subject to change.

highways england


# Agenda

- Introductions
- Reminder of proposals
- Possible mitigation measures
- AOB and close

highways england


# Junction 24

highways england

# Our proposed location provides several benefits

| Benefits | |
|---|---|
| Reduces traffic on Kelvedon High Street | ✓ |
| Addresses suboptimal performance of access to Prested Hall | ✓ |
| Reduces height of junction in landscape | ✓ |
| Utilises existing potential borrow pit location | ✓ |
| Minor reduced impact on Prested Hall | ✓ |
| Promotes right traffic on right roads | ✓ |
| Responds to statutory stakeholders' ask | ✓ |

**However,** it does provide a significant increase in traffic on Inworth Road and we appreciate that this has raised concerns with those who live on it.

highways england


# Inworth Road, possible interventions

highways england


# Potential mitigation options – for discussion

Under our proposals, traffic will increase on Inworth Road at its peak hour from 779 to 1499, with more traffic (974) travelling northbound. Against standards, the road is suitable for these flows, but may need some interventions.

## B1023 northern section – north of new junction 24

- **Speed limit reduction/extension to 30mph to the junction 24 connector road junction**
  - Further early discussions with ECC and the Essex Highways network management team
  - Speed surveys and additional investigation supporting the reduction are required.
  - Self-enforcement options to be considered (repeater signs, VAD, road markings/roundels).
- **Improve pedestrian connectivity**
  - Localised improvements where possible within space constraints

highways england


# Potential mitigation options – for discussion

## B1023 southern section – south of new junction 24

- **Speed limit reduction/extension to 30mph throughout as per previous slide**
- **Widening of carriageway to address traffic volume and pinch points**
  - Pinch points to approximately 5.5m existing (outside Thatched Cottage for example)
  - Widening in order to improve the capacity of B1023 to cope with increased traffic volumes
  - May require third party land
- **Further traffic management measures**
- **Maintenance (surfacing, drainage & lighting) matters raised by the local community about the current condition of the road (ECC)**

highways england

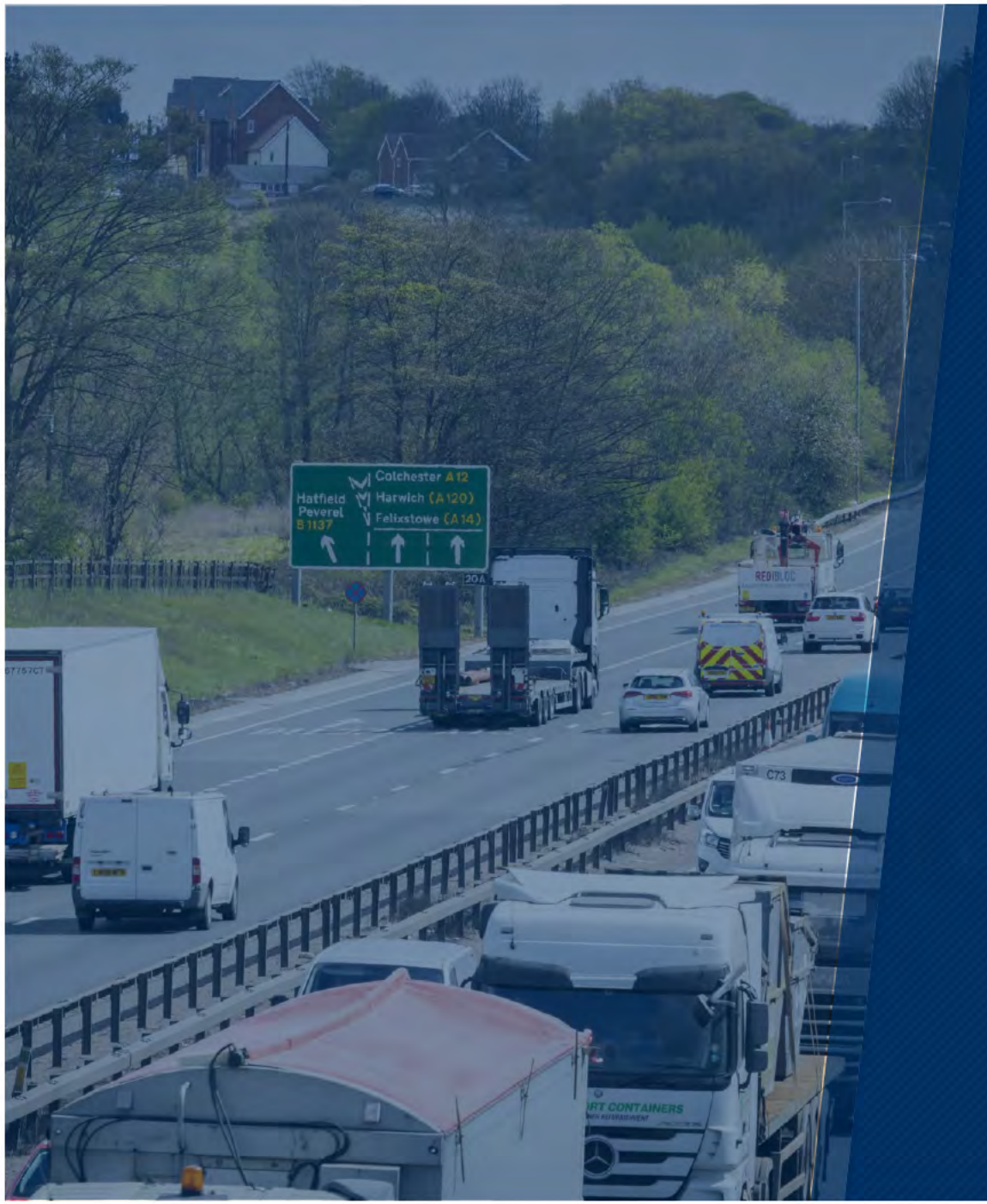
# Potential mitigations – for discussion

- Further assessment of additional pinch points and carriageway width ongoing to south of the A12 along the B1023
- Further assessment of available width for widening within verge along B1023 to the south of the A12



highways england

# AOB and close




# Messing cum Inworth

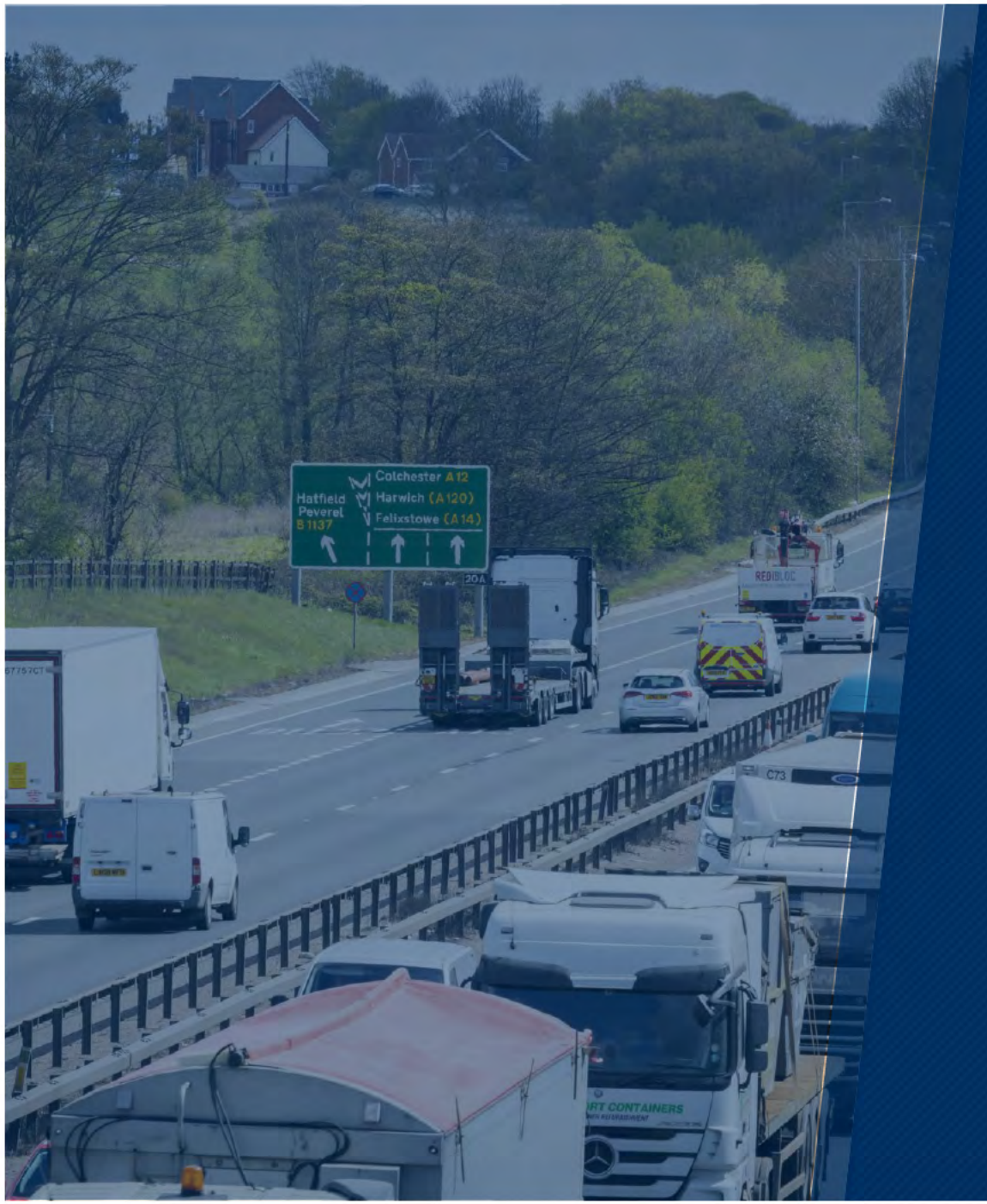
22 September 2022

The information shared in this presentation represents the most up to date proposals. This may evolve for several reasons, and as such, may be subject to change.

national highways

# Agenda

- Introductions
- Background to J24
- B1023 bypass assessment
- B1023 proposals
- Technical standards for the proposed B1023 roundabout
- Next steps
- Environment




# Background to junction 24

# New junction 24 optioneering

- Broad consensus was that the new J24 must be all movements (serve traffic in all directions).
- The next step for the project was to consider where it should go and the details of the arrangement – this options assessment is documented in the SAR addendum:
  - [redacted]

- Our initial thought process was to place the junction broadly where the current junction 24 is. However, further assessments including feedback from stakeholders concluded that the preferred locations was a direct connection to Inworth Road as shown at our statutory consultation

- Once the location was proposed, focus moved to traffic on Inworth Road, and our proposed interventions were published during our supplementary consultation


# B1023 bypass assessment

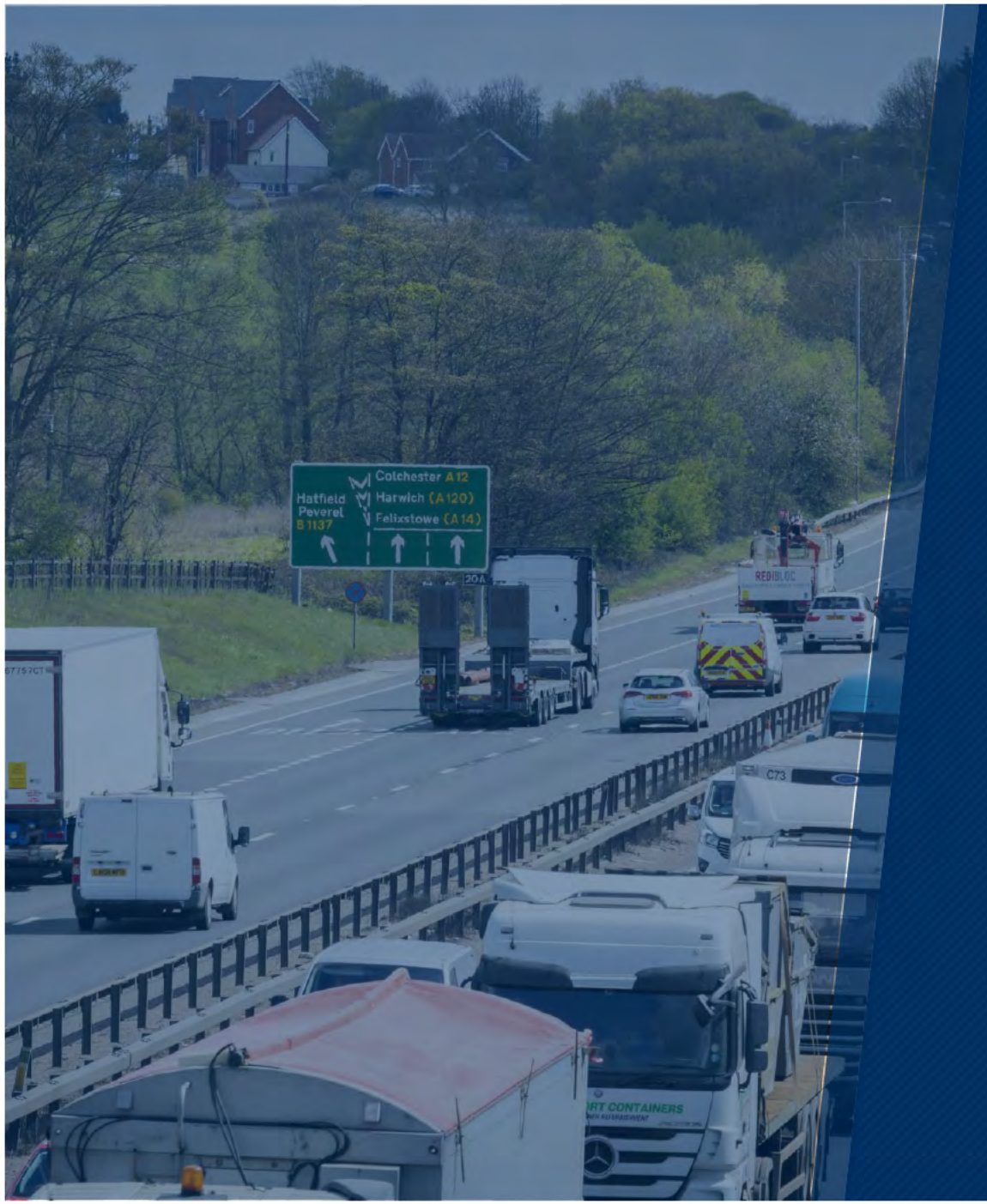
# Assessment of bypass options

While an assessment had taken place previously, in light of the strong feedback at consultation, and the representations from ECC, the project revisited the bypass to consider it in further detail. This challenged the initial analysis that took place which was presented to the council in early 2021. A detailed report, including the work and conclusions touched on in this presentation will be included in the Environmental Statement which we will submit as part of our application for development consent. The analysis considers these bypasses against the proposed scheme.

DS4 - the Main Alternative

DS3 – reflects earlier engagement

The following slides consider the traffic and noise effects of the bypasses locally




# Traffic assessment

# The Main Alternative (DS4) – traffic assessment 2027 (slide 1 of 2)

As to be expected when comparing it to the scheme's proposals there are positives and negatives:

- Traffic goes up considerably on:
  - The southern section of Inworth Road south of the bypass*
  - B1023 Kelvedon Road in Tiptree*
  - Oak Road in Tiptree*
  - The northern section of Inworth Road, north of J24

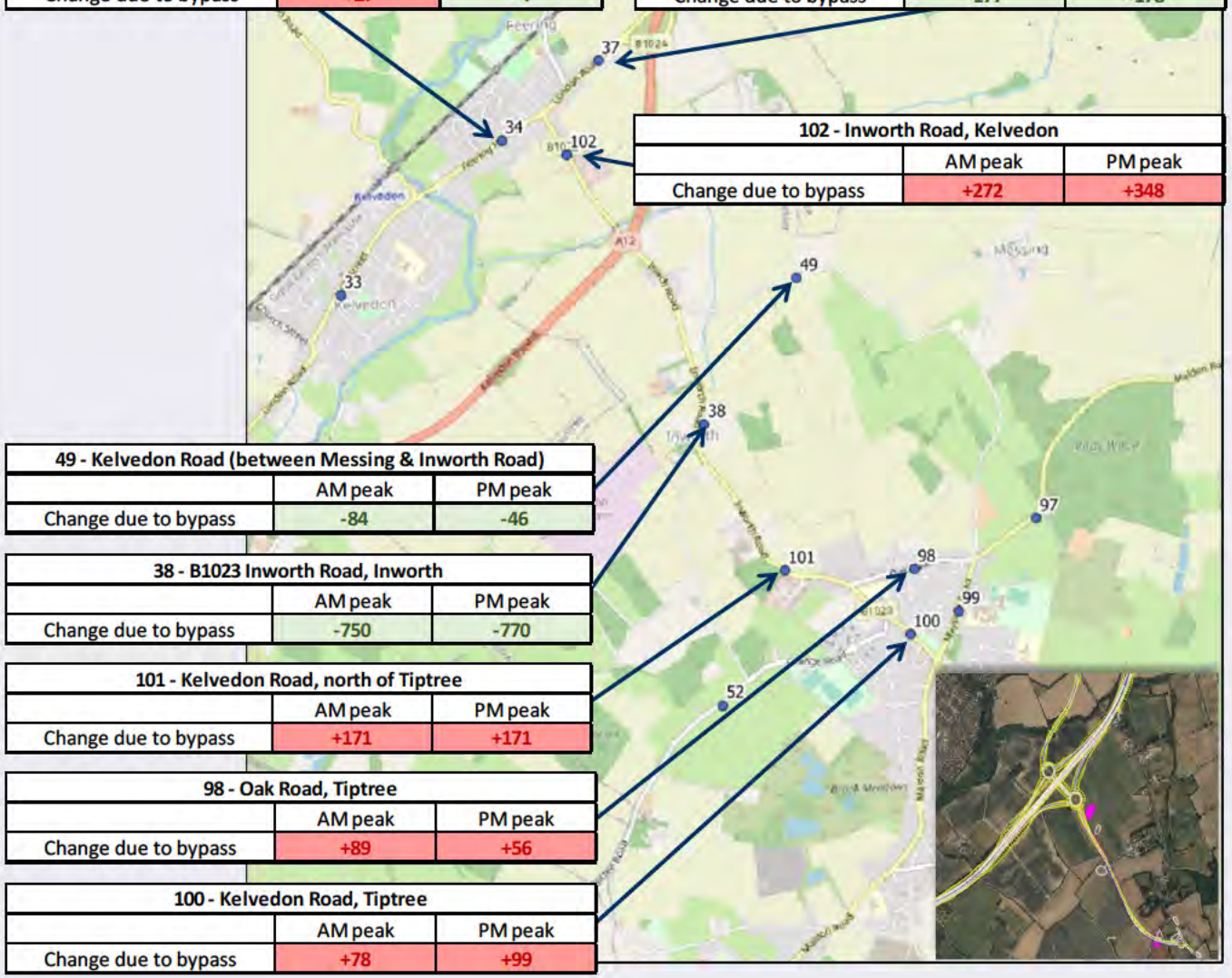
- Traffic goes down considerably on:
  - Middle section of Inworth Road (Inworth village)
  - London Road between Gore Pit junction and the existing J24
  - Kelvedon Road (Messing)

** these increases would happen with the principle of a bypass with any combination of additional links. The increases are not just due to traffic no longer using Messing as a cut-through. A bypass would make J24 more attractive for traffic coming from Tiptree, and therefore increase traffic between Tiptree and the bypass)*

| 34 - Feering Hill, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +27 | -4 |

| 37 - London Rd between Gore Pit and existing junction 24 | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -177 | -178 |

| 102 - Inworth Road, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +272 | +348 |




| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -84 | -46 |

| 38 - B1023 Inworth Road, Inworth | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -750 | -770 |

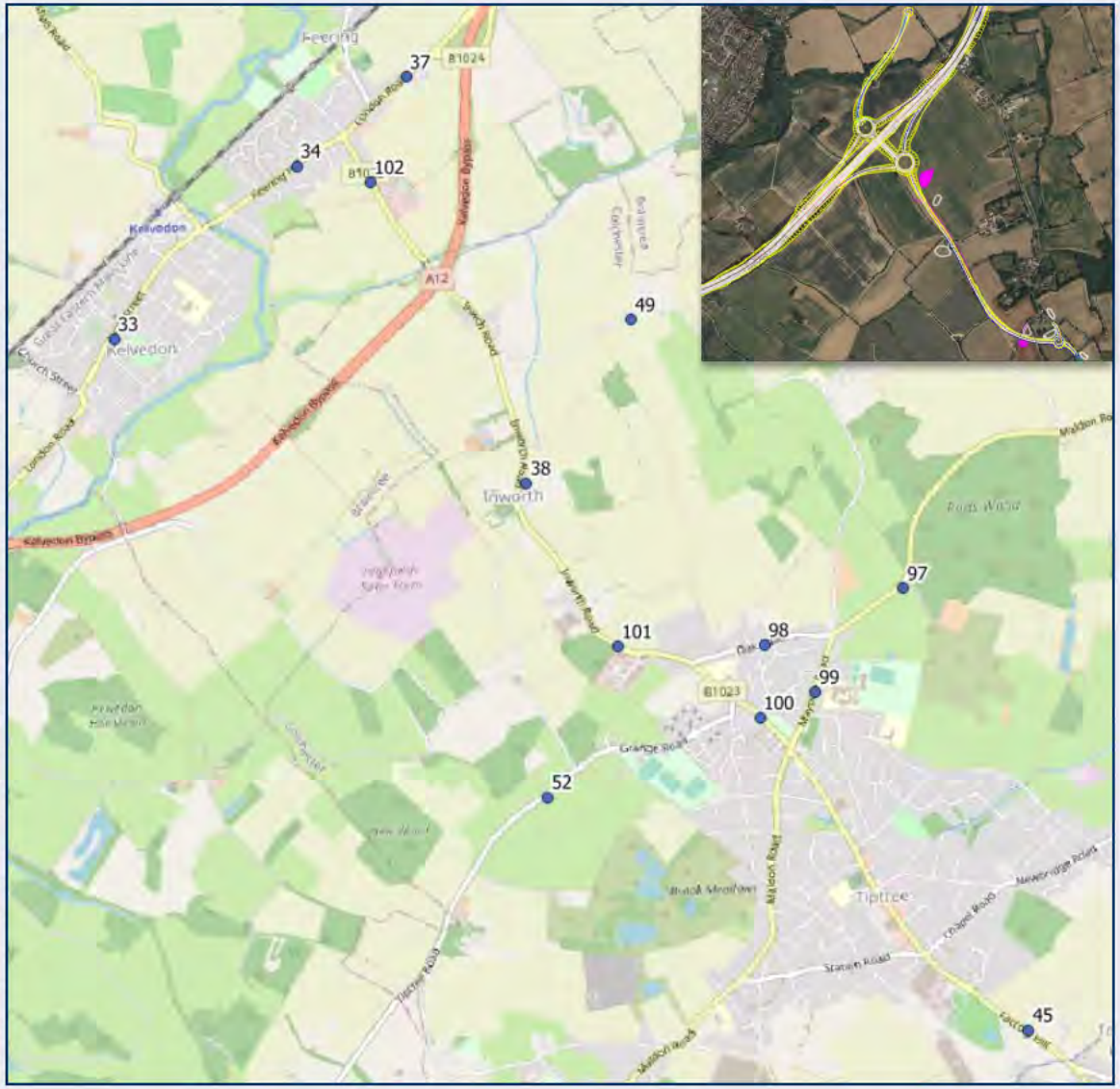
| 101 - Kelvedon Road, north of Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +171 | +171 |

| 98 - Oak Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +89 | +56 |

| 100 - Kelvedon Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +78 | +99 |

# The Main Alternative (DS4) – traffic assessment 2027 (slide 2 of 2)

| Ref. | Location | Peak | DM - Without A12 Scheme | DS2 - With A12 Scheme | With Scheme & DS4 bypass | Change due to DS4 bypass |
|---|---|---|---|---|---|---|
| 33 | B1024 Kelvedon High Street | AM | 1,013 | 763 | 746 | -17 |
| | | PM | 1,003 | 887 | 834 | -53 |
| 34 | Feering Hill, Kelvedon | AM | 1,000 | 711 | 737 | +27 |
| | | PM | 1,029 | 859 | 855 | -4 |
| 37 | London Rd between Gore Pit and existing junction 24 | AM | 880 | 522 | 346 | -177 |
| | | PM | 956 | 464 | 286 | -178 |
| 38 | B1023 Inworth Road, Inworth | AM | 784 | 1,111 | 361 | -750 |
| | | PM | 846 | 1,132 | 362 | -770 |
| 45 | B1023 Oxley Hill, Tiptree | AM | 383 | 365 | 364 | -1 |
| | | PM | 387 | 409 | 407 | -2 |
| 49 | Kelvedon Road (between Messing & Inworth Road) | AM | 38 | 133 | 49 | -84 |
| | | PM | 45 | 109 | 63 | -46 |
| 52 | Grange Road, west of Tiptree | AM | 129 | 43 | 46 | +3 |
| | | PM | 155 | 78 | 80 | +2 |
| 97 | Colchester Road, east of Tiptree | AM | 678 | 535 | 566 | +31 |
| | | PM | 727 | 594 | 572 | -22 |
| 98 | Oak Road, Tiptree | AM | 140 | 185 | 275 | +89 |
| | | PM | 160 | 206 | 262 | +56 |
| 99 | Maypole Road, Tiptree | AM | 676 | 508 | 457 | -51 |
| | | PM | 691 | 540 | 473 | -67 |
| 100 | Kelvedon Road, Tiptree | AM | 757 | 928 | 1,006 | +78 |
| | | PM | 835 | 935 | 1,034 | +99 |
| 101 | Kelvedon Road, north of Tiptree | AM | 801 | 1,134 | 1,305 | +171 |
| | | PM | 890 | 1,158 | 1,330 | +171 |
| 102 | Inworth Road, Kelvedon | AM | 822 | 779 | 1,050 | +272 |
| | | PM | 892 | 900 | 1,248 | +348 |



# DS3 – traffic assessment 2027 (slide 1 of 2)

As to be expected when comparing it to the scheme's proposals there are positives and negatives:

- Traffic goes up considerably on:
  - The southern section of Inworth Road south of the bypass*
  - B1023 Kelvedon Road in Tiptree*
  - Oak Road in Tiptree*

- Traffic goes down considerably on:
  - Middle section of Inworth Road (Inworth village)
  - Kelvedon Road (Messing)

** these increases would happen with the principle of a bypass with any combination of additional links. The increases are not just due to traffic no longer using Messing as a cut-through. A bypass would make J24 more attractive for traffic coming from Tiptree, and therefore increase traffic between Tiptree and the bypass)*

| 34 - Feering Hill, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +14 | +0 |

| 37 - London Rd between Gore Pit and existing junction | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -11 | -2 |

| 102 - Inworth Road, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +6 | +16 |

