

Forward Plan reference number: FP/917/12/20

Report title: Outline Business Case for removal of Air Quality Exceedances on East Mayne, Basildon and changes to crossing locations on East Mayne, Basildon	
Report to: Councillor Kevin Bentley, Deputy Leader and Cabinet Member for Infrastructure	
Report author: Andrew Cook, Director, Highways and Transportation	
Date: 9 February 2021	For: Decision
Enquiries to: Mark Robinson, Principal Transportation and Infrastructure Planner, mark.robinson@essex.gov.uk	
County Divisions affected: Basildon Laindon Park and Fryerns; Basildon Pitsea; Wickford Crouch	

1. Purpose of Report

This report seeks approval for a proposal to implement an alternative crossing layout across East Mayne, Basildon between Christopher Martin Rd and Cricketers Way. The proposed scheme is necessary in order to deliver compliance with the Air Quality Directive which requires improvements in the 'shortest possible time'.

2. Recommendations

- 2.1. Agree to the proposed scheme which removes the route along the central reservation on East Mayne, Basildon and therefore removes the air quality receptor location where an exceedance occurs.
- 2.2. Agree to the proposals for an upgraded and widened shared footway/cycleway along the west side of East Mayne in the vicinity of Sainsbury's.
- 2.3. Agree that the Director, Highways and Transportation shall submit an Outline Business Case (OBC) to the Joint Air Quality Unit to develop the Basildon Air Quality Management Plan proposals, and if this is approved, to submit a Full Business Case to the Joint Air Quality Unit for the funding to implement the proposed schemes set out in recommendation 2.1 and 2.2 above.
- 2.4. Agree that mitigation measures shall be investigated to address the concerns raised regarding the additional crossing movements introduced by the recommended schemes and that the Director, Highways and Transportation shall be authorised to add such measures to the Full Business Case if suitable mitigation measures can be found during the design phase.

3. Summary of issue

- 3.1. Essex County Council and Basildon Borough Council received a Directive issued on behalf of the Secretary of State for Environment, Food and Rural Affairs (DEFRA) to submit an Outline Business Case to the Joint Air Quality Unit (set up by DEFRA and the Department for Transport (DfT)) that proposes measures on East Mayne in Basildon (which is just south of the A127) that will, in the shortest possible time, bring the annual mean nitrogen dioxide (NO₂) emissions to below the annual mean level of 40 micrograms per cubic metre (µg/m³) as set by the EU Air Quality Directive. The Air Quality Directive is implemented in the UK through the Air Quality Standards Regulations 2010.
- 3.2. A joint DEFRA / DfT Air Quality Unit (JAQU) has been set up to oversee the delivery of all Air Quality Directives issued to Local Authorities across England. JAQU guidance assumes that a Charging Clean Air Zone (CAZ) (which charges certain vehicles to enter a defined zone) is the option that is most likely to achieve air quality compliance in the shortest possible time. Any other preferred option must be shown to be able to deliver compliance sooner than a CAZ default option.
- 3.3. The Directive required this work to be submitted by 31st July 2020. This deadline was met but subsequent discussion about the work and time involved to deliver a CAZ was such that it could not bring about compliance in the shortest possible time. Discussions with the Minister and the JAQU team have concluded that an engineering option (Appendix 1) to remove public access from the areas of exceedance is an acceptable approach as long as it is accompanied by a benchmark CAZ that confirms the timescale for delivery of air quality ('AQ') compliance.
- 3.4. A CAZ has been discounted on the basis that:
 - the development and delivery of a CAZ could not be achieved in the shortest possible time as a result of the extensive traffic modelling which would be required; and
 - the introduction of a CAZ at this location would have a detrimental impact on the local economy as it would make the zone less attractive to businesses than other local areas.
- 3.5. The proposal to remove public access to the existing route along the central reservation and therefore remove the location of the exceedance (see Appendix 1) is considered a viable option as, even though this measure alone does not result in any improvements to local air quality, it ensures that the public won't be impacted. This proposal is likely to be approved by JAQU.
- 3.6. A public engagement exercise has been undertaken (See Appendix 2). Objections have been received identifying that for certain journeys the proposed option significantly increases the number of crossing points for pedestrians and cyclists and results in longer journeys. This is recognised as a disadvantage but removing public access to an area of poor air quality in the shortest possible time, as required by the ministerial Directive, makes the changes to the route necessary as no other suitable alternatives have been identified. The feedback from the engagement exercise also included a number of issues raised by cyclists regarding the increase in crossing points

in the north/south direction and the additional journey time that would be added. The need to review mitigation measures for cyclists and pedestrians traveling between Wickford and Basildon will be considered and (if suitable measures can be identified in the final design stages) these will be submitted as part of the FBC.

