

The Lake Lothing (Lowestoft) Third Crossing Order 201[*]



Lake Lothing
**THIRD
CROSSING**

Document 5.2: Consultation Report Appendices

Appendix 4 Consultation Material

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Consultation materials

This is the non-technical material created for the statutory public consultation

- 4.1 Consultation leaflet
- 4.2 Consultation brochure
- 4.3 Consultation questionnaire
- 4.4 Design Process Summary
- 4.5 Q&A
- 4.6 Consultation booklet
- 4.7 Preliminary Environmental Information Report (PEIR)
- 4.8 Non-technical summary of the PEIR
- 4.9 Consultation leaflet with consultation extension

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Consultation Report

Appendix 4.1

Consultation
leaflet

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Lake Lothing

THIRD CROSSING

HAVE YOUR SAY

**on a new crossing over Lake Lothing
from Waveney Drive to Peto Way**

PUBLIC CONSULTATION

Monday 4 September – Monday 16 October 2017



Suffolk
County Council

Introduction

Suffolk County Council is seeking your views on our proposals for a new crossing over Lake Lothing in Lowestoft.

The existing bridges over the lake at Mutford Lock and the A47 Bascule Bridge are inadequate to meet current and future traffic demand. Delays and congestion are a common occurrence for drivers, particularly during peak hours, and pedestrians and cyclists often have long and difficult journeys as they travel across the town.

A crossing will open up opportunities for regeneration and create a new link between north and south Lowestoft.

This new crossing presents an opportunity to introduce a focal point for the town, enhancing its identity. This will help to regenerate the area and attract new investment in the local economy.

This is a significant project for Lowestoft and it is important residents, businesses, landowners and all those affected by, or interested in, the project have their say.

THE PROPOSED PROJECT

Our proposals for the Lake Lothing Third Crossing aim to improve journeys and connectivity, help meet the aspirations for economic prosperity and provide a new feature in the town for all users to enjoy for years to come.

The project will include a new multi-span bridge from Waveney Drive to Peto Way. The bridge will be a single carriageway road with facilities for pedestrians and cyclists.

The proposed design includes new roundabouts to the north and south of the lake to help connect the traffic smoothly into the existing road network, as well as provide public spaces for people to enjoy.

Changes to the road layout include a new access from Waveney Drive to Riverside Business Park and closure of Durban Road at its junction with Waveney Drive.

ENVIRONMENTAL IMPACTS

We aim to minimise impacts on the environment, local communities, local businesses, road users and residents as much as possible.

As part of the consultation, a report called the Preliminary Environmental Information Report (PEIR) has been produced to give information about the potential environmental effects and measures to reduce them. This report and the Non-Technical Summary can be viewed online or at the consultation events.



THIRD CROSSING BENEFITS



Reduce congestion and delay on the existing bridges over Lake Lothing



Reduce congestion in town centre



Reduce community severance between north and south Lowestoft

Your Local Consultation Events

We are holding a series of events to provide an opportunity to meet the project team and ask questions. Everyone who is interested in the project is welcome to attend any of our drop-in events.

Location	Date	Time
Gunton Estate Community Hall Hollingsworth Road, Lowestoft, Suffolk, NR32 4AY	Tuesday 5 September 2017	12noon – 7pm
Lowestoft Library Clapham Road South, Lowestoft, Suffolk, NR32 1DR	Saturday 9 September 2017	10.30am – 4.30pm
Spinnaker Room (Kessingland Library) Marram Green, Hall Road, Kessingland, Suffolk, NR33 7AH	Tuesday 12 September 2017	2.30pm – 7.30pm
Kirkley Centre 154 London Road South, Lowestoft, NR33 0AZ	Thursday 14 September 2017	1pm – 7.30pm
Waveney District Council Council Offices, Riverside, 4 Canning Road, Lowestoft, Suffolk, NR33 0EX	Friday 22 September 2017	2pm – 7pm
Commodore Mission Hall 26 Gorleston Road, Oulton Broad, Lowestoft, Suffolk, NR32 3AG	Monday 25 September 2017	2pm – 7pm
St Marks Church, Bridge Road, Oulton Broad, Lowestoft, Suffolk, NR33 9JX	Friday 29 September 2017	1pm – 7pm

You can also view information at the deposit locations below during normal opening hours:

Waveney District Council	Lowestoft Library	Oulton Broad Library	Waveney District Council - Marina Customer Service Centre	Kessingland Library	Suffolk County Council
Council Offices, Riverside, 4 Canning Road, Lowestoft, Suffolk, NR33 0EX	Clapham Road South, Lowestoft Suffolk, NR32 1DR	Bridge Road, Lowestoft, Suffolk, NR32 3LR	Marina, Lowestoft, Suffolk, NR32 1HH	Marram Green, Hall Road, Kessingland, Suffolk, NR33 7AH	Endeavour House, 8 Russell Road, Ipswich, Suffolk, IP1 2BX



View documents and complete a questionnaire from 4 September at
www.suffolk.gov.uk/lakelothing3rdcrossing



Encourage
people to walk
and cycle



Improve bus
journey times
and reliability



Reduce
accidents



Open up opportunities
for regeneration and
development



Accommodate
planned
growth

Have your say

The consultation is your opportunity to express your views on the project. This consultation will run for six weeks from **Monday 4 September - Monday 16 October 2017**.

PLANNING APPLICATION PROCESS

The Secretary of State for Transport has directed that Lake Lothing Third Crossing is to be treated as a Project of National Significance for the purposes of the Planning Act 2008. As such, we are required to make an application for a Development Consent Order (DCO) to obtain permission to construct, operate and maintain the project.

Following the formal public consultation, we will carefully consider all responses received and produce a report on the consultation.

This report will form part of our DCO application, to the Secretary of State.

The Planning Inspectorate will examine the application and make a recommendation to the Secretary of State for Transport, who will decide on whether or not the project will go ahead.

We currently intend to make our application for development consent in early 2018.

Your comments

Between **Monday 4 September, 12.01am and Monday 16 October 2017, 11.59pm** you can use the following methods to respond to the public consultation:

- Go online to access the consultation documents and fill out a questionnaire at: **www.suffolk.gov.uk/lakelothing3rdcrossing**

- Complete a questionnaire or send other feedback to us at:

LL3X Consultation Team
Freepost RTUL-KAKE-BCTR
PO Box 73943 (Lake Lothing)
London
EC4P 4HN

- View and pick up consultation documents and a questionnaire at Lowestoft, Oulton Broad and Kessingland Libraries, the council offices at Riverside, Waveney District Council's Marina Customer Service Centre or Suffolk County Council's Endeavour House in Ipswich.
- Attend a public consultation event and complete a questionnaire or leave one at a deposit location.

PROJECT PROGRESS



Contact the project team

Email: lakelothing3rdcrossing@suffolk.gov.uk Call: 03456 031 842 (open Mon-Fri 8.30am-6pm)

If you need help to understand this information in another language please call 03456 066 067.

Se precisar de ajuda para ler estas informações em outra língua, por favor telefone para o número abaixo. 03456 066 067

Portuguese

Jeżeli potrzebujesz pomocy w zrozumieniu tych informacji w swoim języku zadzwoń na podany poniżej numer. 03456 066 067

Polish

এই লেখাটি যদি অন্য ভাষাতে বুঝতে চান তাহলে নিচের নম্বরে ফোন করুন 03456 066 067

Bengali

Jeigu jums reikia šios informacijos kita kalba, paskambinkite 03456 066 067

Lithuanian

Dacă aveți nevoie de ajutor pentru a înțelege această informație într-o altă limbă, vă rugăm să telefonați la numărul 03456 066 067

Romanian

Если для того чтобы понять эту информацию Вам нужна помощь на другом языке, позвоните, пожалуйста, по телефону 03456 066 067

Russian

If you would like more information in another format, including audio or large print, please call 03456 066 067.



Consultation Report Appendix 4.2

Consultation
brochure

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Lake Lothing

THIRD CROSSING

HAVE YOUR SAY

**on a new crossing over Lake Lothing
from Waveney Drive to Peto Way**

PUBLIC CONSULTATION

Monday 4 September – Monday 16 October 2017



Suffolk
County Council

A NEW CROSSING OVER LAKE LOTHING IN LOWESTOFT

Suffolk County Council is seeking your views on our proposals for a new crossing over Lake Lothing in Lowestoft.

The existing bridges over the lake at Mutford Lock and the A47 Bascule Bridge are inadequate to meet current and future traffic demand. Delays and congestion are a common occurrence for drivers, particularly during peak hours, and pedestrians and cyclists often have long and difficult journeys as they travel across the town.

A crossing will open up opportunities for regeneration and create a new link between north and south Lowestoft.