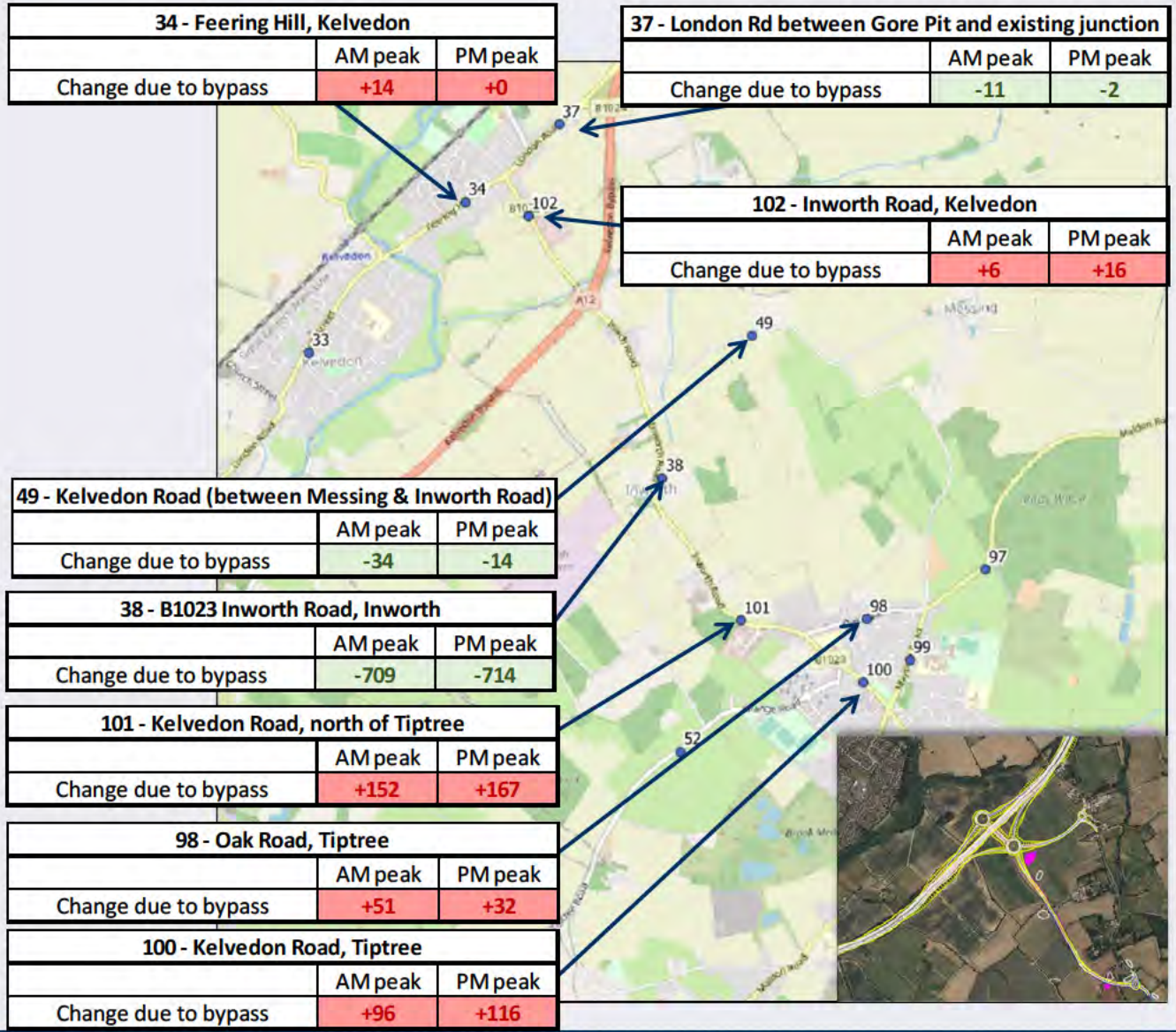
| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -34 | -14 |

| 38 - B1023 Inworth Road, Inworth | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -709 | -714 |

| 101 - Kelvedon Road, north of Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +152 | +167 |

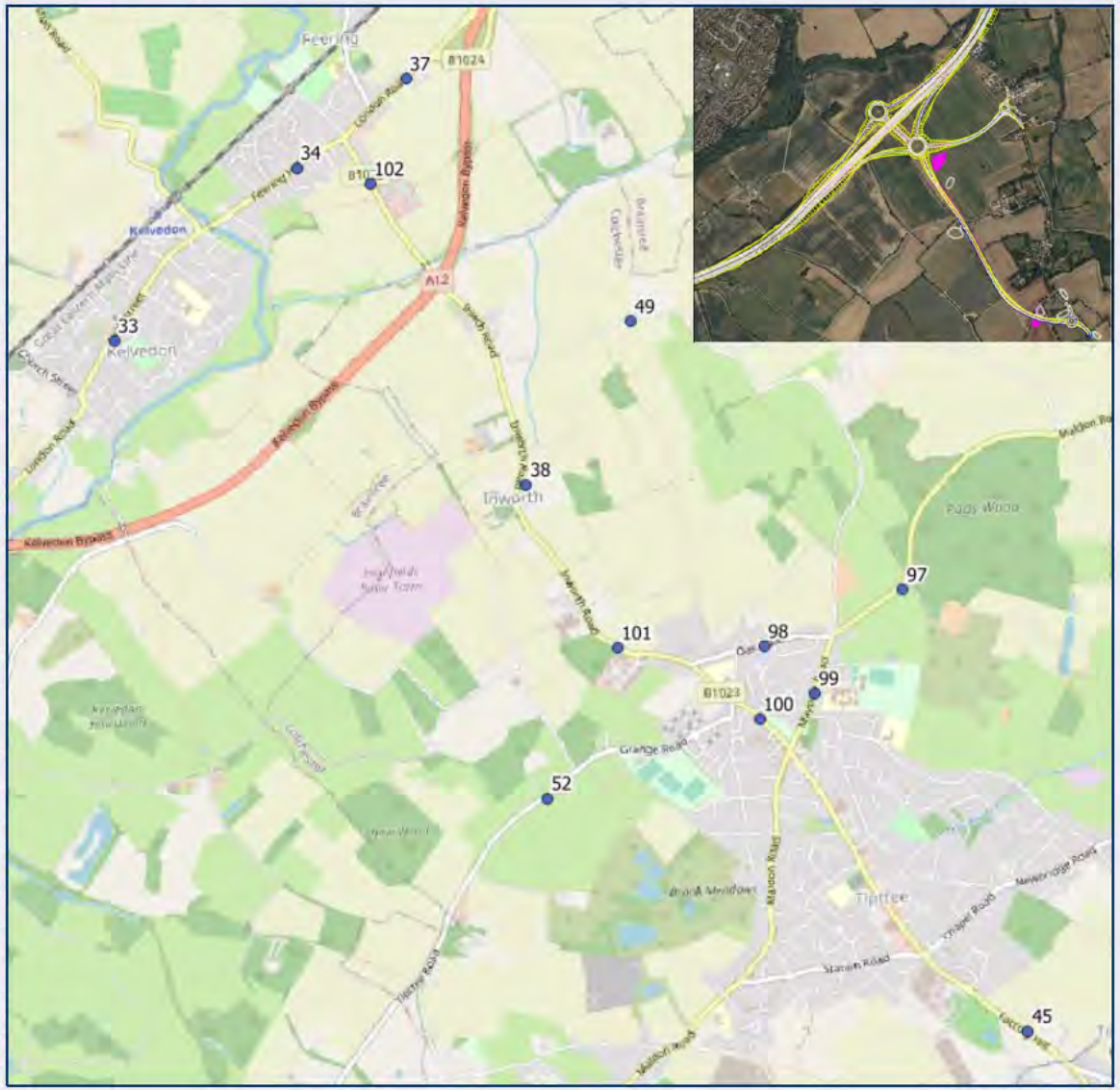
| 98 - Oak Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +51 | +32 |

| 100 - Kelvedon Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +96 | +116 |



# DS3 – traffic assessment 2027 (slide 2 of 2)

| Ref. | Location | Peak | DM - Without A12 Scheme | DS2 - With A12 Scheme | With Scheme & DS3 bypass | Change due to DS3 bypass |
|---|---|---|---|---|---|---|
| 33 | B1024 Kelvedon High Street | AM | 1,013 | 763 | 777 | +13 |
| | | PM | 1,003 | 887 | 883 | -4 |
| 34 | Feering Hill, Kelvedon | AM | 1,000 | 711 | 725 | +14 |
| | | PM | 1,029 | 859 | 859 | +0 |
| 37 | London Rd between Gore Pit and existing junction 24 | AM | 880 | 522 | 511 | -11 |
| | | PM | 956 | 464 | 462 | -2 |
| 38 | B1023 Inworth Road, Inworth | AM | 784 | 1,111 | 403 | -709 |
| | | PM | 846 | 1,132 | 418 | -714 |
| 45 | B1023 Oxley Hill, Tiptree | AM | 383 | 365 | 362 | -3 |
| | | PM | 387 | 409 | 404 | -5 |
| 49 | Kelvedon Road (between Messing & Inworth Road) | AM | 38 | 133 | 99 | -34 |
| | | PM | 45 | 109 | 95 | -14 |
| 52 | Grange Road, west of Tiptree | AM | 129 | 43 | 47 | +4 |
| | | PM | 155 | 78 | 80 | +2 |
| 97 | Colchester Road, east of Tiptree | AM | 678 | 535 | 513 | -22 |
| | | PM | 727 | 594 | 543 | -51 |
| 98 | Oak Road, Tiptree | AM | 140 | 185 | 236 | +51 |
| | | PM | 160 | 206 | 237 | +32 |
| 99 | Maypole Road, Tiptree | AM | 676 | 508 | 438 | -70 |
| | | PM | 691 | 540 | 464 | -77 |
| 100 | Kelvedon Road, Tiptree | AM | 757 | 928 | 1,024 | +96 |
| | | PM | 835 | 935 | 1,052 | +116 |
| 101 | Kelvedon Road, north of Tiptree | AM | 801 | 1,134 | 1,286 | +152 |
| | | PM | 890 | 1,158 | 1,325 | +167 |
| 102 | Inworth Road, Kelvedon | AM | 822 | 779 | 784 | +6 |
| | | PM | 892 | 900 | 915 | +16 |



# Messing

- We have received many representations regarding traffic numbers in Messing.
- Ordinarily roads of this type would not be included in our model. However, in response to concerns, we ran some tests to provide the requested information.

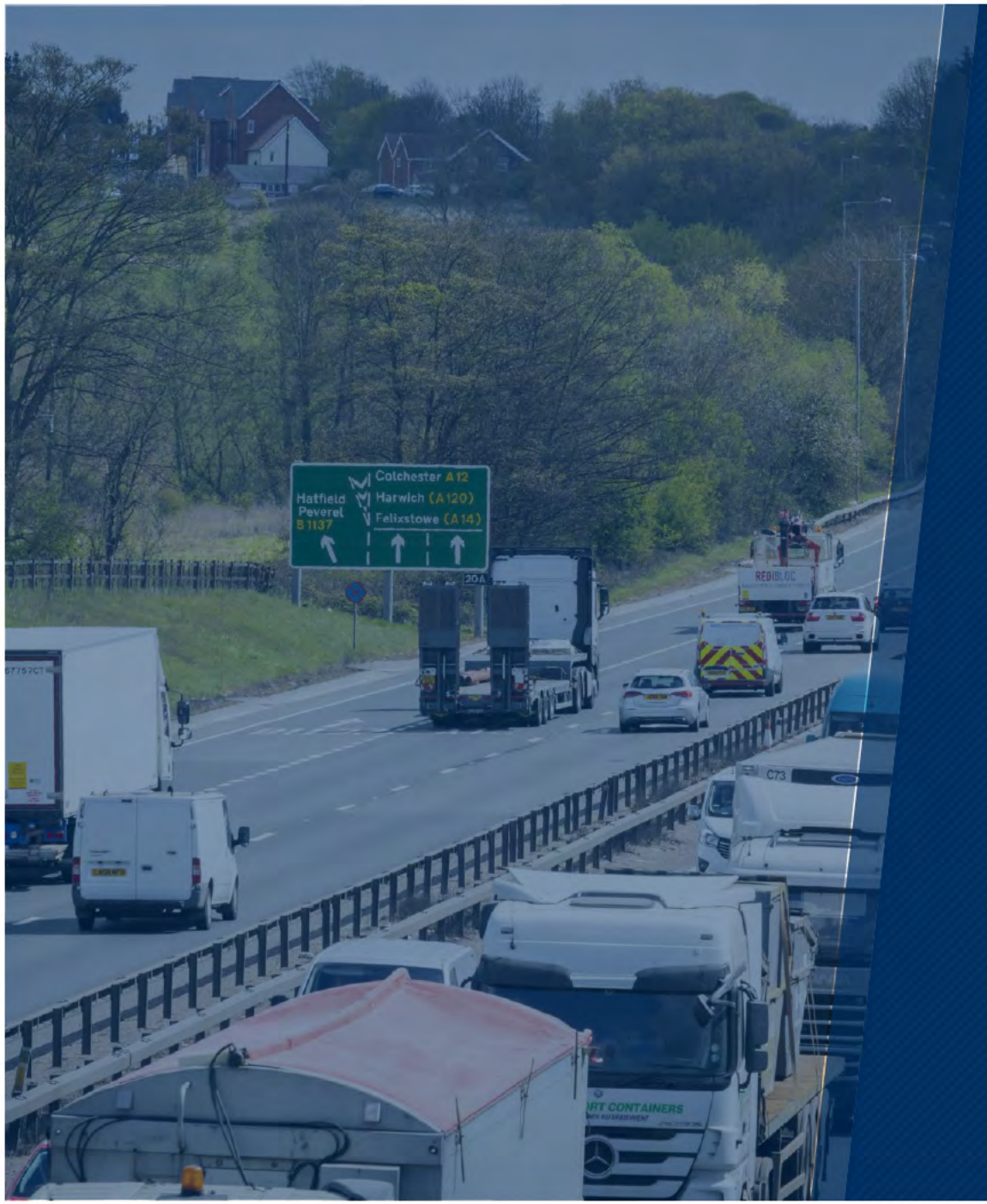
DS3

DS4
the main alternative

| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| DM - Without scheme | 38 | 45 |
| DS2 - (A12 & Inworth Rd Mitigations) | 133 | 109 |
| DS3 - (A12 & Bypass with J24 southern link) | 99 | 95 |
| Change due to bypass | -34 | -14 |

| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| DM - Without scheme | 38 | 45 |
| DS2 - (A12 & Inworth Rd Mitigations) | 133 | 109 |
| DS4 - (A12 & Bypass with J24 northern link) | 49 | 63 |
| Change due to bypass | -84 | -46 |

- With our scheme, total traffic will be just over two vehicles per minute during the morning and evening peak.
- This is within the capacity of the road, and many similar roads around the country safely handle higher flows.
- As noted, the bypass would bring traffic in Messing back close to levels without the scheme.
- The bypass also attracts additional traffic to J24 from Tiptree, thereby increasing traffic levels though Tiptree centre (B1023)



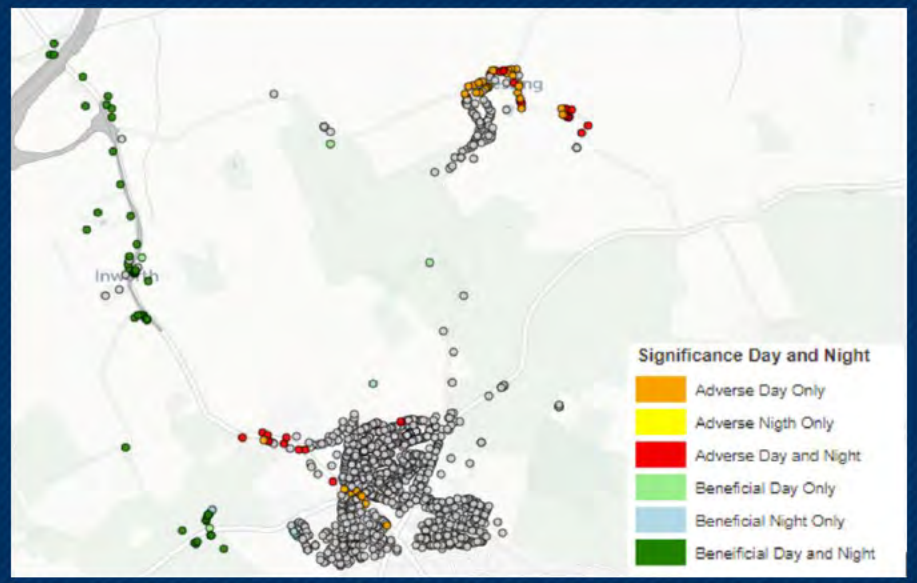

# Noise assessment

A detailed assessment has taken place across various factors. A key differentiator between our proposals and a bypass is noise as the expect effects of a bypass exceed Significant Observed Adverse Effect Level (SOEAL). Due to the importance of the noise differentiator the next slides provide more information.

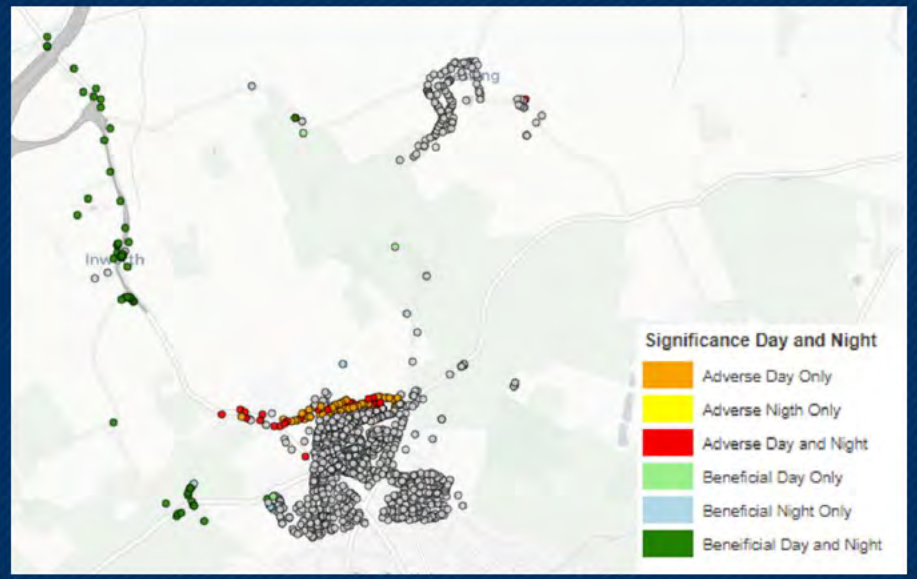
The full assessment across all factors have been captured in Chapter 3 of the Environmental Statement.

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000290-6.3-Environmental-Statement-Appendix-3.3-Junction-24-Inworth-Road-and-Community-Bypass-Tehcnical-Report.pdf

# Noise




DS3




DS4 – the main alternative

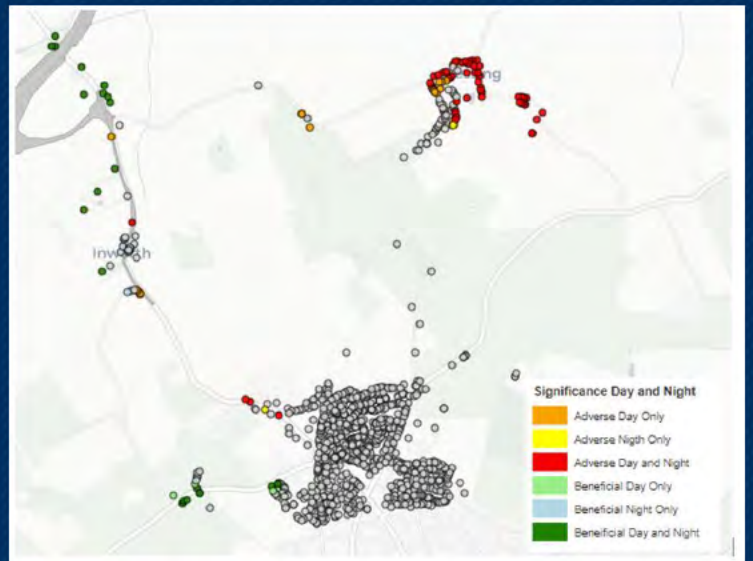
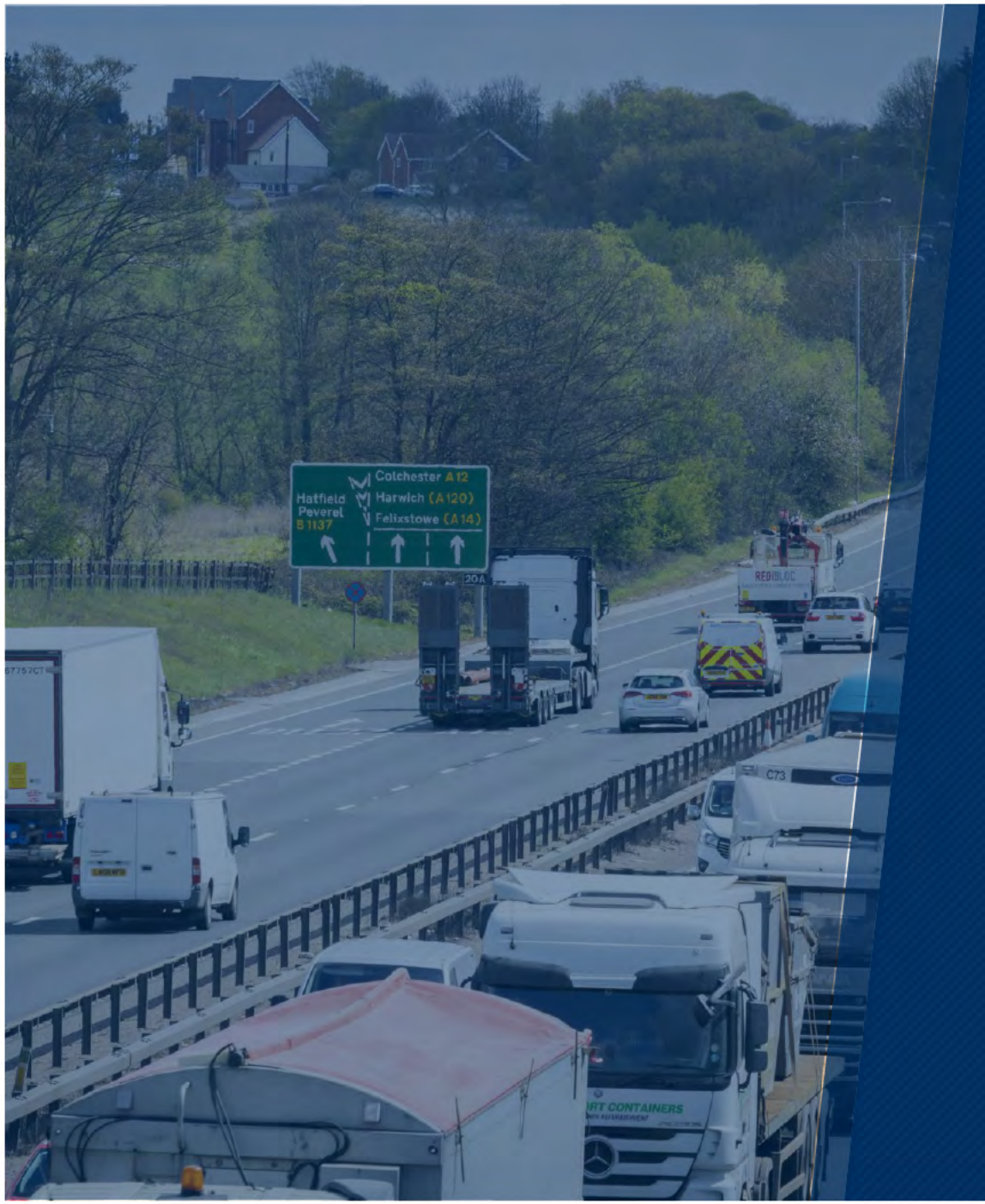



**Plate 7.2 Significant effects from noise with the proposed scheme**

# Noise

**Table 8.3 Significant noise effects for proposed scheme and community bypass options**

| | Proposed scheme (DS2) | DS3 | DS4 |
|---|---|---|---|
| Significant adverse effects | 75 | 63 | 90 |
| Significant adverse effects above SOAEL | 4 | 20 | 19 |
| Significant beneficial effects | 110 | 153 | 165 |

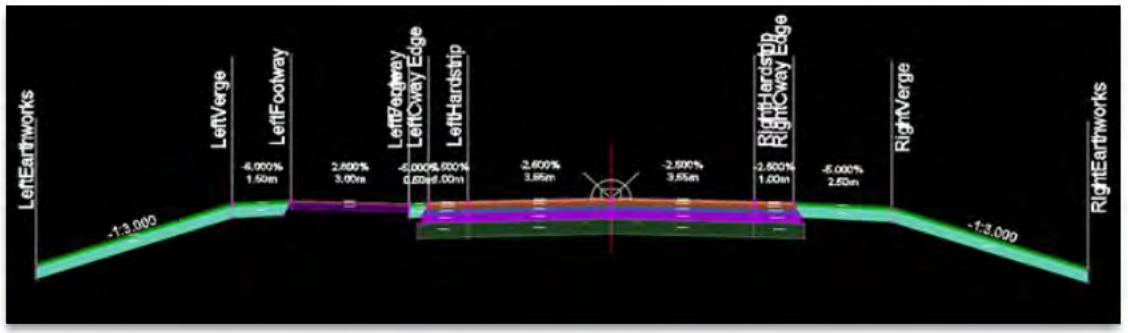



# Cost and land

# Cost and land assessment

NOTE: the northern link would require an additional structure, and would require additional land and cost more.

- We did utilise this proposal to assess the cost of the bypass section to the south of the A12 and the land required (circled in blue). We did this by creating a cross section compliant with standard.