3.7. The DfT guidance note LTN 1/20 issued in July 2020 advises that routes and crossings should be segregated where at all possible and the route should be direct. A review of the scheme design against the design guidance was undertaken. The option proposed, while not providing a fully segregated route, does take account of the principle to make the route as wide as possible and provide a route that cyclists can use throughout without having to dismount.

3.8. A Road Safety Assessment will be carried out in due course to ensure the suitability of the proposed changes.

3.9. The proposed relocation to the crossings is designed to ensure compliance with the national air quality strategy as soon as the existing route along the central reservation is removed. This is programmed for delivery by the end of 2021.

3.10. **Scheme Design**

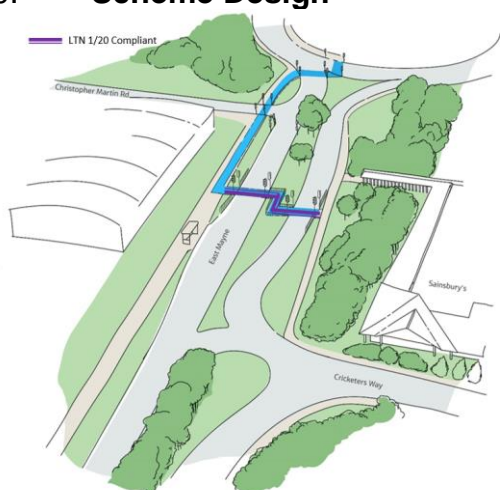


Figure 1

This scheme design provides new crossing locations and removes the central reservation route while maintaining the existing shared cycle/pedestrian design. It is the option which is most likely to deliver compliance with the Air Quality Directive standards in this location in the shortest possible time and therefore the only way to comply with the direction issued by DEFRA. Separate versions of this layout have been investigated and discounted in line with DfT Local Transport Note LTN 1/20. (See Appendix 1).

Options

The following options have been considered.

3.11. **Do Nothing**

There are exceedances of legal limits of NO₂ which the Council has been directed to resolve in the shortest possible time. DEFRA is very unlikely to withdraw the Direction, placing the Council at risk of enforcement action if steps are not taken. This option is not recommended.

3.12. Implement a Charging Clean Air Zone (CAZ)

This is the default recommendation from DEFRA as it is the option most likely to encourage vehicle owners to upgrade their vehicles to those with engine types that produce low emissions. Low emission engines would have a positive benefit to air quality objectives. This option has been considered as part of the benchmark CAZ but cannot be developed and implemented before other options can be delivered. Therefore, a CAZ cannot deliver compliance with the air quality directive in the shortest possible time. This option is not recommended.

3.13. Implement an alternative crossing layout on East Mayne

A number of possible feasibility designs were considered for the removal of the central reservation receptor (see Appendix 1). The options were modelled to assess their ability to address the air quality exceedance and to ensure that no other air quality exceedances were created. The layout that performed best has then been reassessed to consider the route in terms of DfT guidance LTN 1/20. The option proposed (shown in 5.3.1 below) is the one that can be delivered in the shortest possible time but takes into account LTN 1/20 in the layout and width of the crossings in the vicinity of Sainsbury's. The recommended scheme is likely to be considered a viable option by JAQU. **This is the recommended option.**

Issues for consideration

3.14. Financial Implications

3.14.1. Revenue funding has been received, totalling £850,000 from DEFRA to cover the cost of investigating ways of improving air quality in Basildon. In total £552,369 of this has been spent in 2020/21 so far. This decision enables Essex County Council to seek an additional £1.9m to final design and tender stage and preparation of a Full Business Case (FBC). The funding already received will not be recovered if this scheme does not proceed.

3.14.2. ECC will be expected to cover any cost overrun. Significant work was undertaken to ensure that all costs presented to JAQU were robust and included sufficient contingency.

3.14.3. An Outline Business Case (OBC) needs to be submitted to JAQU, as well as to Recovery Advisory Board. If this is approved a Full Business Case (FBC) will be prepared for funding to implement the scheme. The development of the costs and management of the scheme for the OBC and the subsequent FBC are in accordance with HM Treasury Green Book. The current estimated implementation cost of this scheme is shown in the Confidential Appendix. This is reflected in the Outline Business Case

to be submitted to JAQU. Any ongoing revenue costs will be managed within the existing Highways Commissioning budget.

3.14.4. Should the grant not be used in full in delivering this scheme JAQU require the funding to be invested in delivering further air quality improvements and/or supporting individuals and business affected by local air quality plans.