This new crossing presents an opportunity to introduce a focal point for the town enhancing its identity. This will help to regenerate the area and attract new investment in the local economy.

The Lake Lothing Third Crossing consists of a multi-span single carriageway bridge from Waveney Drive on the south side, to Peto Way on the north side. The section of the bridge over the lake has been designed higher than the existing Bascule Bridge, which will minimise the need to open it. The crossing includes provision for pedestrians and cyclists.

The proposed design includes new roundabouts to the north and south of the lake to help connect the traffic smoothly into the existing road network as well as public spaces for people to enjoy.

Changes to the road layout include a new access from Waveney Drive to Riverside Business Park and closure of Durban Road at its junction with Waveney Drive.

This is a significant project for Lowestoft and it is important residents, businesses, landowners and all those affected by, or interested in, the project have their say on the scheme.

WHY DO WE NEED THIS SCHEME?

There have been improvements to local roads in recent years, but the Third Crossing remains a missing link. The new crossing will provide quicker and more reliable journeys, fewer accidents and benefits to the local economy.

The new crossing will also create a striking visual feature across the river, enhancing the identity of the town.

The objectives of the project are to:

- Reduce congestion and delay on the existing bridges over Lake Lothing
- Reduce congestion in the town centre and improve accessibility
- Reduce community severance between north and south Lowestoft
- Encourage people to walk and cycle, and reduce conflict between cyclists, pedestrians and other traffic
- Improve bus journey times and reliability
- Reduce accidents
- Open up opportunities for regeneration and development in Lowestoft
- Provide the capacity needed to accommodate planned growth.

WHY WE ARE CONSULTING

It is important for us to understand the views of those who live, work and visit the town or who may be interested in the development of the Lake Lothing Third Crossing.

The Secretary of State for Transport has directed that this project is treated as a project of national significance for the purposes of the Planning Act 2008 requiring a Development Consent Order (DCO) to construct, operate and maintain the Project. This consultation is a statutory requirement set out in the Planning Act 2008.

Feedback received from this consultation exercise will help shape the development of the final scheme proposals, which will form the basis of the application for development consent.

The consultation runs from **Monday 4 September, 12.01am and Monday 16 October 2017, 11.59pm.**

You may already have provided your views on the proposed project in the past, but we would like to hear from you again on our current proposals.

You can send us your thoughts by completing a questionnaire or writing to us. Please see the back of this brochure for contact details.

PROJECT FUNDING

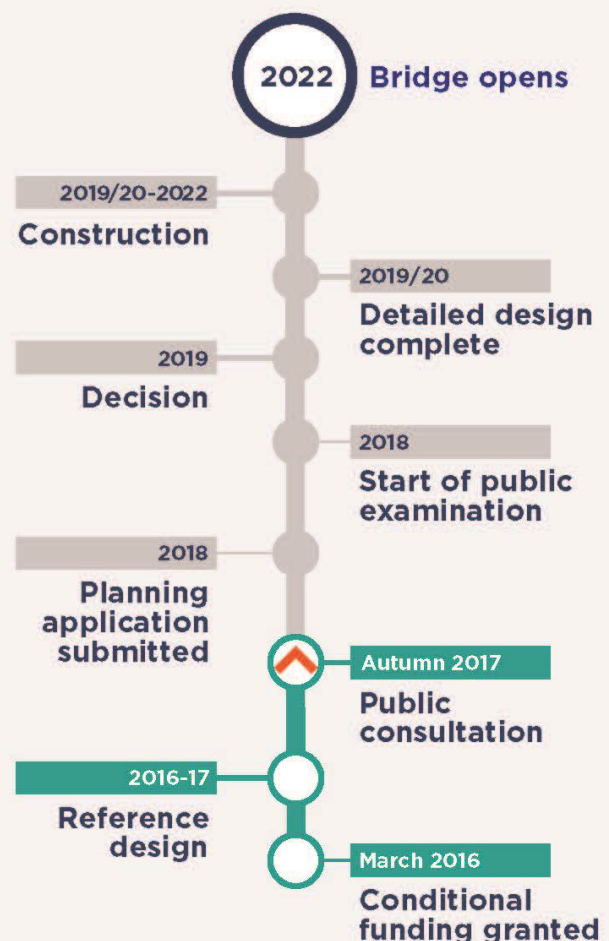
There have been ambitions for a new crossing over Lake Lothing for many years. An Outline Business Case was presented to the Department for Transport in 2015. The report considered 15 options for the project and concluded a crossing in a central location gave the highest benefits and value for money.