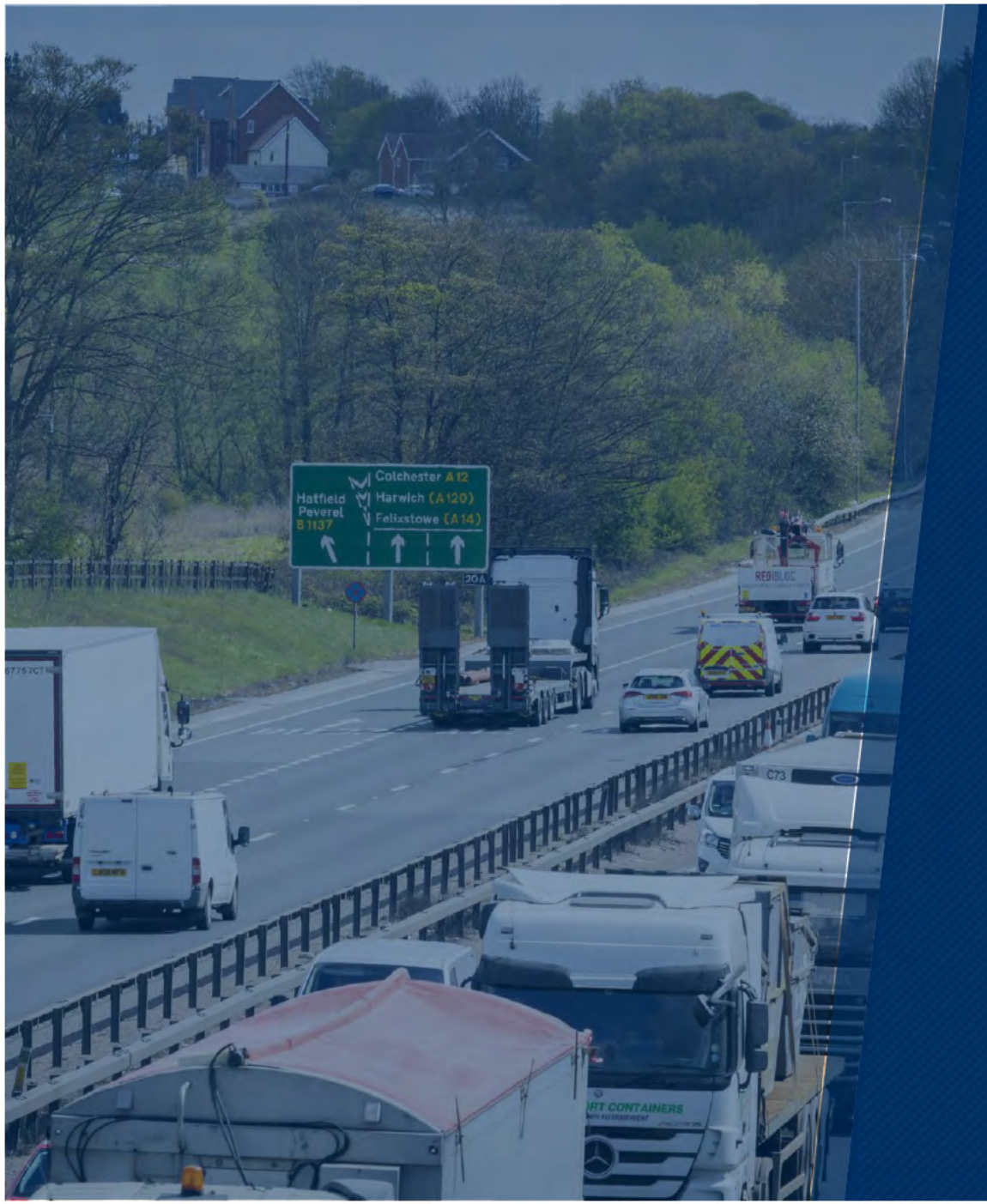

| A12 Inworth mitigation | Inworth Road bypass |
|---|---|
| **Land** | |
| 67,200sqm | 104,000sqm |
| **Costs (over and above any J24 configuration)** | |
| £3-4mil | £13-15mil |

## Summary

- A bypass, compared to our proposals, would reduce traffic in the community of Inworth, and would reduce traffic in Messing.
- A bypass, compared to our proposals, would increase traffic in Tiptree and the southern section of Inworth Road, the “Main Alternative" would also increase traffic on the northern section of Inworth Road
- SOAEL would not be exceeded in Messing under our proposals, but SOAEL would be exceeded at certain locations in Tiptree under the bypass proposals
- A bypass would create additional environmental effects and it would require a minimum of 40% more land, when compared to the mitigation measures on Inworth Rd.
- A bypass would be a minimum of £10,000,000 more expensive than the A12 proposals
- The scheme is proposing to address pinch points and flooding issues that a bypass would not address

## Conclusion

While a bypass would considerably reduce traffic from the central section of Inworth Road, as well as reduce traffic in Messing compared to our proposals, it would create noise effects that would put the A12 scheme’s DCO in jeopardy. In addition, the bypass would not just transfer traffic from one community to another, but draw additional traffic to Tiptree as the bypass would make Junction 24 more popular. On this basis the A12 cannot support the inclusion of a bypass within the scheme.




# B1023 proposals

# Design for development consent application

To address historical pinch points and capacity:

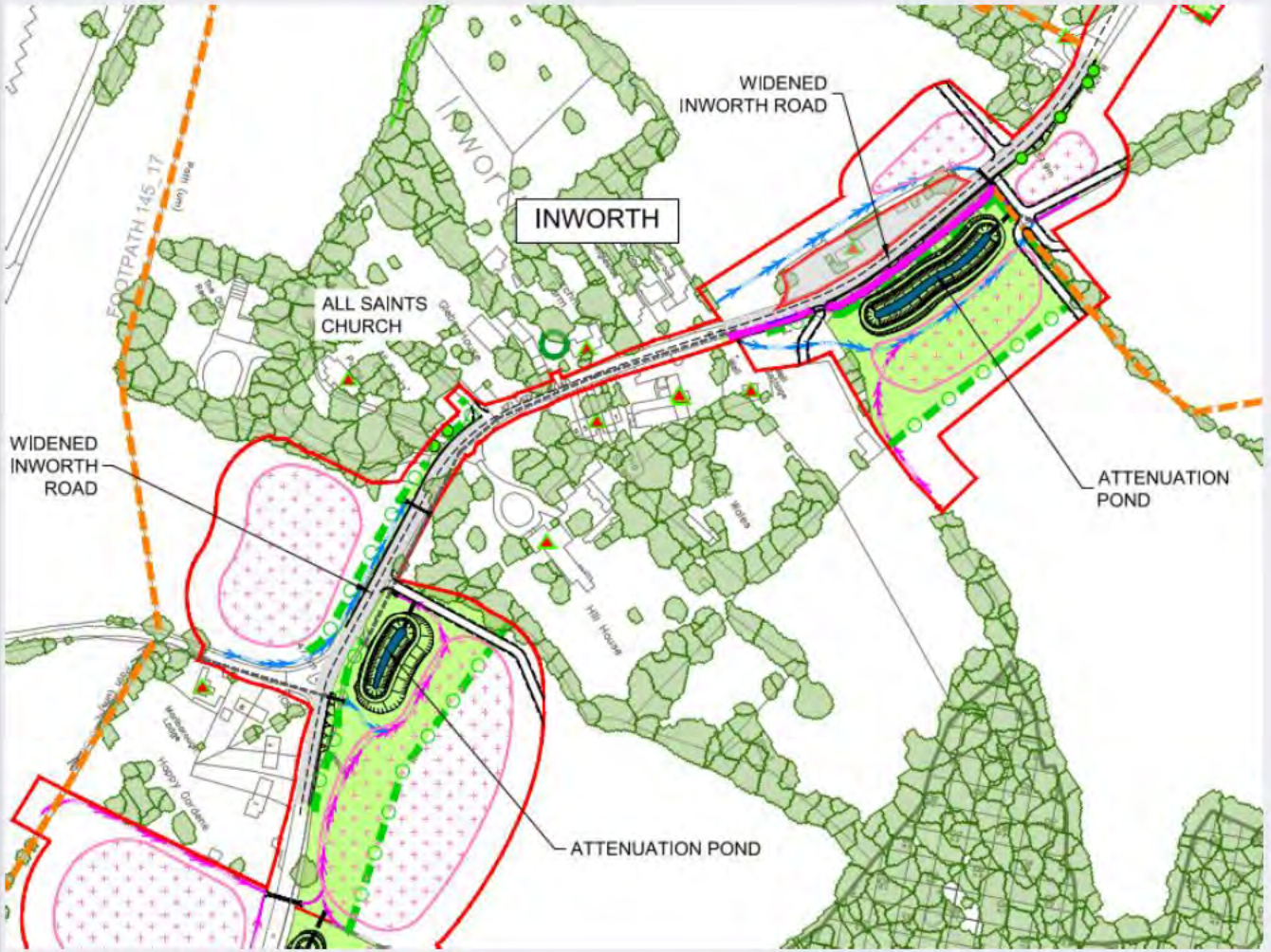
- Swept path analysis (vehicle tracking) software used to plot movements of articulated HGVs.
- In addition, first principles and standards (e.g ECC highways design guide, Manual for Streets) to inform width on straight sectionsDetailed microsimulation of the corridor to test capacity.

From ECC *"where points remain the road width and reasons for not being able to increase it should be provided."*

- Through Inworth Village approximate 6.0m carriageway to remain to minimise impacts. Straight section allows for HGVs passing and acts as traffic calming.

To address historical drainage and surface water flooding.

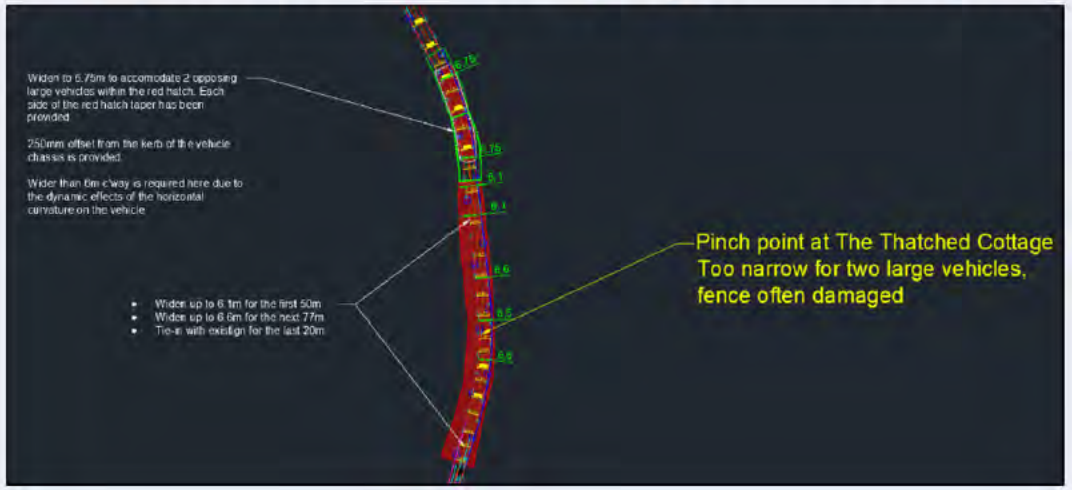
- Additional attenuation and flood mitigation areas, assessed as a 'worst case scenario'.

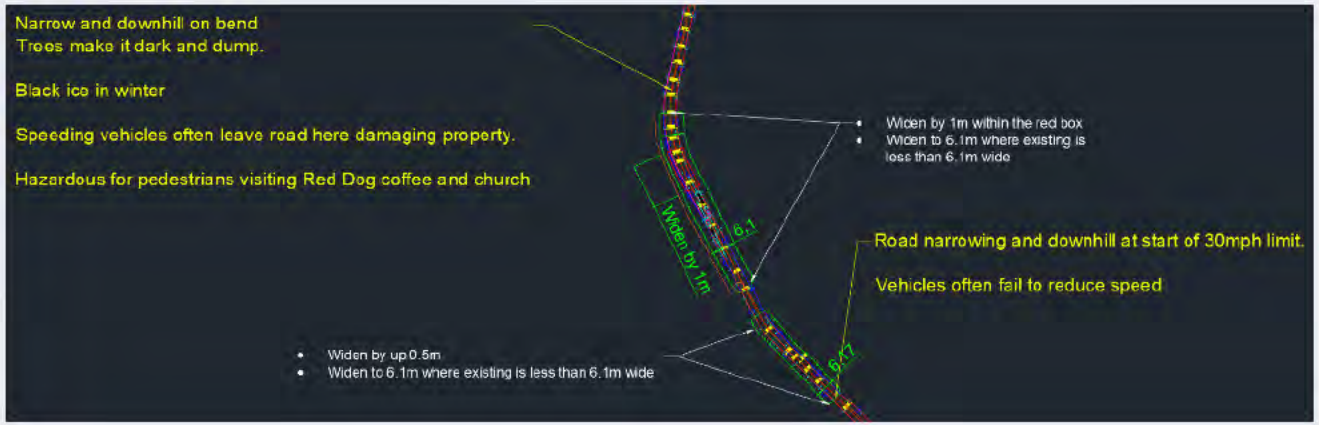


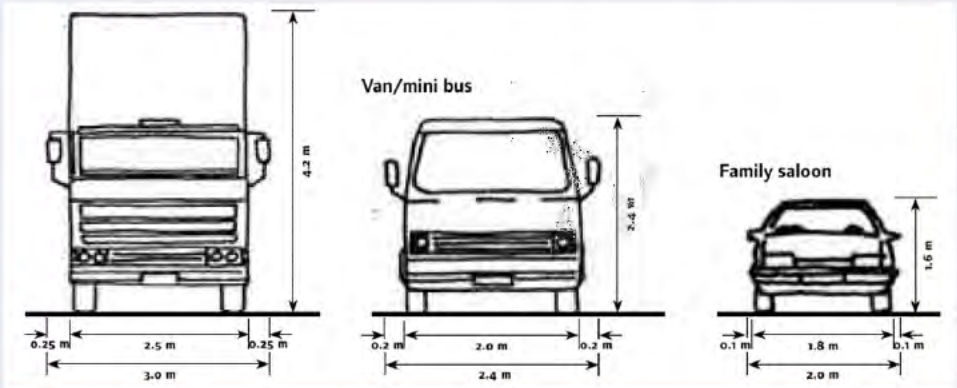
# Design for development consent application – swept path analysis

Examples of the swept path analysis are shown to the right.

- Pinch points raised by community addressed, in addition to those found by our analysis which were not raised.
- Swept path analysis used to inform widening on bends
- 6.1m proposed width on pinch points on straight sections.
- Additional widening would both increase land take, environmental impacts, and increase speeds and reduce driver caution.
- 16.5m articulated heavy goods vehicle used as the 'design vehicle', larger than the vehicle below from Manual for Streets.



# Design for development consent application – microsimulation (slide 1 of 2)

- Microsimulation is a way of modelling how traffic behaves on a road network when changes are made to the road layout or to the number of vehicles.
- We used microsimulation used to test the performance of the improved corridor, including buses and bus stops, private accesses and trip generators such as Perrywood Garden Centre. Our assessment factors in the increased traffic due to the A12 scheme.
- The table to the right presents the results from the microsimulation, showing that the average delays and journey times are similar in the Do Minimum (DM) and Do Something (DS2 – mitigation measures) scenarios.
- Videos of the microsimulation of these scenarios are on the following slide.

Table 6-1: Microsimulation results of Inworth Rd considering the Do Minimum (DM), Do Something 1 (DS1) and Do Something 2 (DS2) traffic scenarios. The figures listed are the average journey times (seconds) and the average delay (seconds).

**Inworth Road**

| Journey Times | Distance |
|---|---|
| Northbound | 1371.61m |
| Southbound | 1371.61m |

**DCO Traffic Flows**

Average Journey Times, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| AM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 92 | 96 | 92 |
| Southbound | 91 | 97 | 90 |

Average Journey Times, in seconds (10 runs)

| In Seconds | DM | DS1 | DS2 |
|---|---|---|---|
| PM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 87 | 89 | 88 |
| Southbound | 89 | 94 | 91 |

Average Delay, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| AM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 8 | 12 | 9 |
| Southbound | 8 | 12 | 7 |

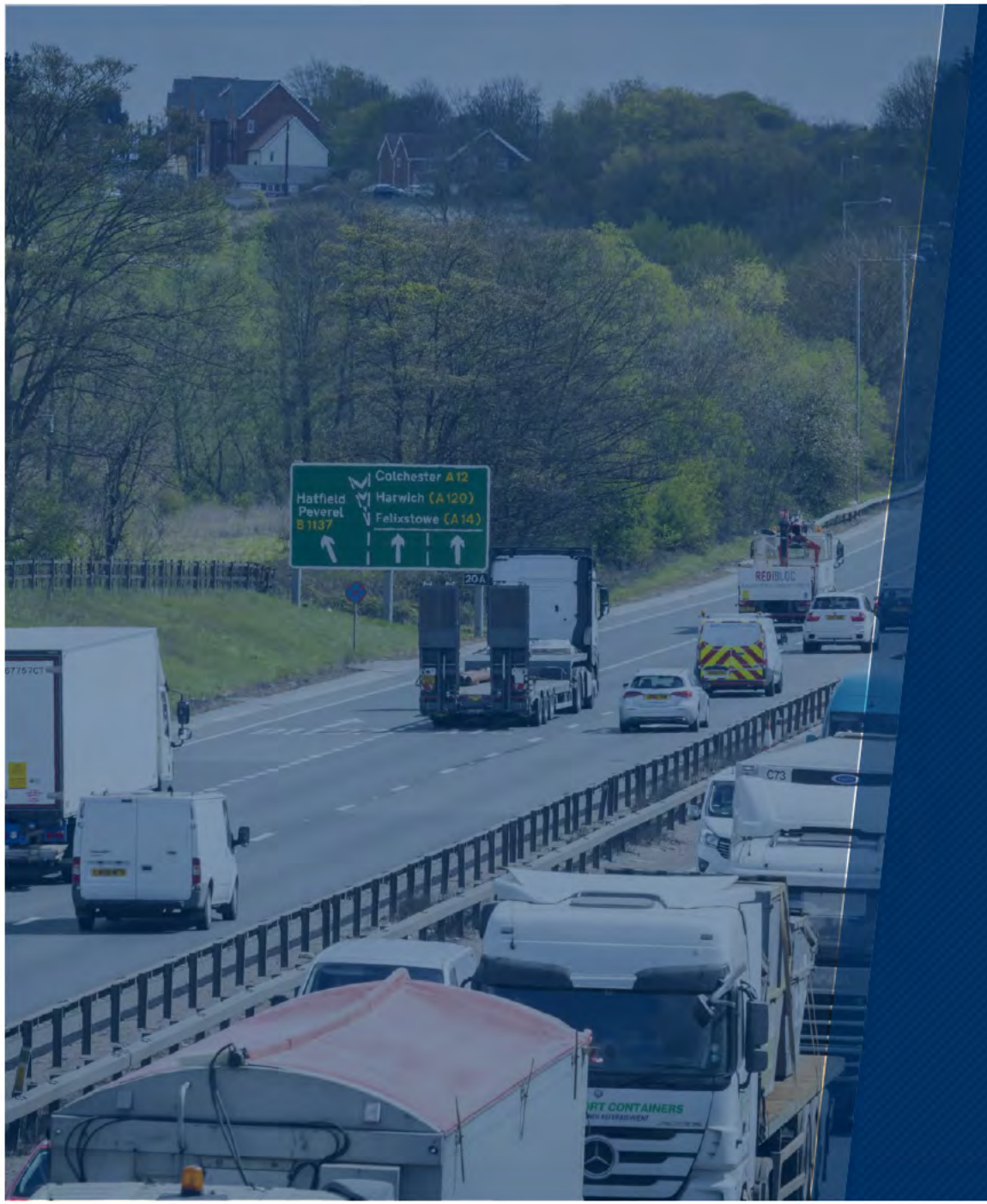
Average Delay, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| PM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 4 | 6 | 5 |
| Southbound | 6 | 10 | 7 |

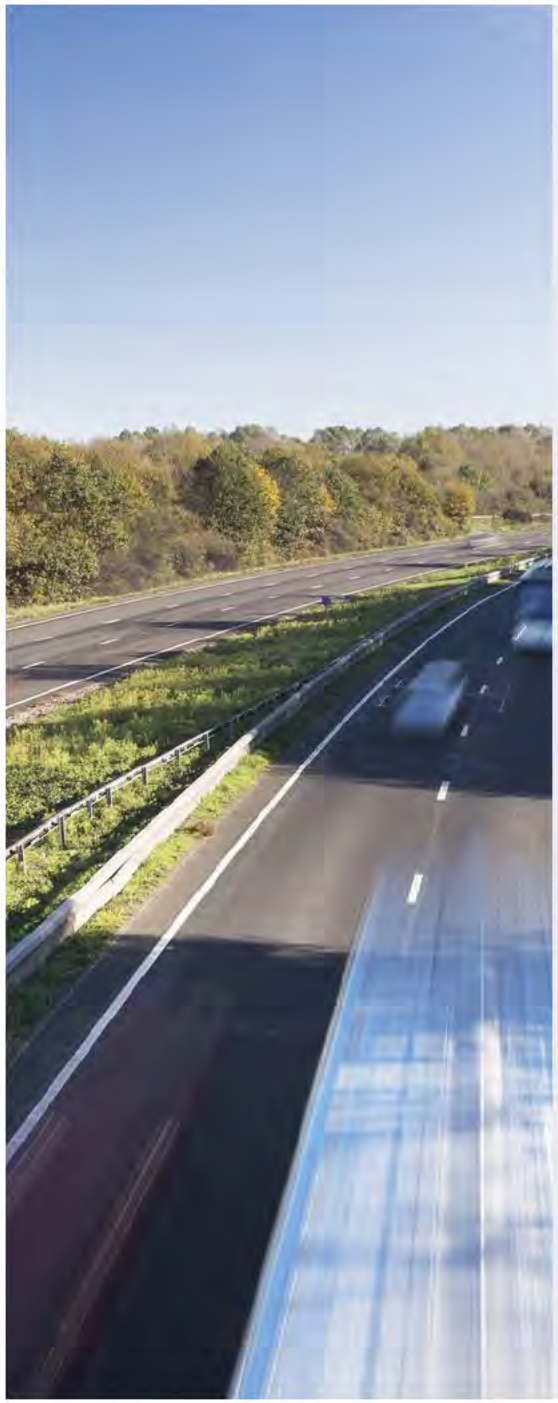
# Design for development consent application – microsimulation (slide 2 of 2)

- Do Something 1 (DS1) scenario – Existing Inworth Road, with the new junction 24 and no mitigation measures.
- Location is facing The Red Dog restaurant, looking north to J24.

- Do Something 2 (DS2) scenario – Inworth Road, with the new junction 24 and proposed mitigation measures.
- Location is facing The Red Dog restaurant, looking north to J24

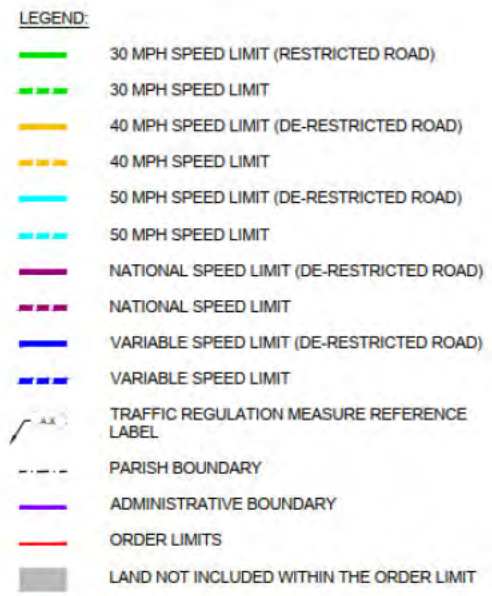


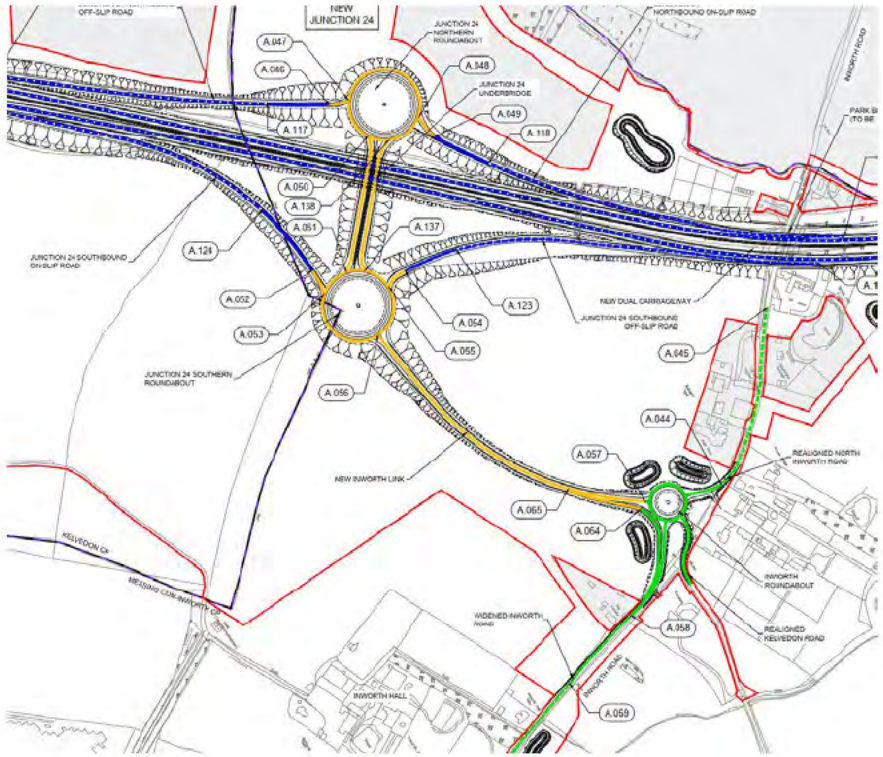

# Technical standards for the proposed B1023 roundabout



# J24/B1023 Roundabout Design Strategy

- Part of the design process for all junctions of the A12 is to ensure that drivers transition from the trunk road to the local road in a safe manner. As part of this, it is important that the driver feels they are entering the local road network prior to doing so. As a principle decision of the project, we believe that drivers should feel they are entering the local road network as they reach the roundabout rather than on Inworth Road itself.




- A roundabout designed in accordance with the Design Manual for Roads and Bridges (DMRB) could give the perception to the driver that they are still on the strategic road network

# J24/B1023 Roundabout Design Strategy

- The project has been asked (by Messing and Inworth PC amongst other consultees) to extend the existing 30mph limit along the B1023 to Gore Pit Junction in Feering
- Although we are unable to do that all the way up to Feering due to the nature of the road and traffic north of Hinds bridge not changing, the roundabout approaches linking the B1023 and J24 have been designed around a 30mph limit, specifically around the entry and exit visibility requirements of Manual for Streets
- The Essex Highways Technical Manual states that, regarding visibility, "For streets with speed limits of 30mph or under in particular type B, C and D roads, Manual for Streets standards will apply."
- The below visibility/stopping sight distance (SSD) criteria are from Table 7.1 from Manual for Streets, and minimum recommended curve radii are from Table 8.1 from Manual for Streets 2. These minimum requirements are met for 30mph/48kph on both the northern and southern B1023 approaches to the roundabout. The roundabout has been modelled in traffic microsimulation software also has the capacity to provide a level of service of A (less than 10 seconds delay at both the AM and PM peak, denoting best operating conditions) for the forecasted flows, and has appropriate geometry for heavy goods vehicles.