3.14.5. The revenue cost of managing and maintaining the scheme will be included in the Final Business Case and will be contained within the existing Highways Commissioning budgets.

3.14.6. If Essex County Council is successful in securing this funding then additional approval will need to be sought in order for this project to be added into the Capital Programme.

4. Legal implications

4.1.1. The Council have been directed to consider measures to improve air quality on East Mayne, Basildon. Whilst there are other measures that will deliver compliance, the proposed scheme achieves compliance with the direction as quickly as possible. The Council should ensure that the proposed scheme will meet JAQU's requirements.

4.1.2. Under section 122 of the Road Traffic Regulation Act 1984, the Council, as highway authority, has a duty to exercise its functions to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off the highway.

4.1.3. In doing so the Council must also consider:

- (a) the desirability of securing and maintaining reasonable access to premises;
- (b) the effect on the amenities of any locality affected and (without prejudice to the generality of this paragraph) the importance of regulating and restricting the use of roads by heavy commercial vehicles, so as to preserve or improve the amenities of the areas through which the roads run;
- (c) the strategy prepared under section 80 of the Environment Act 1995 (national air quality strategy);
- (d) the importance of facilitating the passage of public service vehicles and of securing the safety and convenience of persons using or desiring to use such vehicles; and
- (e) any other matters appearing to ECC to be relevant.

5. Equality and Diversity implications

5.1. The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:

- a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc on the grounds of a protected characteristic unlawful.
- b) Advance equality of opportunity between people who share a protected characteristic and those who do not.
- c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.

5.2. The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).

5.3. The outcome of the equality impact assessment indicated that the proposals will not have a disproportionately adverse impact on any people with a particular characteristic and the removal of the central reservation exceedance location will have a positive impact on the health of both younger and older people. However, the proposal removes the current route along the central reservation and therefore the new route is less direct for pedestrians and cyclists for many journeys including between Wickford and Basildon.

5.4. This potentially increases the number of crossings that must be used along that route from two to five. As such it does have a negative impact particularly on cyclists, who are the main users of the route between the two towns and could result in them choosing to use a less safe route on the main carriageway. If implemented the new route will be very clearly signed to ensure cyclists and pedestrians are sure of the route they should use.

5.5. There will be publicity to promote the route and to ensure that users are aware that this route avoids areas of poor air quality. Publicity and local communications will also be used to discourage cyclists from using a less safe route.

5.6. Where feasible the route will be constructed in accordance with the new Local Transport Note 1/20 for the design of pedestrian/cycle routes.

5.7. The local data shows that there is a higher percentage of people in lower socio-economic groups living in rented housing closer to the town centre. They work in local businesses and travel on routes where the air quality is currently poor. This group is more likely to walk or cycle and are more at risk from poor air quality, therefore the improvement in air quality will have a positive impact on this group.

5.8. Regarding the environmental impacts, e.g. housing, transport links/rural isolation, the proposals to reduce the NO₂ pollutants along East Mayne will enable Basildon to deliver compliance with the national air quality requirements while not having adverse impacts on the surrounding areas.

6. List of appendices

- 6.1. Appendix 1 – Options considered
- 6.2. Appendix 2 - Responses to the engagement exercise informing the public about the proposals
- 6.3. Appendix 3 – Letter from Parliamentary Under Secretary of State at the Department for Environment, Food and Rural Affairs
- 6.4. Appendix 4 – Draft Outline Business Case for the implementation of the new crossing locations
- 6.5. Appendix 5 - Equality Impact Assessment
- 6.6. Confidential Appendix – Estimated works cost

7. List of Background papers

- The Decision to implement the 50 mph speed limit on the A127 that delivered compliance with the AQ Directive for the A127 (Forward Plan number FP-470-07-19)
- Ministerial Directive to Essex CC and Basildon Council June 2019
- DfT LTN 1/20 Cycle Infrastructure
- Options Appraisal Report
- ECC LCWIP (Draft)
- Basildon Borough Cycling Action Plan
<https://www.essexhighways.org/uploads/docs/Basildon%20CAP.pdf>
- Road Death Investigation Manual (National Policing Improvement Agency)
- Further information and Frequently Asked Questions:
www.essex.gov.uk/airquality

I approve the above recommendations set out above for the reasons set out in the report.	Date
Councillor Kevin Bentley, Deputy Leader and Cabinet Member for Infrastructure	26.2.21

In consultation with:

Role	Date
Andrew Cook, Director, Highways and Transportation	15.2.21
Executive Director, Finance and Technology (S151 Officer)	
Stephanie Mitchener on behalf of Nicole Wood	25.2.21
Director, Legal and Assurance (Monitoring Officer)	
Katie Bray on behalf of Paul Turner	16.2.21