In March 2016 the government agreed to provide £73.4m to construct a new bridge across Lake Lothing. This funding will cover the majority of the cost required to deliver the Lake Lothing Third Crossing. The project is predicted to cost in the region of £100m (2020 prices) including contingencies. The difference between the government funding and the remaining cost will be underwritten by Suffolk County Council.

TIMING

Subject to the application approval process, construction could start in 2019/20 and would take between two and three years to complete.

The detailed design and phasing of the construction works has not to date been determined. This will be developed in conjunction with the appointed contractor.



WHAT WE ARE PROPOSING

Our proposals for the Lake Lothing Third Crossing aim to improve journeys and connectivity, help meet the aspirations for economic prosperity and provide a new feature in the town for all users to enjoy for years to come.

The project will include a new multi-span bridge from Waveney Drive to Peto Way. The bridge will be a single carriageway road with facilities for pedestrians and cyclists.

On the northern side the crossing will cross over the existing railway line and drop to connect to Peto Way between Rotterdam Road and Barnards Way. There is an opportunity to incorporate some public space in this area including planting enhancing habitats for wildlife already present in the area. The details of this landscaping are still to be decided.

The proposed design includes new roundabouts to the north and south to help connect the traffic smoothly into the existing road network.

Changes to the road layout include a new access from Waveney Drive to Riverside Business Park and closure of Durban Road at its junction with Waveney Drive.



THE OPENING SECTION DESIGN

An opening section is required over Lake Lothing to maintain the Port of Lowestoft's operations. The proposed crossing will be higher than the existing A47 Bascule Bridge. This will allow a larger number of vessels using the lake to pass below the new bridge without the need to open it.

Careful consideration has been given to the design of the opening mechanism to ensure it functions efficiently. This also presents the opportunity to introduce a distinctive design, with the potential to become one of the town's landmarks.

The emerging design looks to represent the future of Lowestoft as one of the UK's key centres for off-shore renewable energy.

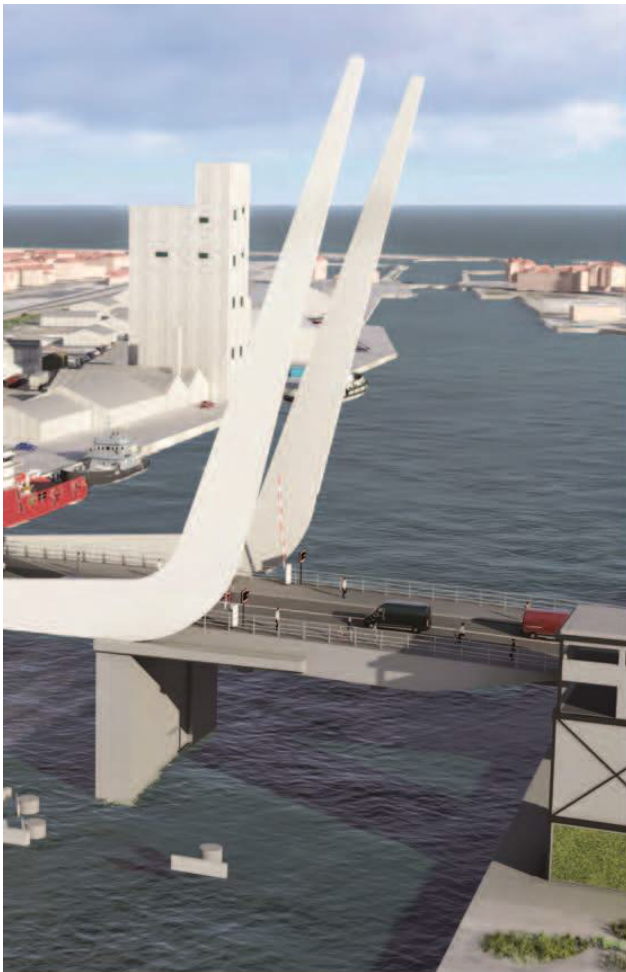
The new bridge will be a minimum of 12 metres above high tide levels, which is significantly higher than the existing Bascule Bridge.

The bridge is proposed to be operated from a new control tower. When required to open, traffic will be alerted and the safety barriers will move into place. The bridge will be hydraulically operated to raise the opening section of the deck.