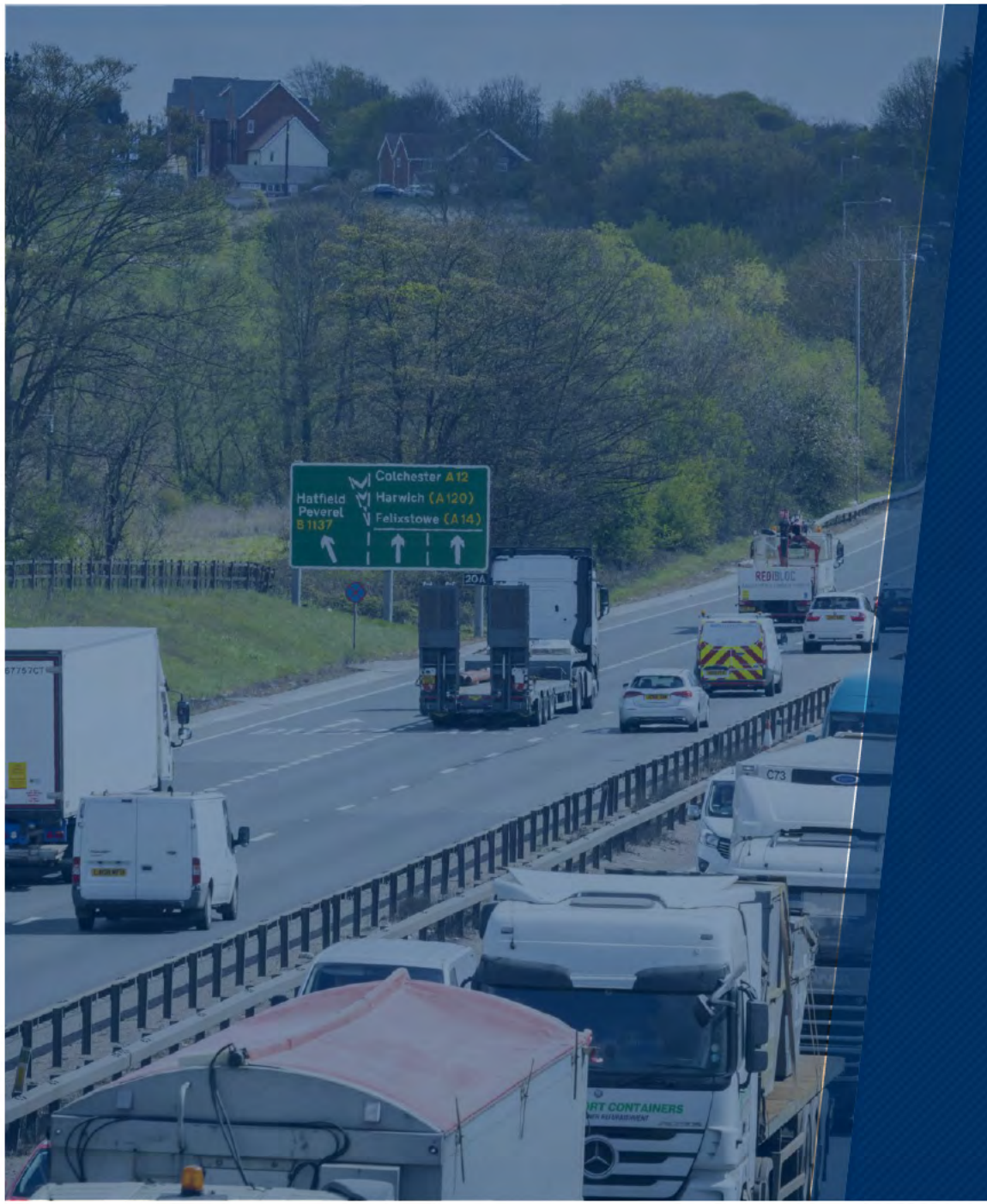

**Table 7.1 Derived SSDs for streets (figures rounded).**

| Speed | Kilometres per hour | 16 | 20 | 24 | 25 | 30 | 32 | 40 | 45 | 48 | 50 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Miles per hour | 10 | 12 | 15 | 16 | 19 | 20 | 25 | 28 | 30 | 31 | 37 |
| SSD (metres) | | 9 | 12 | 15 | 16 | 20 | 22 | 31 | 36 | 40 | 43 | 56 |
| SSD adjusted for bonnet length. See 7.6.4 | | 11 | 14 | 17 | 18 | 23 | 25 | 33 | 39 | 43 | 45 | 59 |

| Design Speed, kph | Curve Radius, m 4 steps below TD 9/93 Desirable Min |
|---|---|
| 30 | 16 |
| 40 | 28 |
| 48 | 41 |
| 50 | 44 |
| 60 | 64 |

**Table 8.1** - Minimum Recommended Curve Radii

highways england


Hatfield
Peverel
B 1137
Colchester A 12
Harwich (A 120)
Felixstowe (A 14)
20A
REDIBLOC
C73

# Next steps

# Next steps

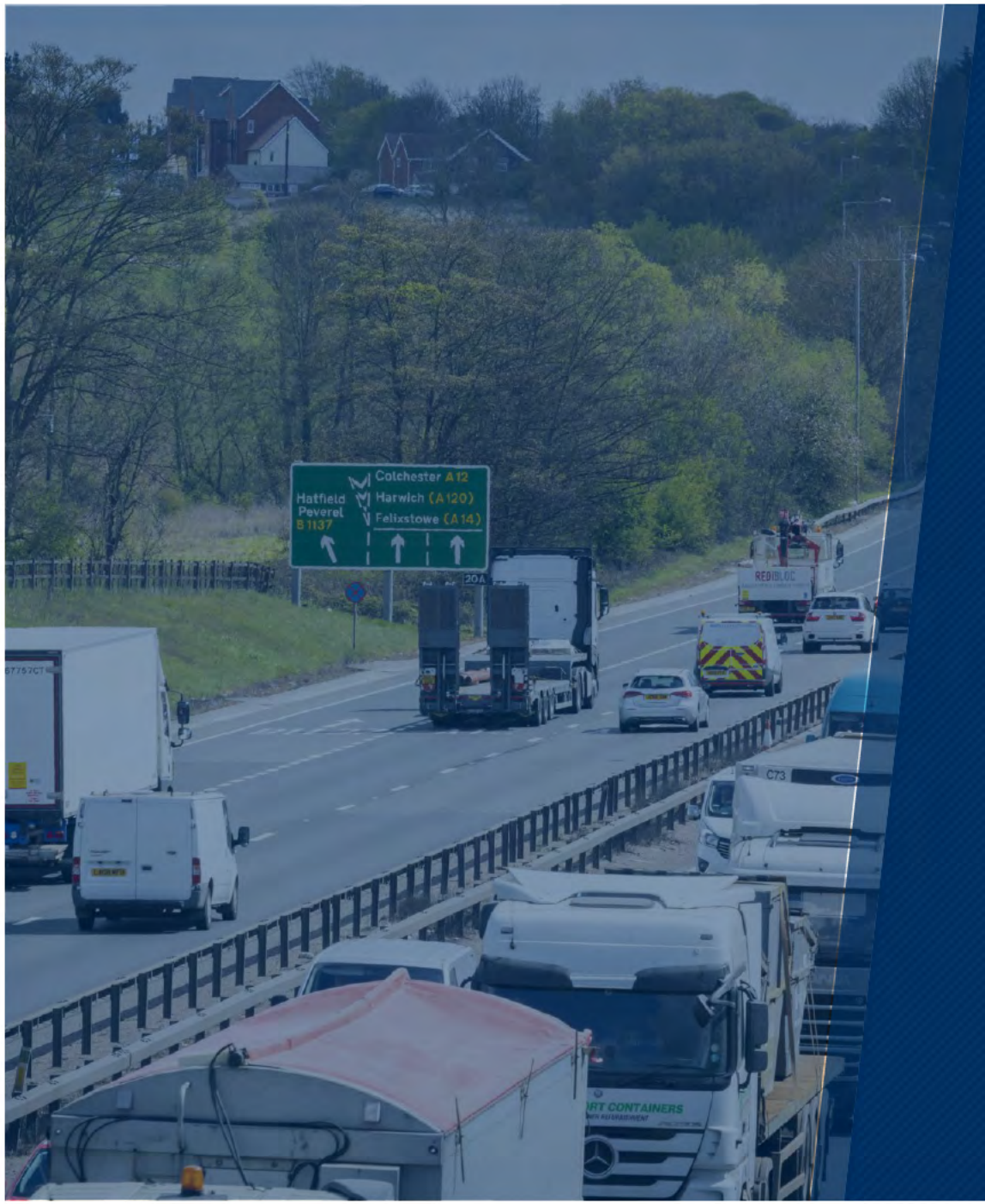
- Now our application has been accepted, the process and programme is run by the Planning Inspector
- On the 22nd of September s56 letters are issued which invite people to participate in the process by submitting a relevant representation. By submitting a relevant representation you will become an Interested Party which means you have the right to participate in examination process. These letters are sent to all statutory stakeholders and landowners.
- We have also contacted local Cllrs, the parish councils and those who have shown interest in the past.
- S56 notices are also published in local and national newspapers and at various locations around the proposed scheme.
- To advertise this more widely in Messing-cum-Inworth, we would like to hold an in person event. The relevant reps window will close on the 4th of November and we are seeking to hold an event on Friday 14th October.
- More information can be found on PINs website: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-eight-overview-of-the-nationally-significant-infrastructure-planning-process-for-members-of-the-public-and-others/

# Next steps

- Outside of the DCO process, we would like to have the opportunity to discuss Designated Fund opportunities with you.
- More on Designated Funds, and how this works can be found here:

[redacted]

- These ideas can include walking, cycling and horse-riding opportunities, saving energy or delivering value for money.




# Environment

# Community severance

**Messing Parish Council comment:**

At current traffic levels, the existing minimal footways are sufficient and there is marginal social severance. It is only National Highway's (formerly Highways England) proposal that will increase traffic levels such that social severance becomes an issue.

**A12 Project's response:**

The existing flow of traffic on the road is associated with moderate severance. The additional traffic caused by the A12 scheme is expected to maintain a moderate level of severance.

Our assessment on community severance can be seen within Chapter 13, Population and Human Health, of the Environmental Statement, which has been submitted as part of the DCO application (see link to chapter below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000147-6.1-Environmental-Statement-Chapter-13-Population-and-Health.pdf

Section 13.18 of Chapter 13 (paragraph 13.18.78 / page 133 onwards) includes a section assessing the health effects from community severance in Inworth.

national highways

# Heritage

**Messing Parish Council comment:**

By which standard have you assessed these impacts upon the listed properties?

**A12 Project's response:**

The general approach to assessing the value of assets and significance of effects on them was based on DMRB LA 104 Environmental Assessment and Monitoring and DMRB LA 106 Cultural Heritage Assessment. Assessments of the contribution made by setting to the value of heritage assets was guided by the methodology in The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition). The assessment of cultural heritage effects was made using professional judgement guided by the significance matrix set out in Table 3.8.1 of DMRB LA 104. The assessment methodology is reported in Chapter 7, Cultural Heritage, of the Environmental Statement, which has been submitted as part of the DCO application (see link to chapter below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000178-6.1-Environmental-Statement-Chapter-7-Cultural%20Heritage.pdf

Section 7.5 of Chapter 7 includes sections on the assessment guidance used (paragraph 7.5.5 / page 23), the general methodology (paragraph 7.5.6 / page 24), and the criteria that have been used to assess the impacts on cultural heritage assets (paragraph 7.5.11 / page 25).

A reference list is included in Section 7.14 of Chapter 7 (page 102), which includes links to the standards and guidance documents mentioned above (note that the Planning Inspectorate have redacted some links which do not have a '.gov' address).

# Heritage (Continued)

**Messing Parish Council comment:**

The vibration caused during construction will be damaging and a significant long-term issue when used by increased HGV traffic.

**A12 Project's response:**

Building damage is caused by individual high levels of vibration (or events), as opposed to a continuous level. If these events of high levels of vibration exist at present, then the number of events may increase during operation of the scheme. No significant vibration effects were identified along Inworth Road. Our assessment on vibration can be seen within Chapter 12, Noise and Vibration, of the Environmental Statement, which has been submitted as part of the DCO application (see link to chapter below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000146-6.1-Environmental-Statement-Chapter-12-Noise-and-Vibration.pdf

Section 12.9 of Chapter 12 describes the vibration impacts from the scheme (paragraph 12.9.21 / page 45 onwards). This identifies a potential vibration impact from piling at the northern section of Inworth Road, however, this would not be a significant effect as the vibration would be temporary, over a short duration (as described in Section 12.11, paragraph 12.11.20 / page 62). In addition, there are no listed buildings near this vibration impact.

Construction traffic will be permitted on Inworth road, which will also be shown in the Outline Construction Traffic Management Plan (OCTMP) published with the DCO. The extent of work to be completed on Inworth Road will be minimal and pre-construction surveys and monitoring can be carried out, where deemed appropriate.

We can confirm that construction HGVs for the scheme will not be permitted through Messing. This is shown in the Permitted & Excluded Routes drawings which are an appendix to the OCTMP (see link below – Inworth and Messing are shown on sheets 14 and 20 of the plans).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000392-7.7-Outline-Construction-Traffic-Management-Plan-Appendix-B-Permitted-and-excluded-routes-for-construction-vehicles-(plans).pdf

# Heritage (Continued)

**Messing Parish Council comment:**

Any work on Church land will need to be sanctioned by the Diocese

**A12 Project's response:**

The Project team has and will continue to engage with the Chelmsford Diocesan on matters related with the required land take for the works. At this moment, detailed plans are yet to be finalised and when completed, will be discussed with the Diocese.

national highways


# Air quality

**Messing Parish Council comment:**

Council's view is that Inworth Village sits within a valley and therefore pollution can accumulate more densely. Council asked Mr Kevin Turpin (air pollution specialist at National Highways) if the modelling used for the assessment allowed for topography of which his answer was "no". Council therefore require National Highways to conduct an air pollution survey in this specific location to gain meaningful data.

**A12 Project's response:**

The standard criterion in considering terrain is a 10% gradient in slopes. Under this value, it is generally unnecessary to include terrain in the model set-up (LAQM TG16). Examining the terrain surrounding Inworth Village up to 150m to the west and to the east indicate slopes of 4.6% and 5.4% respectively. The Inworth Road itself has a slope of 3% north to south. These are general calculations using digitised maps. Therefore, introducing terrain in the pollution dispersion modelling setup would have negligible impact on the modelling outcome.

An air quality assessment has been undertaken for the scheme to support our application for development consent. The results of this assessment for receptors in Inworth indicate annual mean $NO_2$ concentrations of between 12-15 micrograms per metre cubed with the proposed scheme in place in 2027 which is considerably lower than the air quality objective for this pollutant of 40 micrograms per metre cubed. This assessment has been included in Chapter 6, Air Quality, of the Environmental Statement, which has been submitted as part of the DCO application (see link to chapter below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000140-6.1-Environmental-Statement-Chapter-6-Air-Quality.pdf

Chapter 6 is supported by Figure 6.9, which shows the $NO_2$ concentrations at the opening year of the scheme, and Figure 6.10 which shows the change in $NO_2$ between a scenario with and without the scheme (see sheet 4 of the figures for receptors along Inworth Road). Air quality data for the receptors shown on these figures is included in Appendix 6.5, Air Quality Modelling Results, of the Environmental Statement (see Table 1.4 on page 13 onwards).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000268-Fig6.9-Environmental-Statement-Modelled-No2-Concentrations-Do-Something-Scenario-Human-Health-Receptors-Sheet-1to-8.pdf

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000243-Fig6.10-Environmental-Statement-Modelled-Change-in%20NO2-Sheet-1-to-8.pdf

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000125-6.3-Environmental-Statement-Appendix-6.5-Air-Quality-Modelling-Results.pdf

# Air quality (continued)

**Messing Parish Council comment:**

According to National Highways, the last survey in Inworth was four years ago. Council believes a more recent study should be carried out.

**A12 Project's response:**

The pollution dispersion model was set up in accordance with the traffic model base year of 2019. Hence, air quality monitoring data were derived for this year. This involved projecting existing National Highways monitoring undertaken in 2017 and 2018. These data were also used to set up the previous pollution dispersion model with a base year of 2016. On this occasion the monitoring data were back projected. In addition to the National Highways air quality monitoring data, the model set up also applied data recorded by local authorities (i.e. for the 2016 and 2019 traffic model base years). The important aspect is having a range of monitoring data within five years of the traffic model base year which can be projected if required. On this basis, the monitoring data applied is considered to be appropriate.

The approach to monitoring is set out in Appendix 6.1, Air Quality Monitoring Results, of the Environmental Statement, which has been submitted as part of the DCO application (see link to chapter below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000121-6.3-Environmental-Statement-Appendix-6.1-Air-Quality-Monitoring-Results.pdf

national highways

# Air quality (continued)

**Messing Parish Council comment:**

Every home along the B1023 in Inworth will be adversely affected by the scheme and everyone living in the village will suffer inconvenience, stress, disruption and mental stress. This is evident in the feedback the Council has already received during both consultation processes and must be a factor in any design.

**A12 Project's response:**

The project wishes to engage with the parish to discuss matters such as this in person or via an online meeting. Nevertheless, I can confirm the potential impact on community wellbeing has been assessed and has been reported in Chapter 13, Population and Human Health, of the Environmental Statement (see link below; health is covered in Section C of the chapter, from page 59 onwards).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000147-6.1-Environmental-Statement-Chapter-13-Population-and-Health.pdf

This has been informed by Appendix 13.4: Mental Wellbeing Impact Assessment, which has assessed impacts on protective factors for mental health while considering the average health status of the community.

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000157-6.3-Environmental-Statement-Appendix-13.4-Mental-Wellbeing-Impact-Assessment.pdf

national highways

# Trees and hedgerows

**Messing Parish Council comment:**

National Highways (formerly Highways England) acknowledge there will be a “loss of roadside hedgerows and trees, and in areas where balancing ponds and flood risk mitigation is required. Most sections of lost hedgerow would be mitigated by replanting.” The word “most” indicates that only some and not all will be replanted. Additionally replanted trees etc. will take years to mature and alleviate the decimated rural landscape. Please confirm your intentions in this regard.


**A12 Project’s response:**

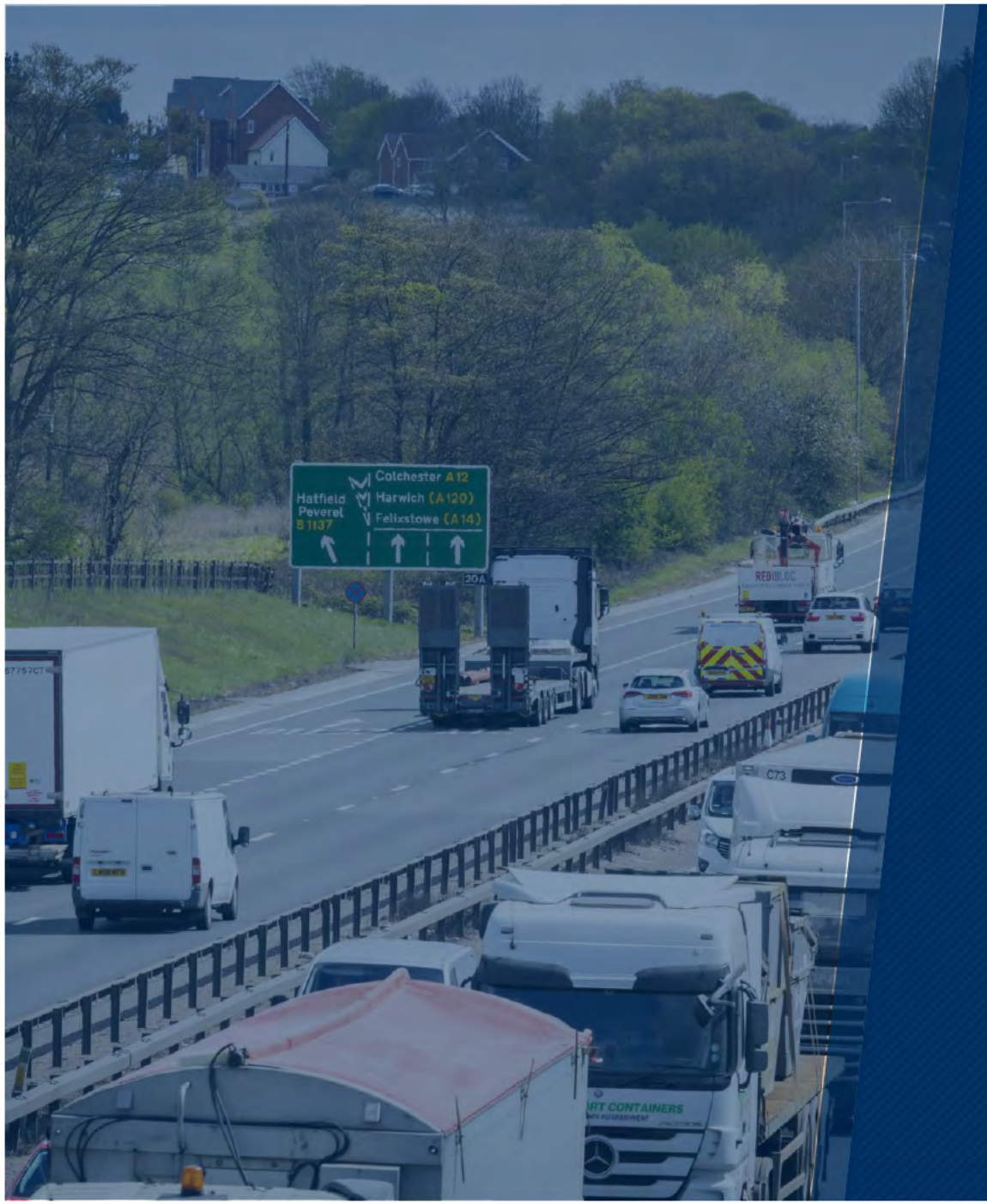
At the preliminary design stage, a worst case for hedgerow and tree loss is assumed to allow space for construction, drainage, lighting and sightlines. However, it may be feasible to retain some of the hedgerows and trees identified as at risk and this would be determined at the detailed design stage. Where loss is unavoidable, hedgerows and trees would be replanted in or near to their current location where practicable. If this is not possible, they would be compensated for elsewhere to meet the proposed scheme’s no net loss biodiversity objective.

Trees/hedgerows to be retained, lost, or at risk, are shown on the Retained and Removed Vegetation Plans, which is part of the DCO application (Inworth shown on sheets 14 and 20).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000352-2.14%20Retained%20and%20Removed%20Vegetation%20Plans%20-%20Part%202.pdf

The indicative planting scheme proposed will be reported in the Environmental Masterplan (Inworth shown on sheets 14 and 20).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010060/TR010060-000293-6.2-Environmental-Statement-Figure-2.1-Environmental-Masterplan-Part-3.pdf




# Additional information

## LEGEND

### BOUNDARIES

- ORDER LIMITS
- ORDER LIMITS EXCLUSION ZONE
- LOCAL AUTHORITY BOUNDARY

### HIGHWAYS

- NEW OR REALIGNED PUBLIC HIGHWAY ROAD
- NEW OR REALIGNED MAINTENANCE ACCESS / PRIVATE MEANS OF ACCESS
- EXISTING PUBLIC RIGHT OF WAY
- EXISTING CYCLE TRACK
- EXISTING PUBLIC RIGHT OF WAY - STOPPED UP
- NEW OR IMPROVED FOOTPATH / BRIDLEWAY
- PROPOSED / IMPROVED CYCLE TRACK
- PROPOSED / IMPROVED FOOTWAY
- NEW PERMISSIVE PATH
- PROPOSED CONTROLLED CROSSING
- PROPOSED UNCONTROLLED CROSSING
- PROPOSED TECHNOLOGY GANTRY (CANTILEVER)
- PROPOSED TECHNOLOGY GANTRY
- PROPOSED GANTRY MOUNTED DIRECTION SIGN
- PROPOSED LIGHTING COLUMN

### ENGINEERING & CONSTRUCTION

- PROPOSED CONSTANT CUTTING
- PROPOSED CONSTANT EMBANKMENT
- PROPOSED MITIGATION EARTHWORKS
- PROPOSED MITIGATION EARTHWORKS (BORROW PITS)
- PROPOSED CARRIAGEWAY/ ROAD
- PROPOSED FOOTWAY / HARDSTANDING / ISLAND
- PROPOSED VERGE
- NEW OR MODIFIED BRIDGE DECK
- EXISTING BRIDGE DECK (TO BE RETAINED)
- EXISTING BRIDGE DECK (TO BE DEMOLISHED)
- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL

### DRAINAGE

- EXISTING CULVERT (TO BE RETAINED)
- PROPOSED CULVERT - MINOR WATERCOURSE
- EXISTING CULVERT (TO BE EXTENDED)
- EXISTING CULVERT (TO BE ABANDONED)
- PROPOSED WATERCOURSE DIVERSION (plan only)
- WATER FLOW DIRECTION
- PROPOSED CUT-OFF DITCH (FILTER DRAIN IN SPATIAL CONSTRAINT AREA)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE RETAINED)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE REALIGNED)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE ABANDONED)
- PROPOSED ATTENUATION POND (WITH OUTFALL CONNECTION)
- PROPOSED DRAINAGE OUTFALL PIPE
- PROPOSED UNDERGROUND STORAGE UNITS
- PROPOSED FLOOD MITIGATION AREA
- PROPOSED FLOOD BUND

### ENVIRONMENT

EXISTING

- EXISTING OPEN WATER
- EXISTING TREES, HEDGES AND SHRUBS
- EXISTING ANCIENT WOODLAND
- EXISTING ANCIENT, NOBLE AND VETERAN TREES
- EXISTING CONSERVATION AREAS
- EXISTING LOCAL NATURE RESERVE
- EXISTING LISTED BUILDINGS
- EXISTING REGISTERED PARKS AND GARDENS
- EXISTING SCHEDULED MONUMENT
- EXISTING TREES PROTECTED BY TREE PRESERVATION ORDER (AREA OR INDIVIDUAL TREE)

PROPOSED

- PROPOSED OPEN WATER
- PROPOSED WOODLAND PLANTING OF TREES AND SHRUBS
- PROPOSED WET WOODLAND
- PROPOSED TALL SCREEN PLANTING TO ELEVATE FLIGHT PATH OF BATS & BARN OWLS
- PROPOSED INDIVIDUAL TREES
- PROPOSED HEDGE
- PROPOSED HEDGE WITH INTERMITTENT TREES
- PROPOSED GRASSLAND
- PROPOSED INTERMITTENT TREES AND SHRUBS
- PROPOSED ECOLOGY POND (INDICATIVE)
- PROPOSED AQUATIC AND MARGINAL PLANTING (INDICATIVE)
- PROPOSED ECOLOGY MITIGATION AREA / ECOLOGY PROTECTION MEASURES
- PROPOSED NOISE BARRIER
- PROPOSED REPLACEMENT LAND

national highways


NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S

national highways

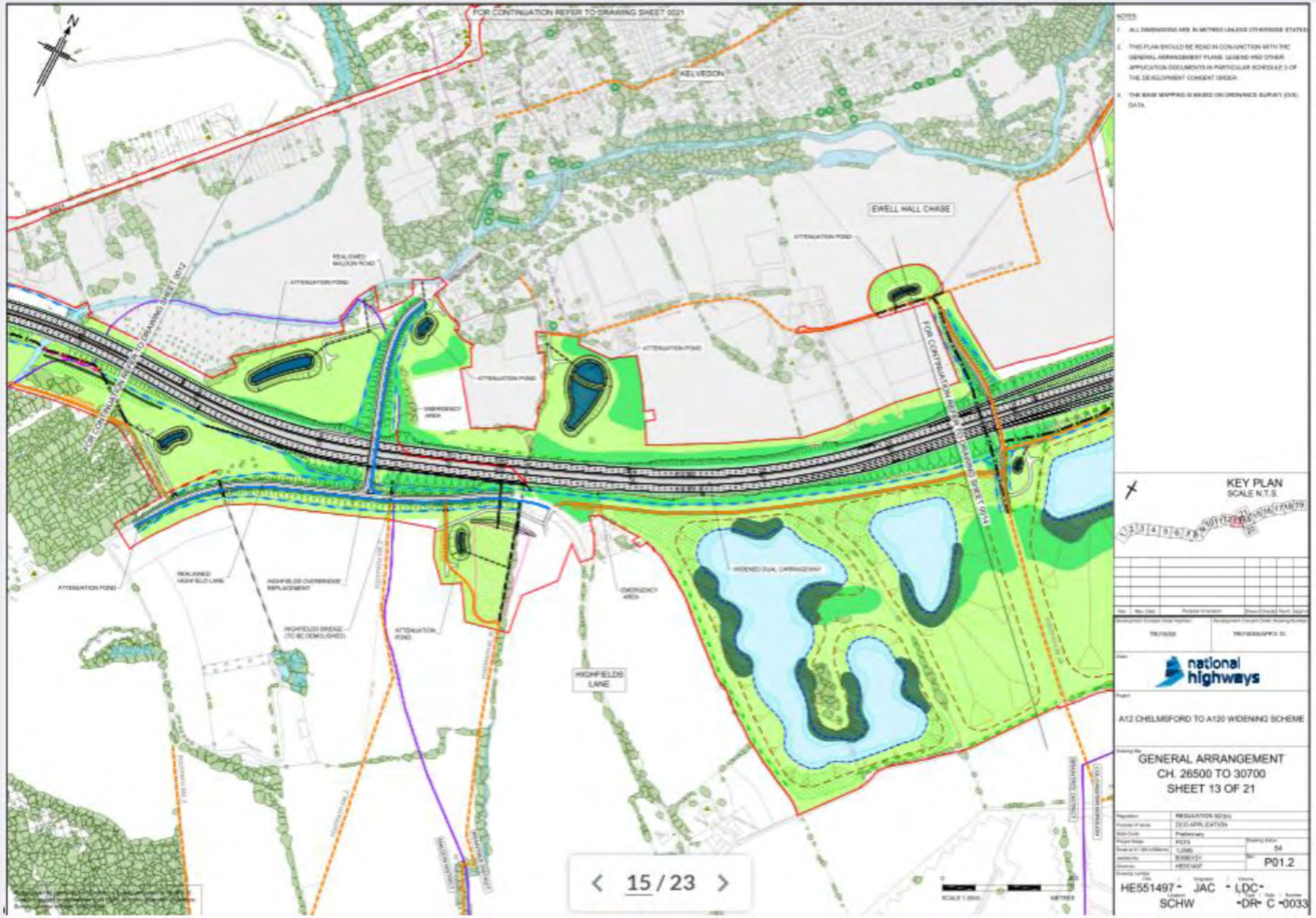
A12 CHELMSFORD TO A120 WIDENING SCHEME

GENERAL ARRANGEMENT
CH. 25100 TO 26500
SHEET 12 OF 21

| | |
|---|---|
| Regulation | REGULATION 5(2)(p) |
| Purpose of Issue | DCO APPLICATION |
| Status Code | Preliminary |
| Project Stage | PCF3 |
| Drawing Status | S4 |
| Scale at A1 / at A3 | 1:2500 |
| Drawing No. | P01.1 |
| Originator | HE551497 - SCHW |
| Discipline | JAC |
| Volume | LDC |
| Type | DR |
| Role | C |
| Number | 0032 |



national highways




NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S.

national highways

A12 CHELMSFORD TO A120 WIDENING SCHEME

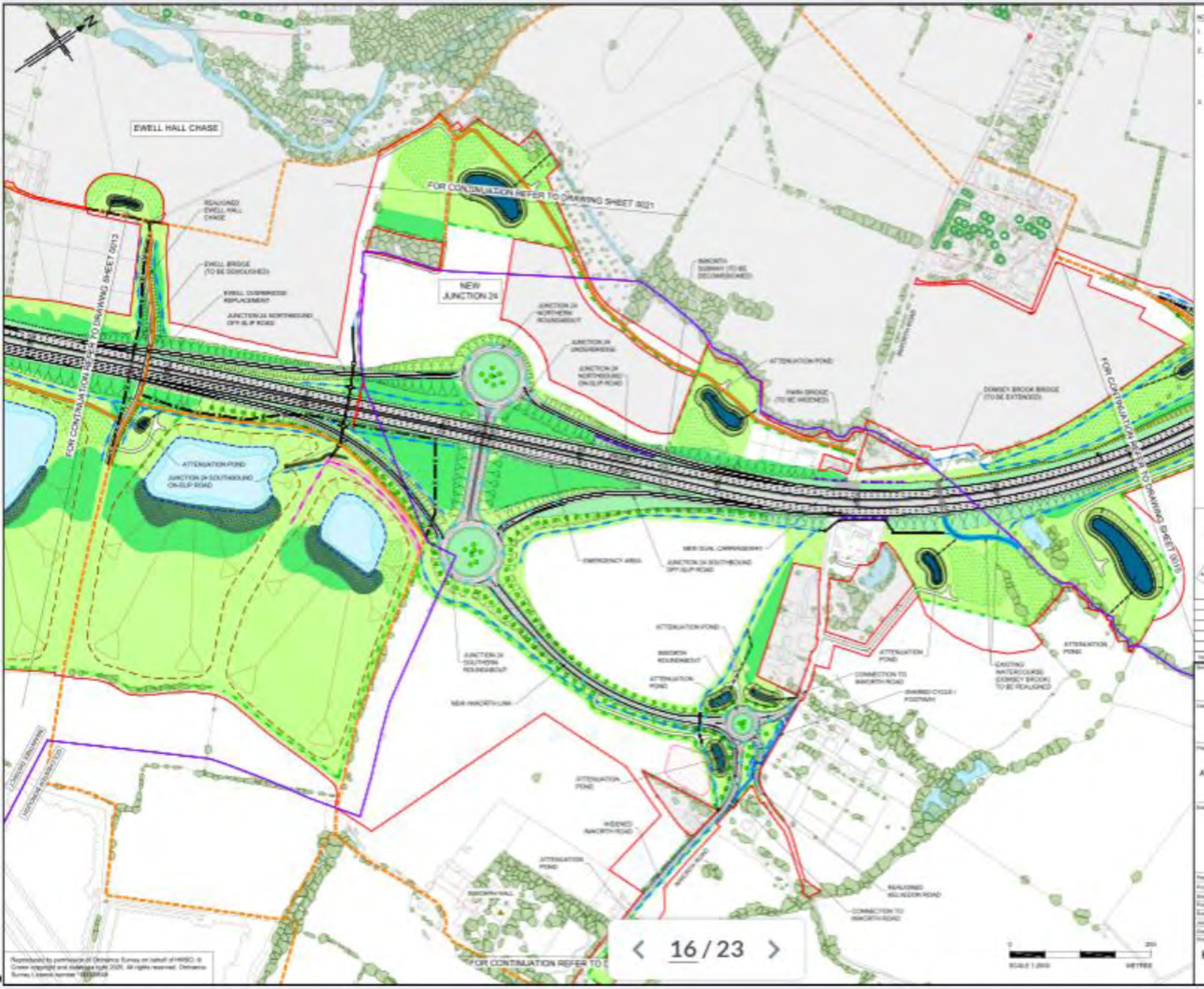
GENERAL ARRANGEMENT
CH. 26500 TO 30700
SHEET 13 OF 21

| | |
|---|---|
| Regulation | REGULATION 5(2)(o) |
| Purpose of Issue | DCO APPLICATION |
| Style Guide | Preliminary |
| Project Stage | PCF3 |
| Drawing Status | S4 |
| Identity No. | P01.2 |

HE551497 - JAC - LDC - DR - C - 0033
SCHW



national highways




NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S.



national highways

A12 CHELMSFORD TO A120 WIDENING SCHEME

GENERAL ARRANGEMENT
CH. 30700 TO 32200
SHEET 14 OF 21

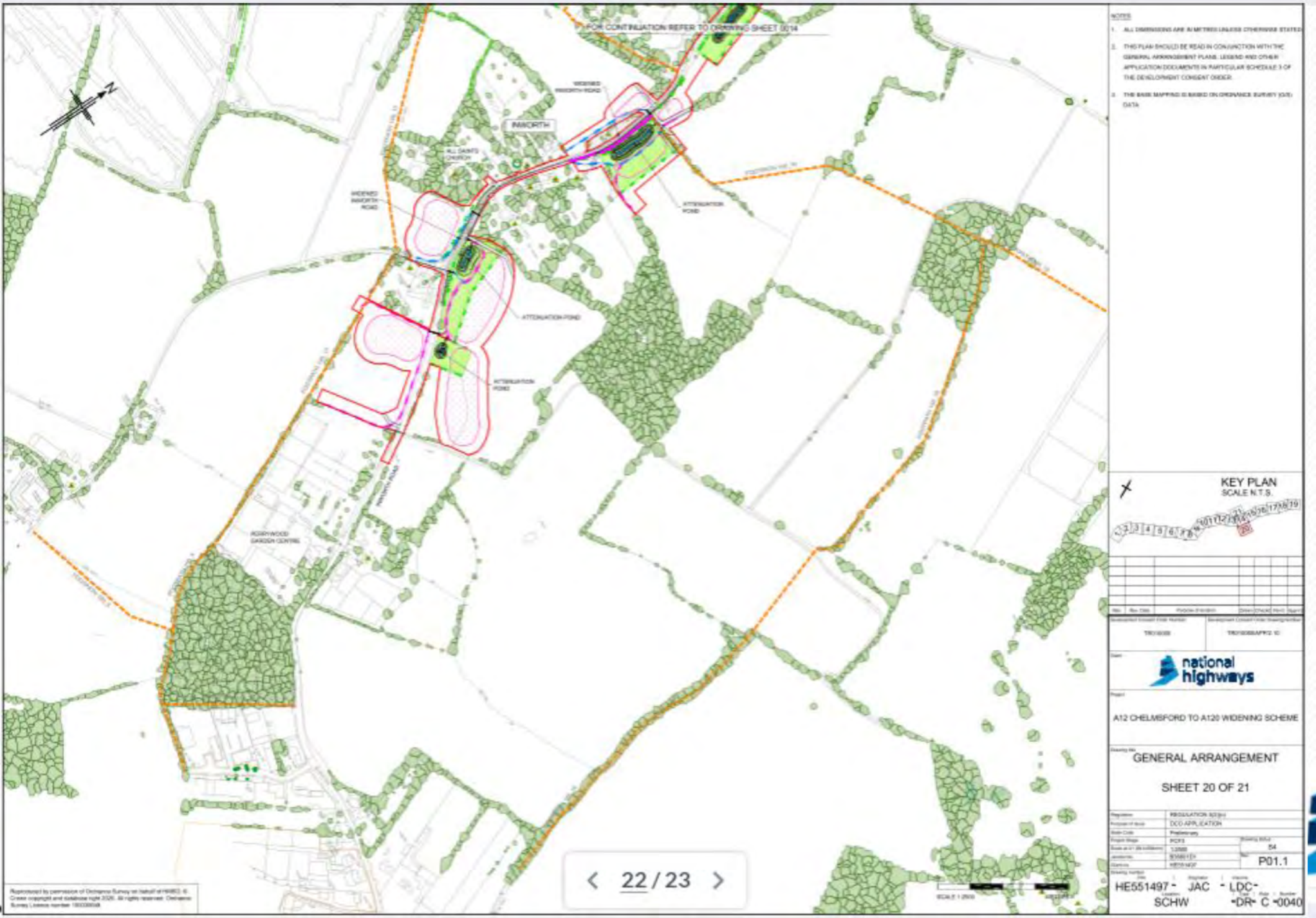
| | |
|---|---|
| Preparation | REGULATION 6(2)(a) |
| Purpose of issue | DCO APPLICATION |
| Scale Code | Preliminary |
| Project Stage | PCF3 |
| Scale at A1 (594 x 841mm) | 1:2000 |
| Drawing No. | 54 |
| Drawing No. | P01.2 |

Drawing number: HE551497 - Originator: JAC - Volume: LDC - Type: DR - Role: C - Number: 0034
Location: SCHW

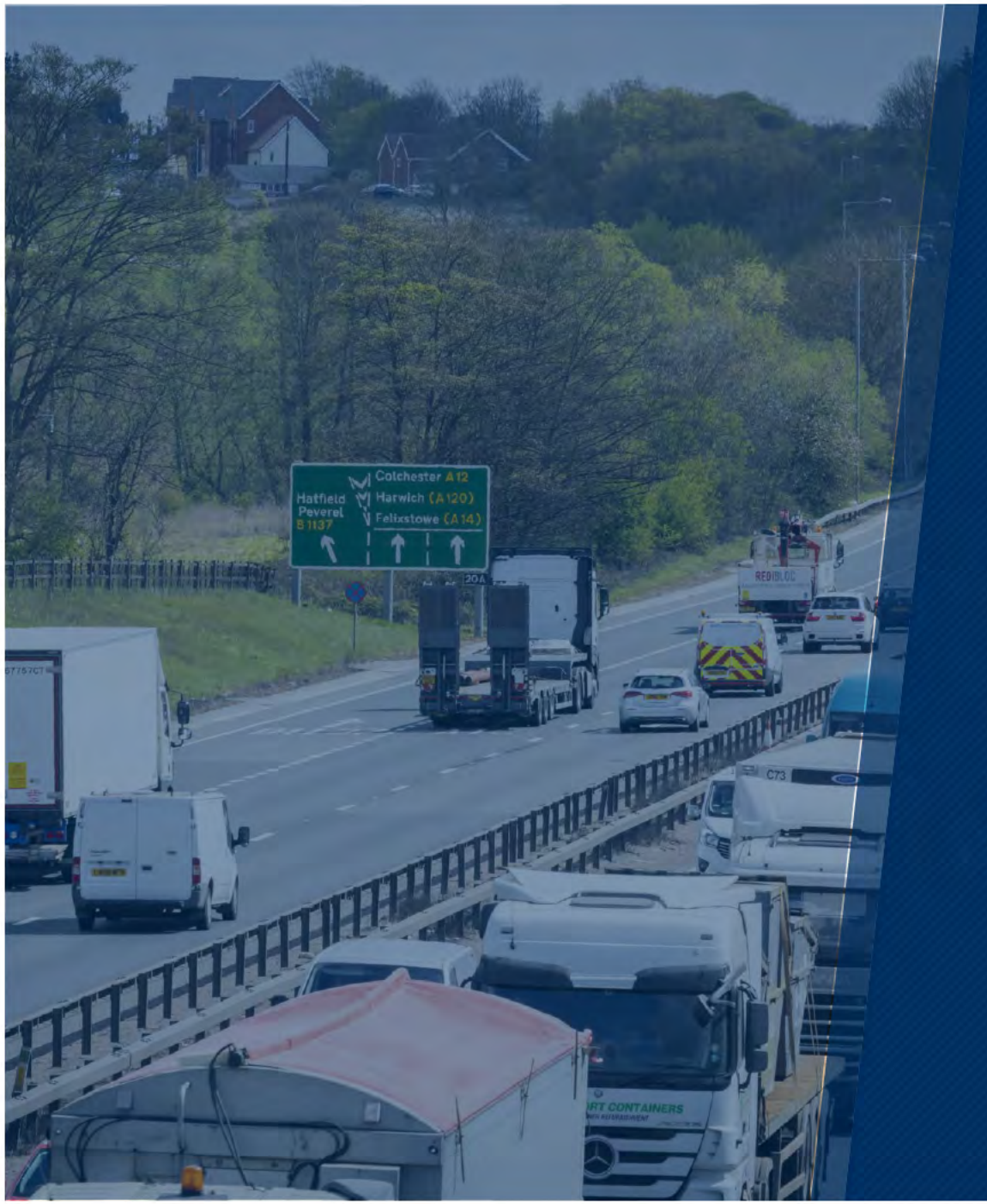




national highways




national highways




# Messing-cum-Inworth

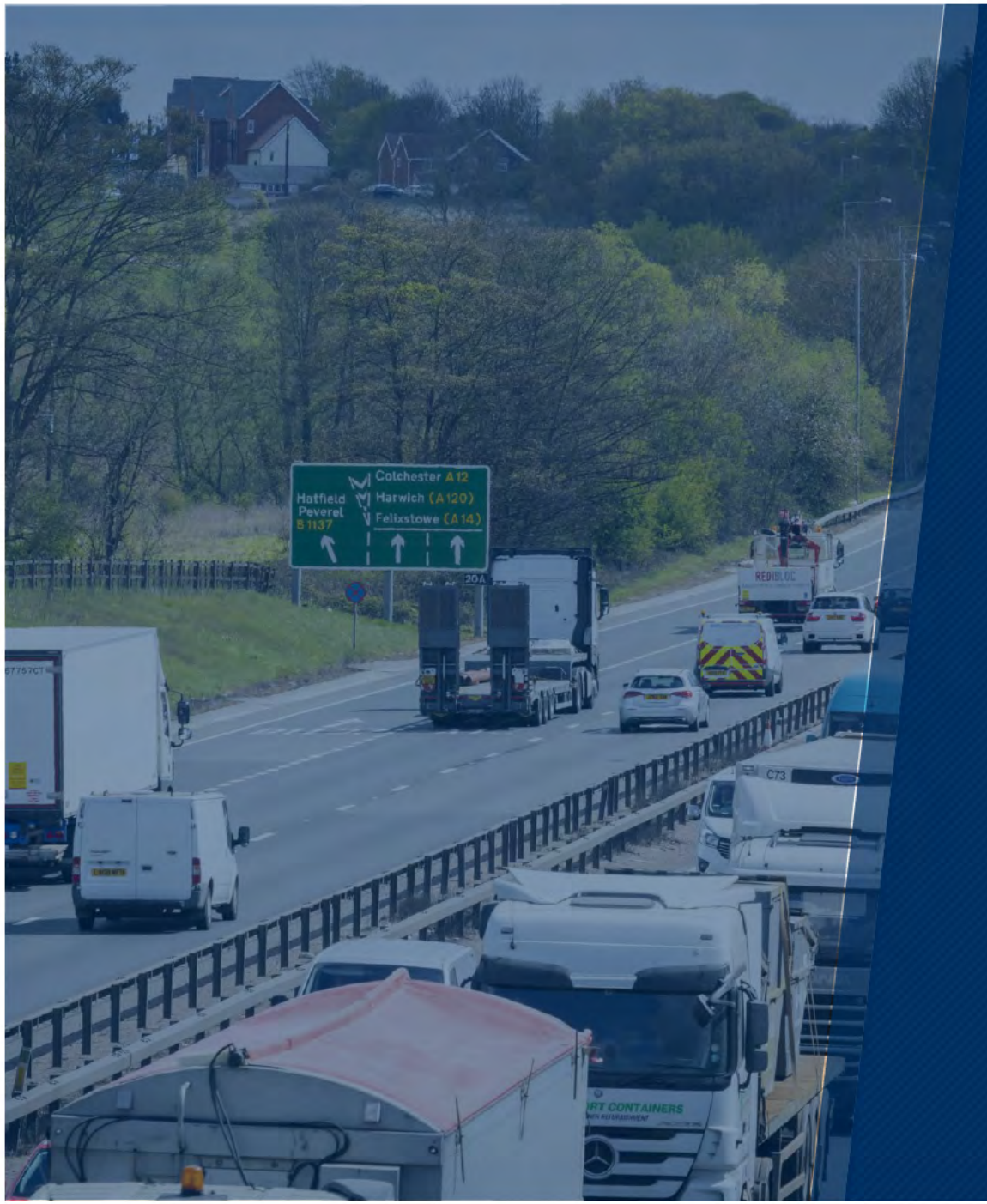
14 July 2022

The information shared in this presentation represents the most up to date proposals. This may evolve for several reasons, and as such, may be subject to change.

national highways

# Agenda

- Introductions
- Background to J24
- Evolution of the bypass proposals
- Inworth Road bypass further assessments
  - Traffic
  - Noise
  - Costs and lands
  - Conclusion
- Scheme proposals
- Next steps




# Background to junction 24

# New junction 24 optioneering (slide 1 of 3)

- Consensus across the board was that the new J24 must be all movements (serve traffic in all directions).
- The next step for the project was to consider where it should go and the details of the arrangement – this options assessment is documented in the SAR addendum:
  - [redacted]


PCF Stage 2 Option

Our initial thought process was to place the junction broadly where the current junction 24 is and the image to the left is what we call our “PCF stage 2” arrangement. It did have benefits such as:

- An all-movements junction
- Reduced traffic on Kelvedon High Street

**However:**

- A12 traffic would still use Gore Pit junction
- The height of junction would be considerable.
- It would have had a considerable impact on the setting of Prested Hall, with substandard geometry access.
- It would prove challenging for our cut and fill earthworks balance.

**And** several statutory and key stakeholders suggested a preference for either a connection with Inworth Road or the junction on Inworth Road.

# New junction 24 optioneering (slide 2 of 3)

- The project considered in detail a link/direct connection to Inworth Road as well as locating the junction on Inworth Road. This assessment is documented in the SAR addendum:
  - [redacted]

**J24 Option D**

- Would need to widen Inworth Road to 2 lanes in each direction (dual carriageway)
- Property impacts
- Impacts on Crown Land

**This option was dismissed**

**J24 Option A**

- Increased costs
- Increased impact on Crown Land
- Increased earthwork
- Less attractive to traffic

**This option was dismissed**

**Conclusion** – while these options were not a suitable alterative to the design on the previous slide, the project, and its technical experts recognised the stat stakeholder aspirations, as well as the economic benefits, reduced impact on Prested Hall and reduction in journey times from Tiptree of providing a connection to Inworth Road

# New junction 24 optioneering (slide 3 of 3)

- As noted on the last slide, our technical experts found merit in the connection to Inworth Road, and as such the project pursued the concept further with two options.

Figure 6: Junction 24 Option E

**J24 Option E**

Figure 7: Junction 24 Option F

**J24 Option F**

Pros and cons for both options:

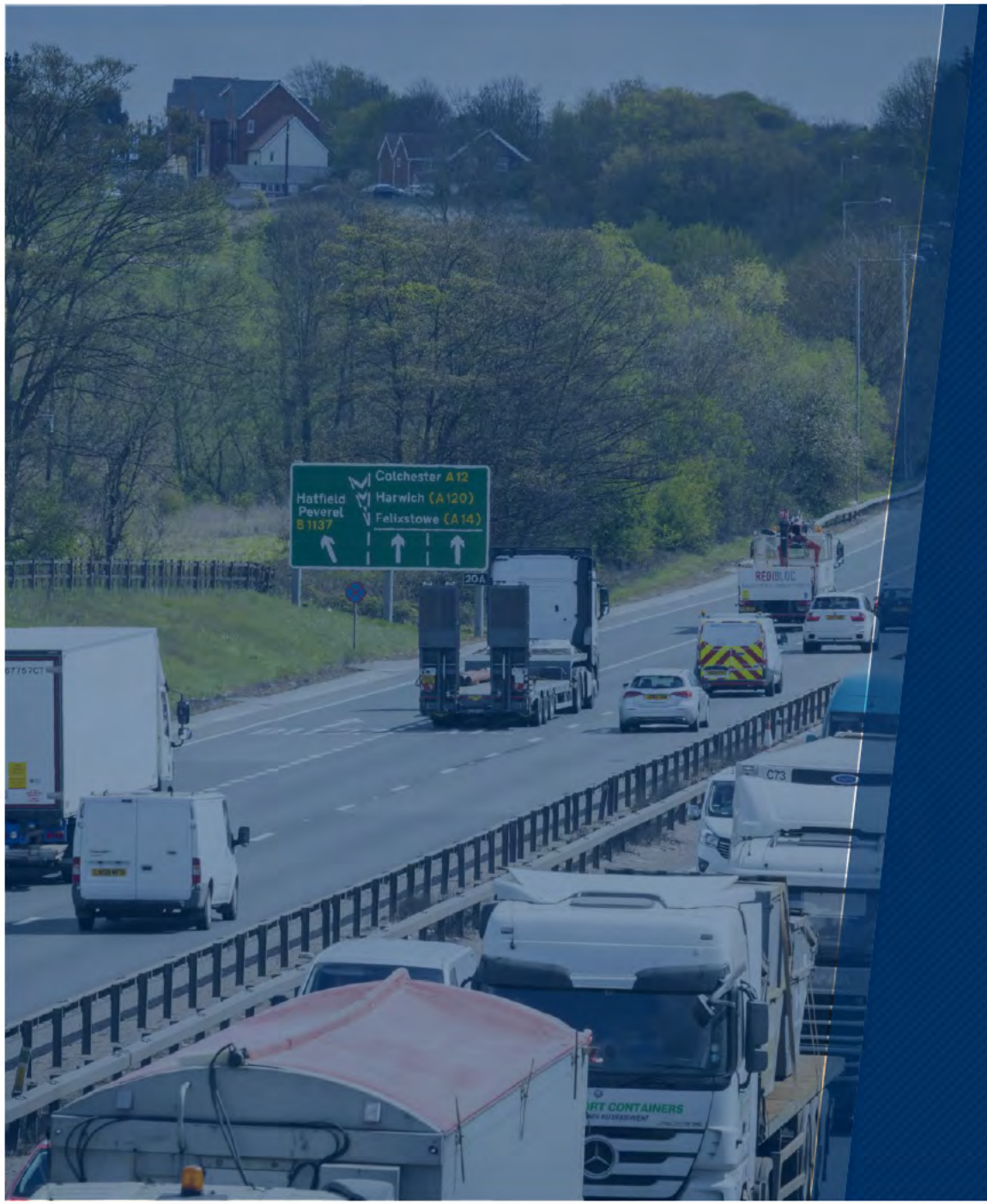
- Right traffic on the right roads
- Fulfils stat stakeholder asks
- Reduces impacts on Prested Hall
- Does not require two lanes in each direction (dual 2) on Inworth Road
- Does not require property demolition

However;

- As for any J24 with an Inworth Rd connection, there would be an increase in traffic on Inworth Road.

**Conclusion**

- This is the right location for junction 24 and Option F is the preferred option.
- In comparison to Option E as it has less of an impact on Crown Estate Land, is more cost efficient, a lower environmental impact, and has lower traffic on the northern section of Inworth Road than Option E.




# Evolution of bypass proposals

# The initial bypass request

- While the project was focused on the established assessment process outlined in the previous slide, the first bypass proposal came forward.
- A detailed assessment of the proposal took place, utilising cross discipline experts to assess the plan against the scheme's proposal.
- While the proposal had some benefits, issues covering traffic, environment, costs, planning and construction and proportionality meant our assessment showed this was not the preferred option.
- Focus would remain on considering what interventions might be required for Inworth Road.
- This was presented to the parish in March 2021 and officers in February 2021:
    - While presenting this to officers in February, it was suggested by officers that the retention of the proposed J24 southern link road, in addition to the bypass, could be an alternative (next slide).

# An alternative bypass request

- During engagement on 1st bypass, officers suggested retaining the J24 southern link road and adding a bypass.
- As for the 1st bypass request, an assessment took place which showed while this design would address the issues of traffic accessing J24 to and from the Kelvedon and the north, it would compound, the planning, environment, construction and cost issues.
- This option was not taken forward and work continued on possible interventions to Inworth Road.
- This was reported to the parish in March 2021
- However, as also reported, work would remain focused on considering what interventions could be required for Inworth Road


# Further detailed assessment

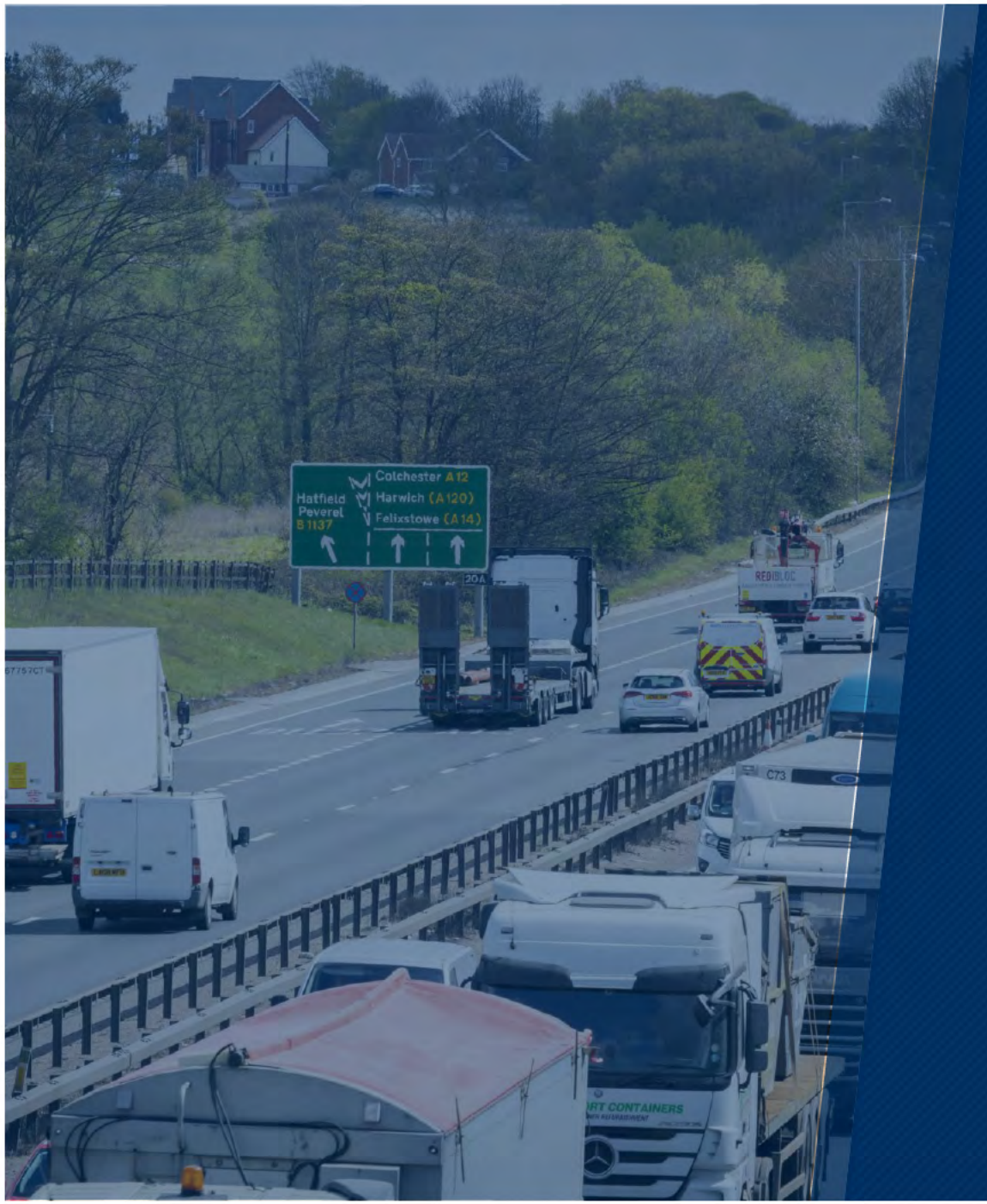
# Assessment of bypass options

In light of the strong feedback at consultation, and the representations from ECC, the project revisited the bypass to consider it in further detail. This challenged the initial analysis that took place which was presented to the council in early 2021. A detailed report, including the work and conclusions touched on in this presentation will be included in the Environmental Statement which we will submit as part of our application for development consent. The analysis considers these bypasses against the proposed scheme.

DS4 - the “Main Alternative”

DS3 – reflects earlier engagement

The following slides consider the traffic and noise effects of the bypasses locally.




# Traffic assessment

# The “Main Alternative” (DS4) – traffic assessment 2027 (slide 1 of 2)

As to be expected when comparing it to the scheme’s proposals there are positives and negatives:

- Traffic goes up considerably on:
  - The southern section of Inworth Road south of the bypass*
  - B1023 Kelvedon Road in Tiptree*
  - Oak Road in Tiptree*
  - The northern section of Inworth Road, north of J24

- Traffic goes down considerably on:
  - Middle section of Inworth Road (Inworth village)
  - London Road between Gore Pit junction and the existing J24
  - Kelvedon Road (Messing)

** these increases would happen with the principle of a bypass with any combination of additional links. The increases are not just due to traffic no longer using Messing as a cut-through. A bypass would make J24 more attractive for traffic coming from Tiptree, and therefore increase traffic between Tiptree and the bypass)*

| 34 - Feering Hill, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +27 | -4 |

| 37 - London Rd between Gore Pit and existing junction 24 | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -177 | -178 |

| 102 - Inworth Road, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +272 | +348 |

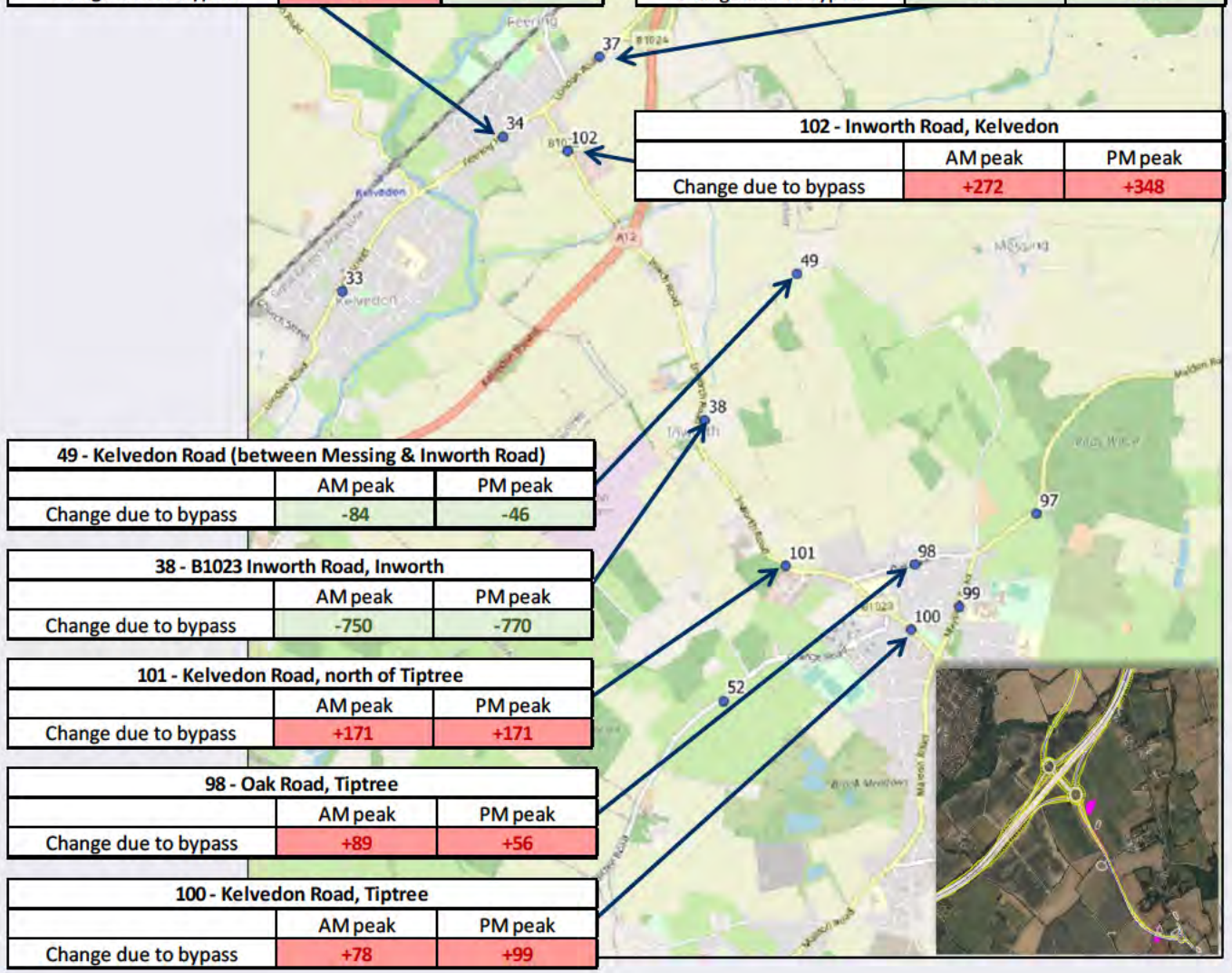
| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -84 | -46 |

| 38 - B1023 Inworth Road, Inworth | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -750 | -770 |

| 101 - Kelvedon Road, north of Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +171 | +171 |

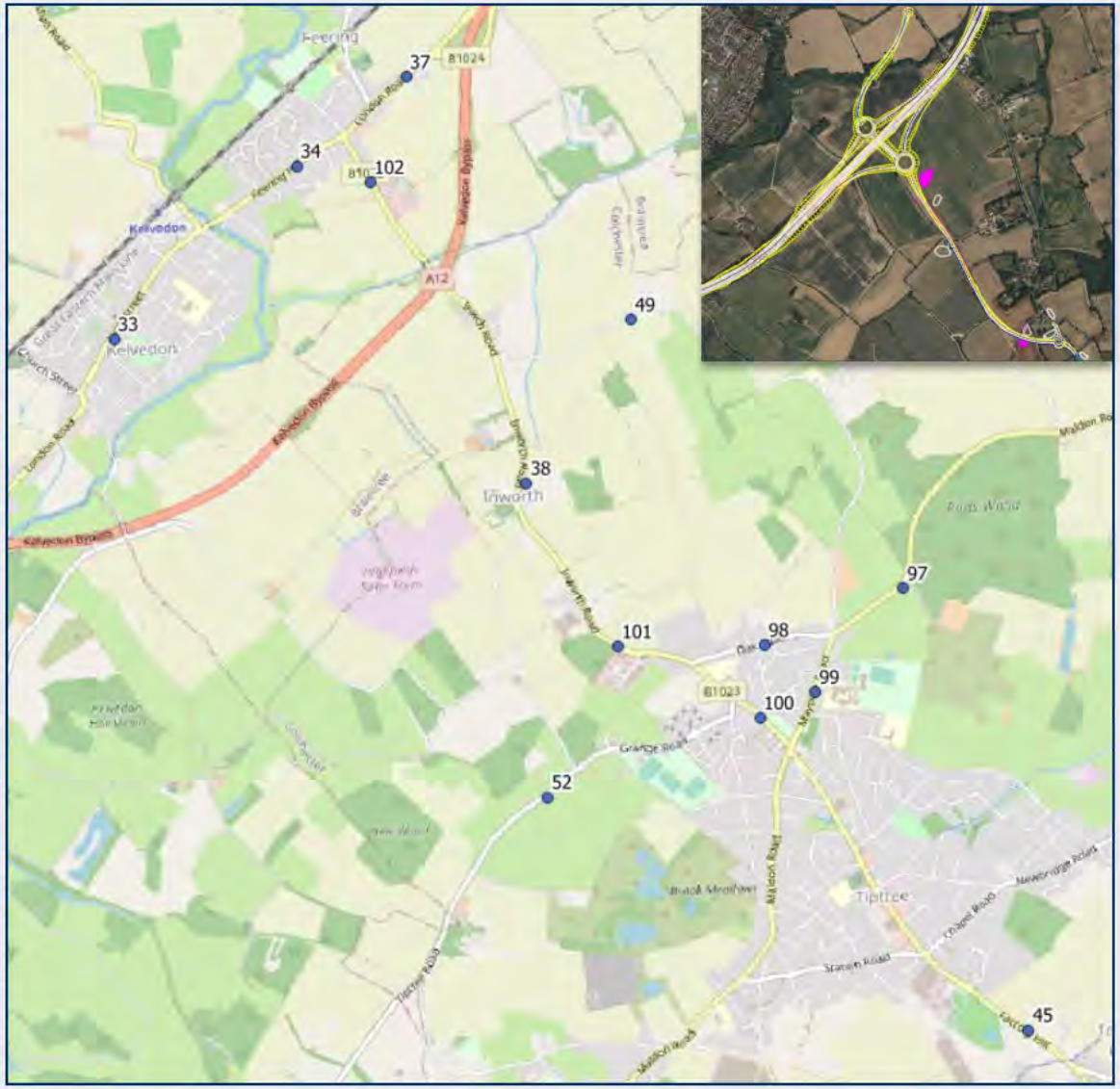
| 98 - Oak Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +89 | +56 |

| 100 - Kelvedon Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +78 | +99 |



# The “Main Alternative” (DS4) – traffic assessment 2027 (slide 2 of 2)

| Ref. | Location | Peak | DM - Without A12 Scheme | DS2 - With A12 Scheme | With Scheme & DS4 bypass | Change due to DS4 bypass |
|---|---|---|---|---|---|---|
| 33 | B1024 Kelvedon High Street | AM | 1,013 | 763 | 746 | -17 |
| | | PM | 1,003 | 887 | 834 | -53 |
| 34 | Feering Hill, Kelvedon | AM | 1,000 | 711 | 737 | +27 |
| | | PM | 1,029 | 859 | 855 | -4 |
| 37 | London Rd between Gore Pit and existing junction 24 | AM | 880 | 522 | 346 | -177 |
| | | PM | 956 | 464 | 286 | -178 |
| 38 | B1023 Inworth Road, Inworth | AM | 784 | 1,111 | 361 | -750 |
| | | PM | 846 | 1,132 | 362 | -770 |
| 45 | B1023 Oxley Hill, Tiptree | AM | 383 | 365 | 364 | -1 |
| | | PM | 387 | 409 | 407 | -2 |
| 49 | Kelvedon Road (between Messing & Inworth Road) | AM | 38 | 133 | 49 | -84 |
| | | PM | 45 | 109 | 63 | -46 |
| 52 | Grange Road, west of Tiptree | AM | 129 | 43 | 46 | +3 |
| | | PM | 155 | 78 | 80 | +2 |
| 97 | Colchester Road, east of Tiptree | AM | 678 | 535 | 566 | +31 |
| | | PM | 727 | 594 | 572 | -22 |
| 98 | Oak Road, Tiptree | AM | 140 | 185 | 275 | +89 |
| | | PM | 160 | 206 | 262 | +56 |
| 99 | Maypole Road, Tiptree | AM | 676 | 508 | 457 | -51 |
| | | PM | 691 | 540 | 473 | -67 |
| 100 | Kelvedon Road, Tiptree | AM | 757 | 928 | 1,006 | +78 |
| | | PM | 835 | 935 | 1,034 | +99 |
| 101 | Kelvedon Road, north of Tiptree | AM | 801 | 1,134 | 1,305 | +171 |
| | | PM | 890 | 1,158 | 1,330 | +171 |
| 102 | Inworth Road, Kelvedon | AM | 822 | 779 | 1,050 | +272 |
| | | PM | 892 | 900 | 1,248 | +348 |



# DS3 – traffic assessment 2027 (slide 1 of 2)

As to be expected when comparing it to the scheme's proposals there are positives and negatives:

- Traffic goes up considerably on:
  - The southern section of Inworth Road south of the bypass*
  - B1023 Kelvedon Road in Tiptree*
  - Oak Road in Tiptree*

- Traffic goes down considerably on:
  - Middle section of Inworth Road (Inworth village)
  - Kelvedon Road (Messing)

** these increases would happen with the principle of a bypass with any combination of additional links. The increases are not just due to traffic no longer using Messing as a cut-through. A bypass would make J24 more attractive for traffic coming from Tiptree, and therefore increase traffic between Tiptree and the bypass)*

| 34 - Feering Hill, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +14 | +0 |

| 37 - London Rd between Gore Pit and existing junction | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -11 | -2 |

| 102 - Inworth Road, Kelvedon | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +6 | +16 |

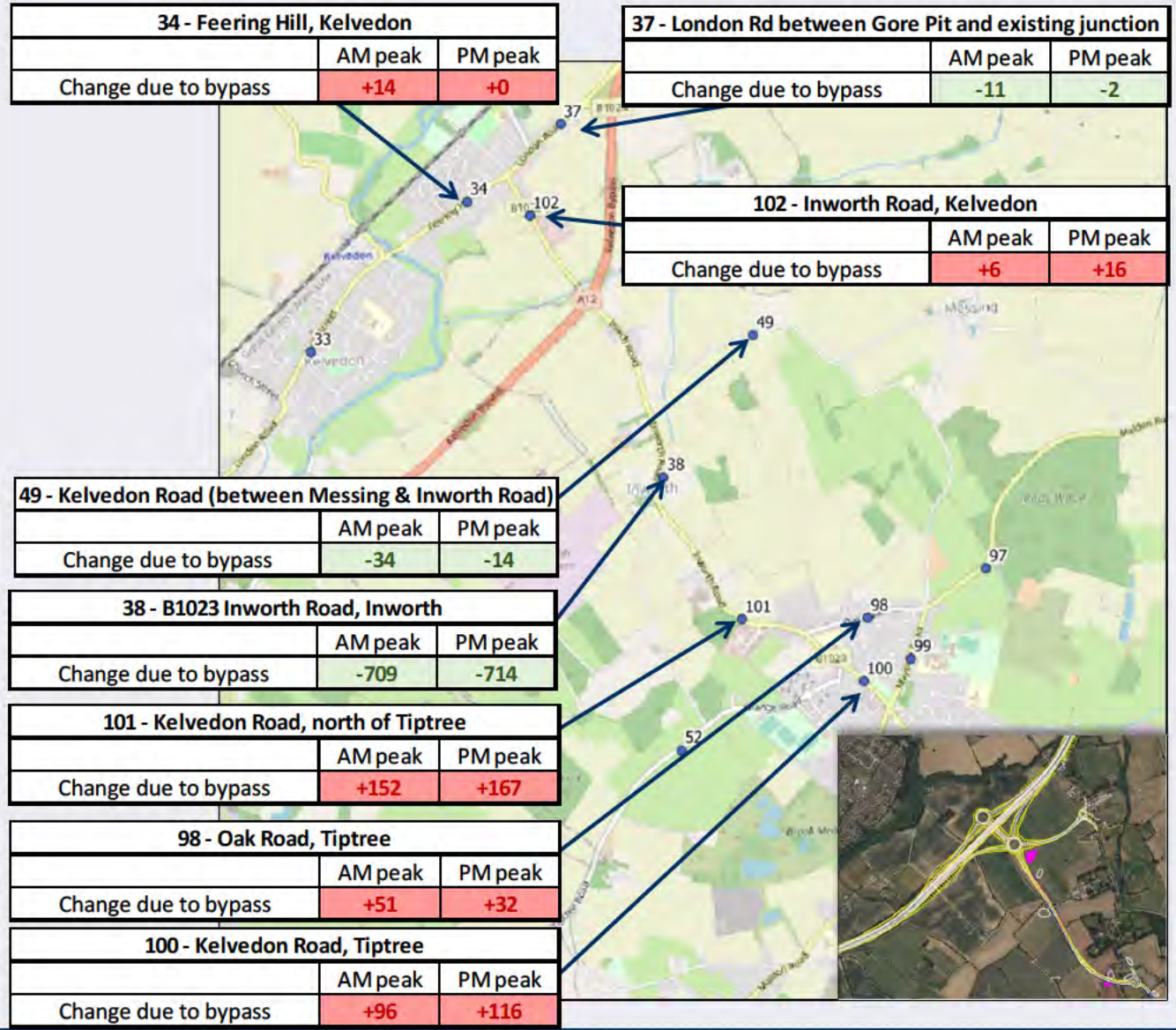
| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -34 | -14 |

| 38 - B1023 Inworth Road, Inworth | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | -709 | -714 |

| 101 - Kelvedon Road, north of Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +152 | +167 |

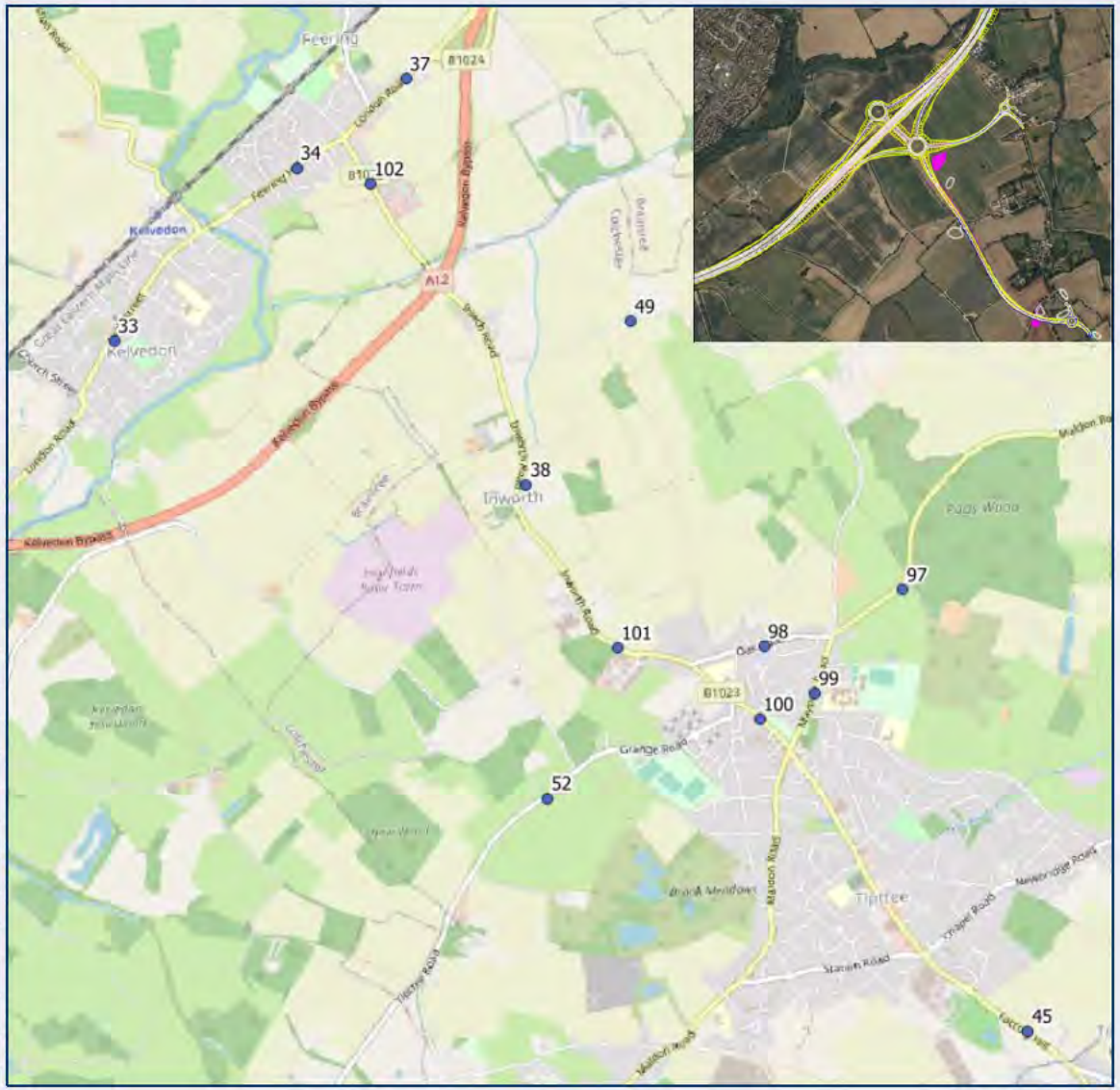
| 98 - Oak Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +51 | +32 |

| 100 - Kelvedon Road, Tiptree | | |
|---|---|---|
| | AM peak | PM peak |
| Change due to bypass | +96 | +116 |



# DS3 – traffic assessment 2027 (slide 2 of 2)

| Ref. | Location | Peak | DM - Without A12 Scheme | DS2 - With A12 Scheme | With Scheme & DS3 bypass | Change due to DS3 bypass |
|---|---|---|---|---|---|---|
| 33 | B1024 Kelvedon High Street | AM | 1,013 | 763 | 777 | +13 |
| | | PM | 1,003 | 887 | 883 | -4 |
| 34 | Feering Hill, Kelvedon | AM | 1,000 | 711 | 725 | +14 |
| | | PM | 1,029 | 859 | 859 | +0 |
| 37 | London Rd between Gore Pit and existing junction 24 | AM | 880 | 522 | 511 | -11 |
| | | PM | 956 | 464 | 462 | -2 |
| 38 | B1023 Inworth Road, Inworth | AM | 784 | 1,111 | 403 | -709 |
| | | PM | 846 | 1,132 | 418 | -714 |
| 45 | B1023 Oxley Hill, Tiptree | AM | 383 | 365 | 362 | -3 |
| | | PM | 387 | 409 | 404 | -5 |
| 49 | Kelvedon Road (between Messing & Inworth Road) | AM | 38 | 133 | 99 | -34 |
| | | PM | 45 | 109 | 95 | -14 |
| 52 | Grange Road, west of Tiptree | AM | 129 | 43 | 47 | +4 |
| | | PM | 155 | 78 | 80 | +2 |
| 97 | Colchester Road, east of Tiptree | AM | 678 | 535 | 513 | -22 |
| | | PM | 727 | 594 | 543 | -51 |
| 98 | Oak Road, Tiptree | AM | 140 | 185 | 236 | +51 |
| | | PM | 160 | 206 | 237 | +32 |
| 99 | Maypole Road, Tiptree | AM | 676 | 508 | 438 | -70 |
| | | PM | 691 | 540 | 464 | -77 |
| 100 | Kelvedon Road, Tiptree | AM | 757 | 928 | 1,024 | +96 |
| | | PM | 835 | 935 | 1,052 | +116 |
| 101 | Kelvedon Road, north of Tiptree | AM | 801 | 1,134 | 1,286 | +152 |
| | | PM | 890 | 1,158 | 1,325 | +167 |
| 102 | Inworth Road, Kelvedon | AM | 822 | 779 | 784 | +6 |
| | | PM | 892 | 900 | 915 | +16 |



# Messing

- We have received many representations regarding traffic numbers in Messing.
- Ordinarily roads of this type would not be included in our model. However, in response to concerns, we ran some tests to provide the requested information.

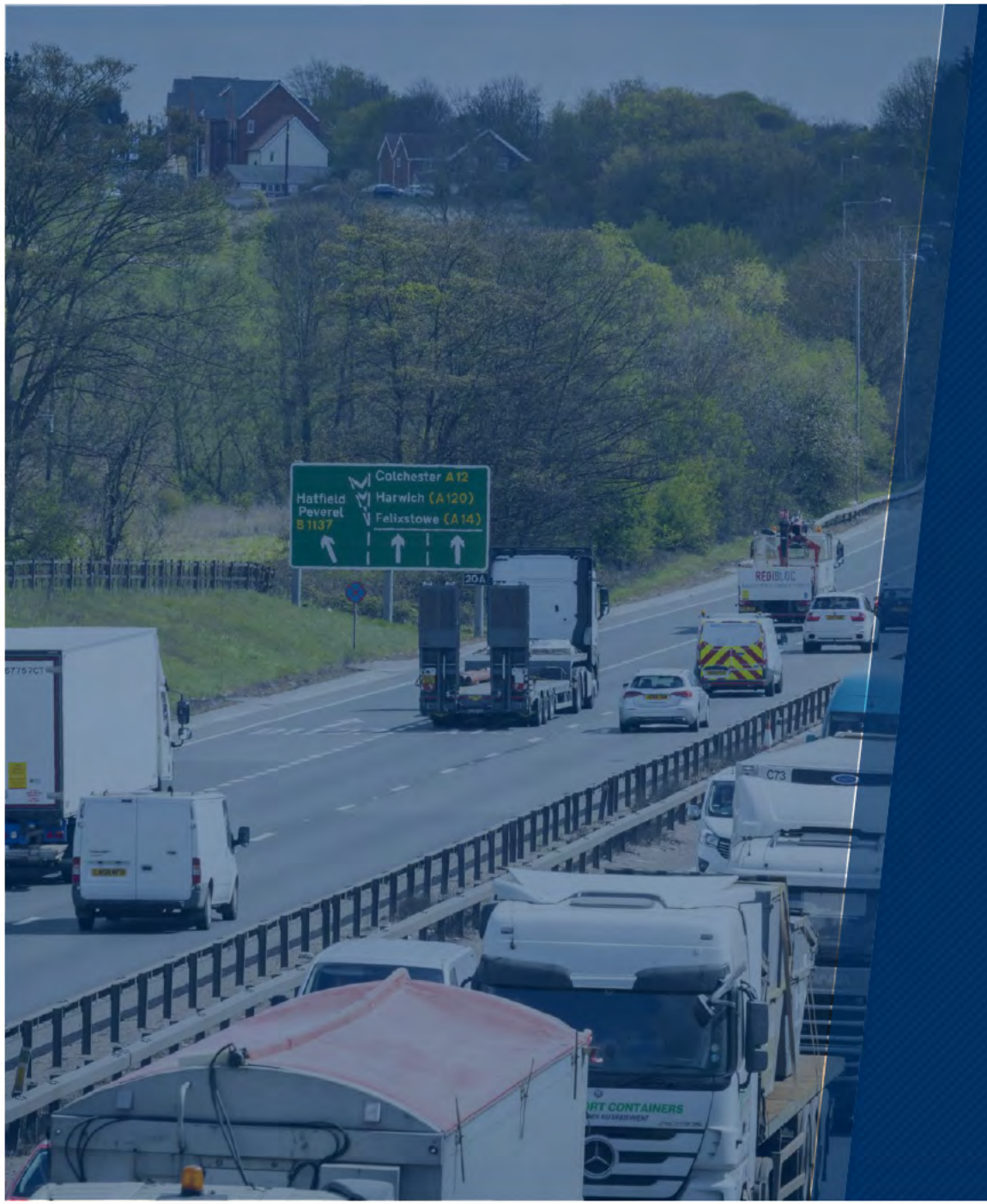
DS3

| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| DM - Without scheme | 44 | 47 |
| DS2 - (A12 & Inworth Rd Mitigations) | 133 | 109 |
| DS3 - (A12 & Bypass with J24 southern link) | 99 | 95 |
| Change due to bypass | -31 | -20 |

DS4

| 49 - Kelvedon Road (between Messing & Inworth Road) | | |
|---|---|---|
| | AM peak | PM peak |
| DM - Without scheme | 44 | 47 |
| DS2 - (A12 & Inworth Rd Mitigations) | 133 | 109 |
| DS4 - (A12 & Bypass with J24 northern link) | 49 | 63 |
| Change due to bypass | -89 | -60 |

- With our scheme, total traffic will be just over two vehicles per minute during the morning and evening peak.
- This is within the capacity of the road, and many similar roads around the country safely handle higher flows.
- As noted, the bypass would bring traffic in Messing back close to levels without the scheme.
- The bypass also attracts additional traffic to J24 from Tiptree, thereby increasing traffic levels though Tiptree centre (B1023)

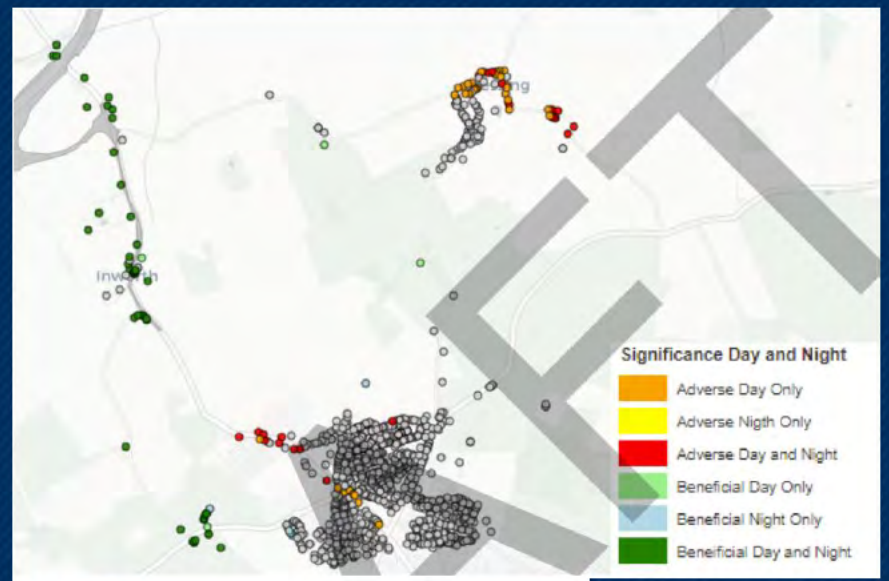



# Noise assessment

A detailed assessment has taken place across various factors. A key differentiator between our proposals and a bypass is noise as the expect effects of a bypass exceed SOEAL.  Due to the importance of the noise differentiator the next slides provide more information.

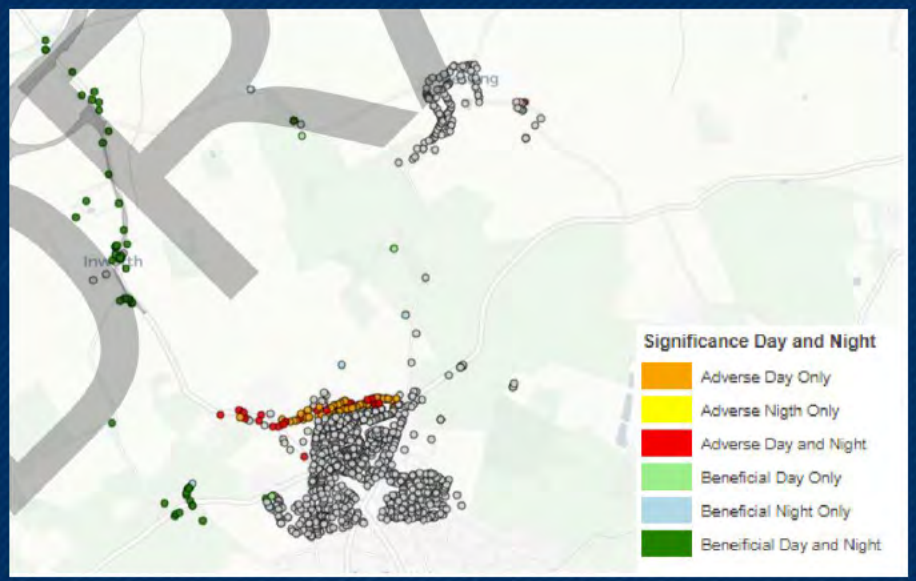
The full assessment across all factors capture in a detail report will be published in the Environmental Statement.

# Noise




DS3

Place holder

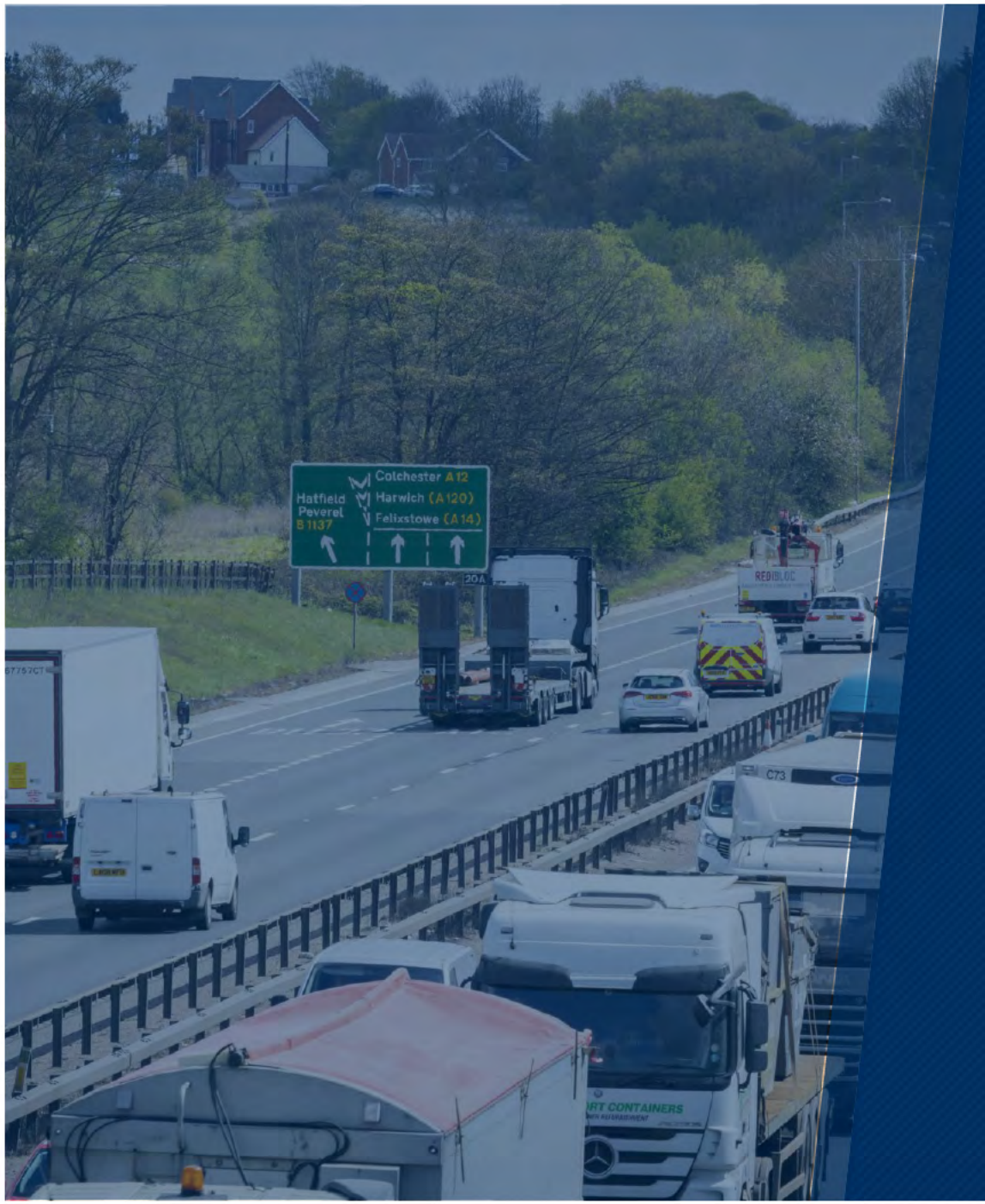



DS4

# Noise

**Table 8.3 Significant noise effects for proposed scheme and community bypass options**

| | Proposed scheme (DS2) | DS3 | DS4 |
|---|---|---|---|
| Significant adverse effects | 75 | 63 | 90 |
| Significant adverse effects above SOAEL | 4 | 20 | 19 |
| Significant beneficial effects | 110 | 153 | 165 |

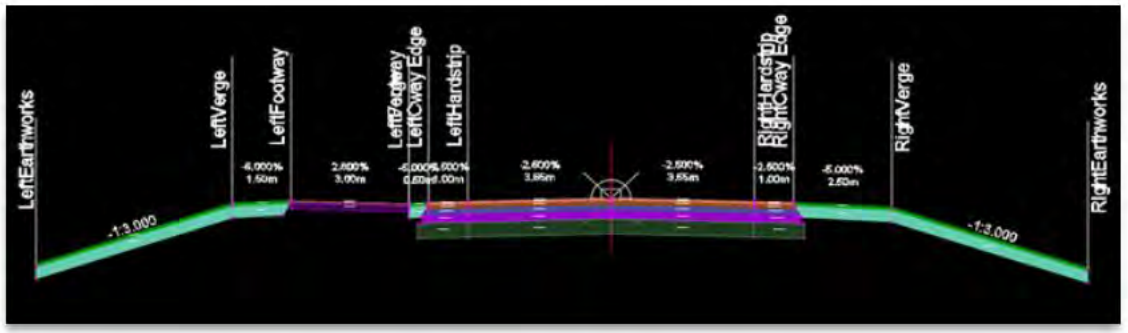



# Cost and land

# Cost and land assessment

NOTE: the northern link would require an additional structure, and would require additional land and cost more.

- We did utilise this proposal to assess the cost of the bypass section to the south of the A12 and the land required (circled in blue). We did this by creating a cross section compliant with standard.



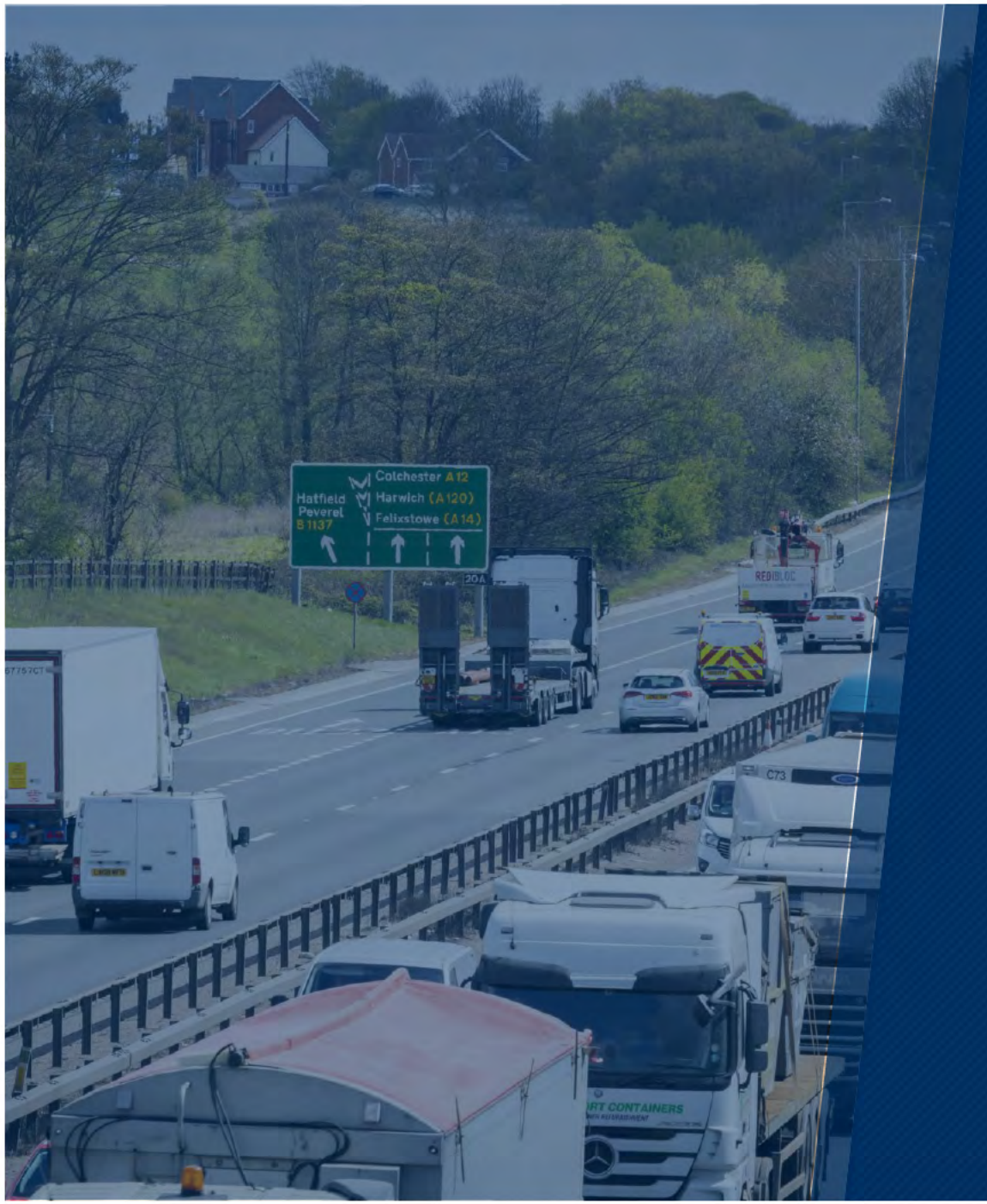

| A12 Inworth mitigation | Inworth Road bypass |
|---|---|
| **Land** | |
| 67,200sqm | 104,000sqm |
| **Costs (over and above any J24 configuration)** | |
| £3-4mil | £13-15mil |

## Summary

- A bypass, compared to our proposals, would reduce traffic in the community of Inworth, and would reduce traffic in Messing.
- A bypass, compared to our proposals, would increase traffic in Tiptree and the southern section of Inworth Road, the “Main Alternative" would also increase traffic on the northern section of Inworth Road
- SOAEL would not be exceeded in Messing under our proposals, but SOAEL would be exceeded at certain locations in Tiptree under the bypass proposals
- A bypass would create additional environmental effects and it would require a minimum of 40% more land, when compared to the mitigation measures on Inworth Rd.
- A bypass would be a minimum of £10,000,000 more expensive than the A12 proposals
- The scheme is proposing to address pinch points and flooding issues that a bypass would not address

## Conclusion

While a bypass would considerably reduce traffic from the central section of Inworth Road, as well as reduce traffic in Messing compared to our proposals, it would create noise effects that would put the A12 scheme’s DCO in jeopardy. In addition, the bypass would not just transfer traffic from one community to another, but draw additional traffic to Tiptree as the bypass would make Junction 24 more popular. On this basis the A12 cannot support the inclusion of a bypass within the scheme.




# Inworth Road - Our proposals

# Design for development consent application

To address historical pinch points and capacity:

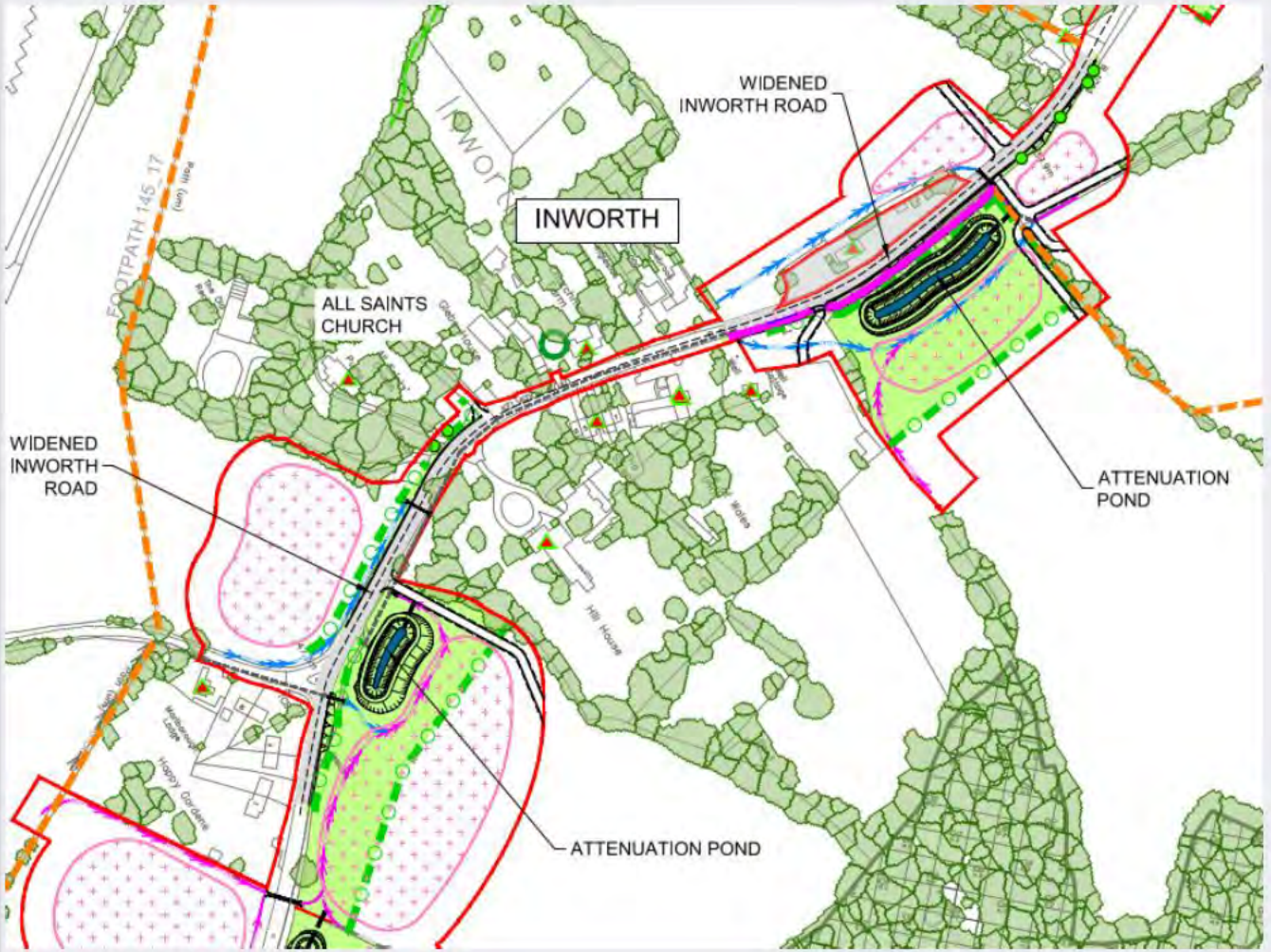
- Swept path analysis (vehicle tracking) software used to plot movements of articulated HGVs.
- In addition, first principles and standards (e.g. DMRB, MfS, ECC highways design guide) to inform width on straight sections.
- Detailed microsimulation of the corridor to test capacity.

From ECC *"where points remain the road width and reasons for not being able to increase it should be provided."*

- Through Inworth Village approximate 6.0m carriageway to remain to minimise impacts. Straight section allows for HGVs passing and acts as traffic calming.

To address historical drainage and surface water flooding.

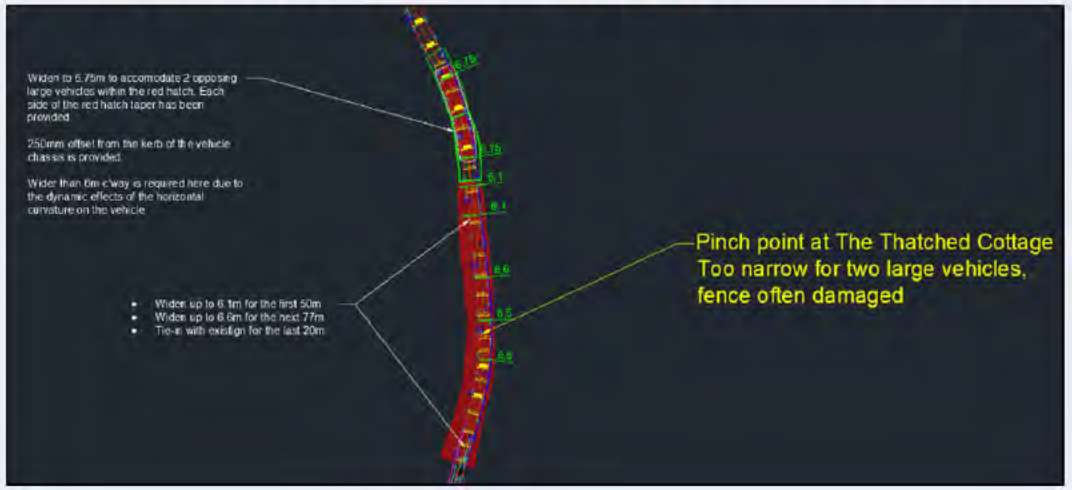
- Additional attenuation and flood mitigation areas, assessed as a 'worst case scenario'.

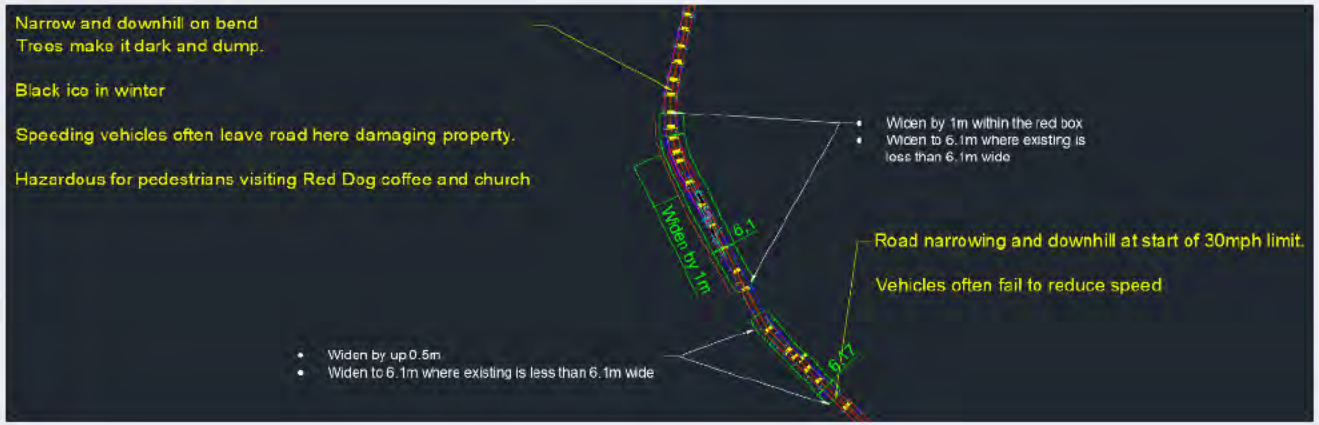


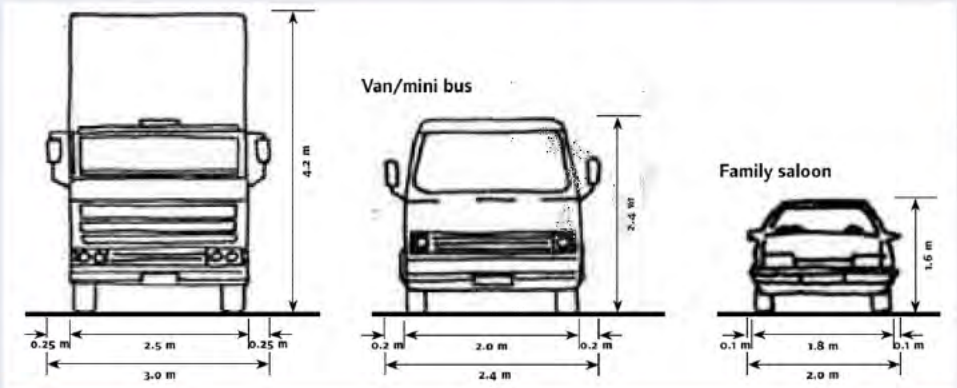
# Design for development consent application – swept path analysis

Examples of the swept path analysis are shown to the right.

- Pinch points raised by community addressed, in addition to those found by our analysis which were not raised.
- Swept path analysis used to inform widening on bends
- 6.1m proposed width on pinch points on straight sections.
- Additional widening would both increase land take, environmental impacts, and increase speeds and reduce driver caution.
- 16.5m articulated heavy goods vehicle used as the 'design vehicle', larger than the vehicle below from Manual for Streets.



# Design for development consent application – microsimulation (slide 1 of 2)

- Microsimulation is a way of modelling how traffic behaves on a road network when changes are made to the road layout or to the number of vehicles.
- We used microsimulation used to test the performance of the improved corridor, including buses and bus stops, private accesses and trip generators such as Perrywood Garden Centre. Our assessment factors in the increased traffic due to the A12 scheme.
- The table to the right presents the results from the microsimulation, showing that the average delays and journey times are similar in the Do Minimum (DM) and Do Something (DS2 – mitigation measures) scenarios.
- Videos of the microsimulation of these scenarios are on the following slide.

Table 6-1: Microsimulation results of Inworth Rd considering the Do Minimum (DM), Do Something 1 (DS1) and Do Something 2 (DS2) traffic scenarios. The figures listed are the average journey times (seconds) and the average delay (seconds).

**Inworth Road**

| Journey Times | Distance |
|---|---|
| Northbound | 1371.61m |
| Southbound | 1371.61m |

**DCO Traffic Flows**

Average Journey Times, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| AM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 92 | 96 | 92 |
| Southbound | 91 | 97 | 90 |

Average Journey Times, in seconds (10 runs)

| In Seconds | DM | DS1 | DS2 |
|---|---|---|---|
| PM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 87 | 89 | 88 |
| Southbound | 89 | 94 | 91 |

Average Delay, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| AM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 8 | 12 | 9 |
| Southbound | 8 | 12 | 7 |

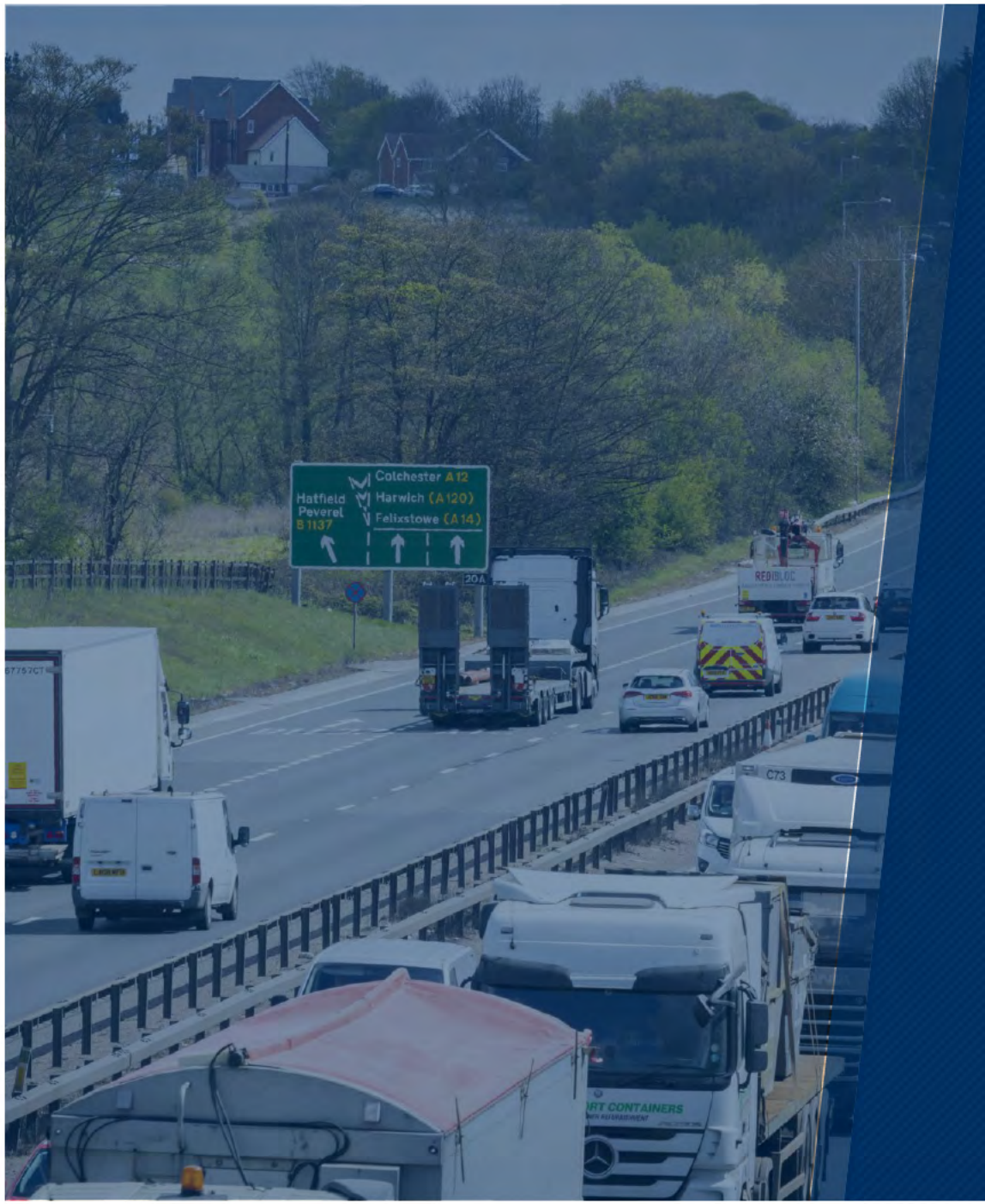
Average Delay, in seconds (10 runs)

| | DM | DS1 | DS2 |
|---|---|---|---|
| PM Peak | Existing Inworth Road Network | Existing Inworth Road Network | Existing Inworth Road Network - with Improvement Proposals |
| Northbound | 4 | 6 | 5 |
| Southbound | 6 | 10 | 7 |

# Design for development consent application – microsimulation (slide 1 of 2)

- Do Something 1 (DS1) scenario – Existing Inworth Road, with the new junction 24 and no mitigation measures.
- Location is facing The Red Dog restaurant, looking north to J24.

- Do Something 2 (DS2) scenario – Inworth Road, with the new junction 24 and proposed mitigation measures.
- Location is facing The Red Dog restaurant, looking north to J24


Colchester A12
Harwich (A120)
Felixstowe (A14)
Hatfield
Peverel
B1137
20A
REDIBLOC
C73

# Next steps

- The project has received technical reports from the community and a written response will be provide shortly
- We intend to hold an in-person event in the community shortly but would be grateful for your thoughts on the format of this
- We will submit our application for development consent within the next month
- Despite the project not providing a bypass, we of course would like to work with the parish, within the deliverability of the A12 project to see how local concerns can be assuaged
- We would like to discuss designated fund opportunities

## LEGEND

### BOUNDARIES

- ORDER LIMITS
- ORDER LIMITS EXCLUSION ZONE
- LOCAL AUTHORITY BOUNDARY

### HIGHWAYS

- NEW OR REALIGNED PUBLIC HIGHWAY ROAD
- NEW OR REALIGNED MAINTENANCE ACCESS / PRIVATE MEANS OF ACCESS
- EXISTING PUBLIC RIGHT OF WAY
- EXISTING CYCLE TRACK
- EXISTING PUBLIC RIGHT OF WAY - STOPPED UP
- NEW OR IMPROVED FOOTPATH / BRIDLEWAY
- PROPOSED / IMPROVED CYCLE TRACK
- PROPOSED / IMPROVED FOOTWAY
- NEW PERMISSIVE PATH
- PROPOSED CONTROLLED CROSSING
- PROPOSED UNCONTROLLED CROSSING
- PROPOSED TECHNOLOGY GANTRY (CANTILEVER)
- PROPOSED TECHNOLOGY GANTRY
- PROPOSED GANTRY MOUNTED DIRECTION SIGN
- PROPOSED LIGHTING COLUMN

### ENGINEERING & CONSTRUCTION

- PROPOSED CONSTANT CUTTING
- PROPOSED CONSTANT EMBANKMENT
- PROPOSED MITIGATION EARTHWORKS
- PROPOSED MITIGATION EARTHWORKS (BORROW PITS)
- PROPOSED CARRIAGEWAY/ ROAD
- PROPOSED FOOTWAY / HARDSTANDING / ISLAND
- PROPOSED VERGE
- NEW OR MODIFIED BRIDGE DECK
- EXISTING BRIDGE DECK (TO BE RETAINED)
- EXISTING BRIDGE DECK (TO BE DEMOLISHED)
- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL

### DRAINAGE

- EXISTING CULVERT (TO BE RETAINED)
- PROPOSED CULVERT - MINOR WATERCOURSE
- EXISTING CULVERT (TO BE EXTENDED)
- EXISTING CULVERT (TO BE ABANDONED)
- PROPOSED WATERCOURSE DIVERSION (plan only)
- WATER FLOW DIRECTION
- PROPOSED CUT-OFF DITCH (FILTER DRAIN IN SPATIAL CONSTRAINT AREA)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE RETAINED)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE REALIGNED)
- EXISTING DITCH / MINOR WATERCOURSE (TO BE ABANDONED)
- PROPOSED ATTENUATION POND (WITH OUTFALL CONNECTION)
- PROPOSED DRAINAGE OUTFALL PIPE
- PROPOSED UNDERGROUND STORAGE UNITS
- PROPOSED FLOOD MITIGATION AREA
- PROPOSED FLOOD BUND

### ENVIRONMENT

EXISTING

- EXISTING OPEN WATER
- EXISTING TREES, HEDGES AND SHRUBS
- EXISTING ANCIENT WOODLAND
- EXISTING ANCIENT, NOBLE AND VETERAN TREES
- EXISTING CONSERVATION AREAS
- EXISTING LOCAL NATURE RESERVE
- EXISTING LISTED BUILDINGS
- EXISTING REGISTERED PARKS AND GARDENS
- EXISTING SCHEDULED MONUMENT
- EXISTING TREES PROTECTED BY TREE PRESERVATION ORDER (AREA OR INDIVIDUAL TREE)

PROPOSED

- PROPOSED OPEN WATER
- PROPOSED WOODLAND PLANTING OF TREES AND SHRUBS
- PROPOSED WET WOODLAND
- PROPOSED TALL SCREEN PLANTING TO ELEVATE FLIGHT PATH OF BATS & BARN OWLS
- PROPOSED INDIVIDUAL TREES
- PROPOSED HEDGE
- PROPOSED HEDGE WITH INTERMITTENT TREES
- PROPOSED GRASSLAND
- PROPOSED INTERMITTENT TREES AND SHRUBS
- PROPOSED ECOLOGY POND (INDICATIVE)
- PROPOSED AQUATIC AND MARGINAL PLANTING (INDICATIVE)
- PROPOSED ECOLOGY MITIGATION AREA / ECOLOGY PROTECTION MEASURES
- PROPOSED NOISE BARRIER
- PROPOSED REPLACEMENT LAND

national highways


NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S

national highways

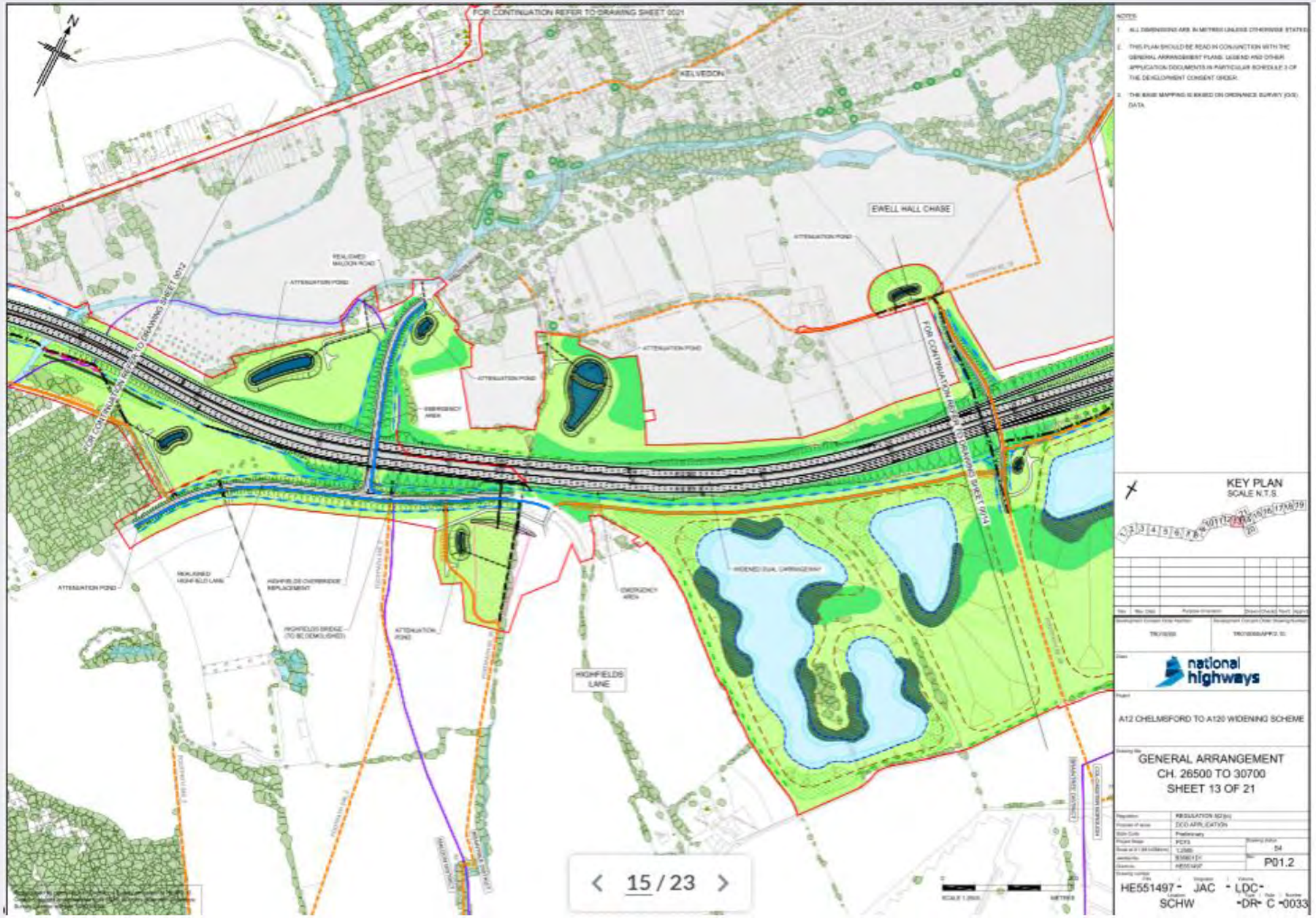
A12 CHELMSFORD TO A120 WIDENING SCHEME

GENERAL ARRANGEMENT
CH. 25100 TO 26500
SHEET 12 OF 21

| | |
|---|---|
| Regulation | REGULATION 5(2)(p) |
| Purpose of Issue | DCO APPLICATION |
| Status Code | Preliminary |
| Project Stage | PCF3 |
| Drawing Status | S4 |
| Scale at A1 / at A3 | 1:2500 |
| Drawing No. | P01.1 |
| Originator | HE551497 - SCHW |
| Discipline | JAC |
| Volume | LDC |
| Type | DR |
| Role | C |
| Number | 0032 |



national highways




NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S.

national highways

A12 CHELMSFORD TO A120 WIDENING SCHEME

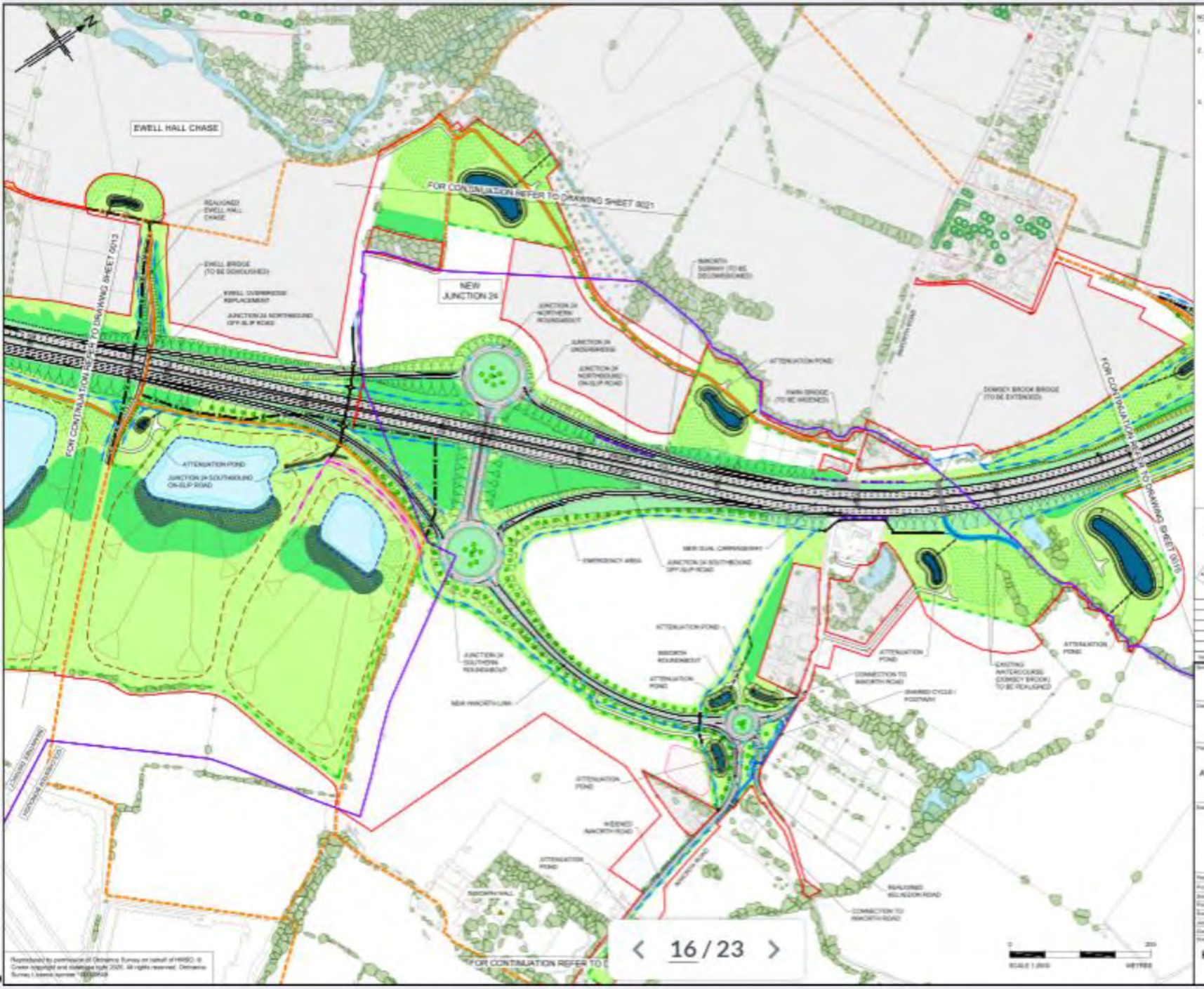
GENERAL ARRANGEMENT
CH. 26500 TO 30700
SHEET 13 OF 21

| | |
|---|---|
| Regulation | REGULATION 5(2)(o) |
| Purpose of Issue | DCO APPLICATION |
| Style Guide | Preliminary |
| Project Stage | PCF3 |
| Drawing Status | S4 |
| Identity No. | P01.2 |

HE551497 - JAC - LDC - DR - C - 0033
SCHW



national highways




NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT PLANS, LEGEND AND OTHER APPLICATION DOCUMENTS IN PARTICULAR SCHEDULE 3 OF THE DEVELOPMENT CONSENT ORDER.
3. THE BASE MAPPING IS BASED ON ORDNANCE SURVEY (OS) DATA.

KEY PLAN
SCALE N.T.S.



national highways

A12 CHELMSFORD TO A120 WIDENING SCHEME

GENERAL ARRANGEMENT
CH. 30700 TO 32200
SHEET 14 OF 21

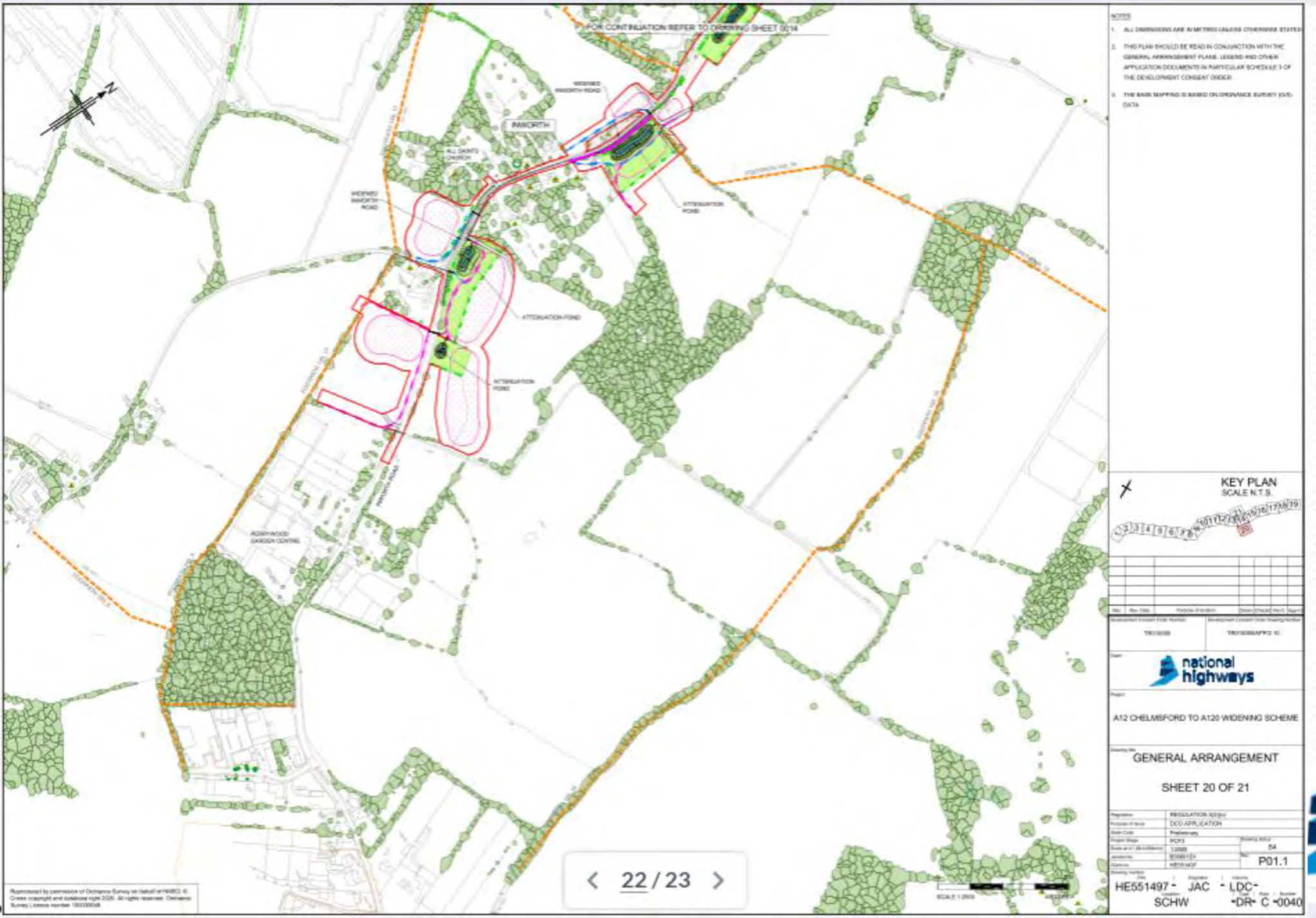
| | |
|---|---|
| Preparation | REGULATION 6(2)(a) |
| Purpose of issue | DCO APPLICATION |
| Scale Code | Preliminary |
| Project Stage | PCF3 |
| Scale at A1 (594 x 841mm) | 1:2000 |
| Drawing No. | 54 |
| Drawing No. | P01.2 |

Drawing number: HE551497 - Originator: JAC - Volume: LDC - Type: DR - Role: C - Number: 0034
Location: SCHW





national highways




national highways