No final decisions have yet been taken on opening schedules, nor exactly where a control tower would be located.

To ensure the bridge is comfortable for all users, including wheelchair users, pedestrians and cyclists, it is being designed to specific gradients that restrict the height of the bridge.

A Design Process Summary has been produced, which outlines how the design of the bridge has developed. This can be viewed online at www.suffolk.gov.uk/lakelothing3rdcrossing or at our consultation events or deposit locations.



ILLUSTRATIVE MASTER PLAN OF LAKE LOTHING THIRD CROSSING



HIGHWAYS AND PUBLIC REALM

It is important that the new crossing is designed to integrate into the wider townscape and road network to provide more reliable journeys for drivers, pedestrians and cyclists.

The public realm is being designed to enhance the accessibility and experience for pedestrians and cyclists using the crossing.

This project will look to incorporate planting and sustainable urban drainage solutions to deal with the surface water run off from the roads. This could include specially planted pond areas designed to collect the water and release it into the main drainage system slowly.

Both north and south of the lake, new facilities for pedestrians and cyclists will be provided and this could include controlled and uncontrolled crossing points.

NORTHERN LAYOUT

It is proposed to construct two new roundabouts on the north side of the lake to connect to Peto Way. The existing roundabout at the junction of Rotterdam Road and Denmark Road will be reconstructed as part of the project.

The design will include a dedicated left lane on Peto Way for those travelling east towards Denmark Road, which will utilise the existing road following construction of the new roundabout.

The northern bridge approach connects to an existing play park on Denmark Road where a proposed crossing point provides access to the new public space.



SOUTHERN LAYOUT

It is proposed to construct a new roundabout at the intersection of Waveney Drive and Riverside Road on the south side of the lake to connect the bridge to the existing road network.

The new roundabout must be able to provide adequate capacity for the forecast traffic flows. There is not enough space within existing highway land to accommodate an appropriately sized roundabout.

To accommodate the roundabout required, we need to close Durban Road at its junction with Waveney Drive. Access to and from Durban Road at this location will however continue for cyclists and pedestrians. A turning head will be added to Durban Road to allow vehicles to turn in the road.

The carriageway between the new roundabout and Tom Crisp Way will be widened to become a dual carriageway with a central reserve.

The southern bridge approach is within a designated enterprise zone promoting employment opportunities for future developments.



RIVERSIDE ROAD

To achieve the necessary gradients, the new crossing will start rising from the current Riverside Road/Waveney Drive traffic lights. This will sever access to Riverside Business Park via Canning Road.

A new access road from Waveney Drive, west of Riverside Road, will be built to continue to provide access to the businesses off Canning Road and those that front Waveney Drive.

This new junction will connect to the retained section of Riverside Road at the northern entrance to Waveney District Council offices.

Pedestrian and cycle facilities will be provided.

To create a sense of entering a different space tree planting could be added to the access.



IMPACT ON TRAFFIC

Computer-based transport modelling has been used to assess the potential impacts of the new crossing and how it will change the traffic movements across Lowestoft.

The model was created using a range of data sources such as road traffic surveys, predictions of development in the town and information on road layout, dimensions and speeds. The method used for modelling is a national standard.

The results show the impact of traffic re-routing as a result of the new crossing being in place on the year of opening (2022) and the additional increase in traffic flows associated with developments coming forward in the area up to 2037 (15 years after project opening).

The traffic modelling will help identify whether any improvements to local junctions will be required to mitigate any significant adverse impact that the project may have.

The plan opposite shows the details of the traffic modelling. The key findings from this are:

- Traffic flows drop significantly on the two existing bridges (by at least a third) compared to the current situation
- Traffic journey times and network efficiency across the town improve considerably
- Traffic from the two existing bridges re-route to use the new bridge, for journeys where a central crossing of the lake is more convenient and quicker for their journey
- There are increases in traffic flows on routes to the new bridge notably on Peto Way, Rotterdam Road, Waveney Drive and Tom Crisp Way.

Key

AADT

Annual Average Daily Traffic - meaning the typical two-way average daily traffic flow

Base

Base means the existing set of traffic flows in 2016 when the survey data was collected

DM

Do Minimum - meaning a model scenario without the project in place. It assumes the existing road network remains the same but takes account of additional traffic from committed additional growth

DS

Do Something - meaning a model scenario with the project in place and takes account of additional traffic from committed additional growth

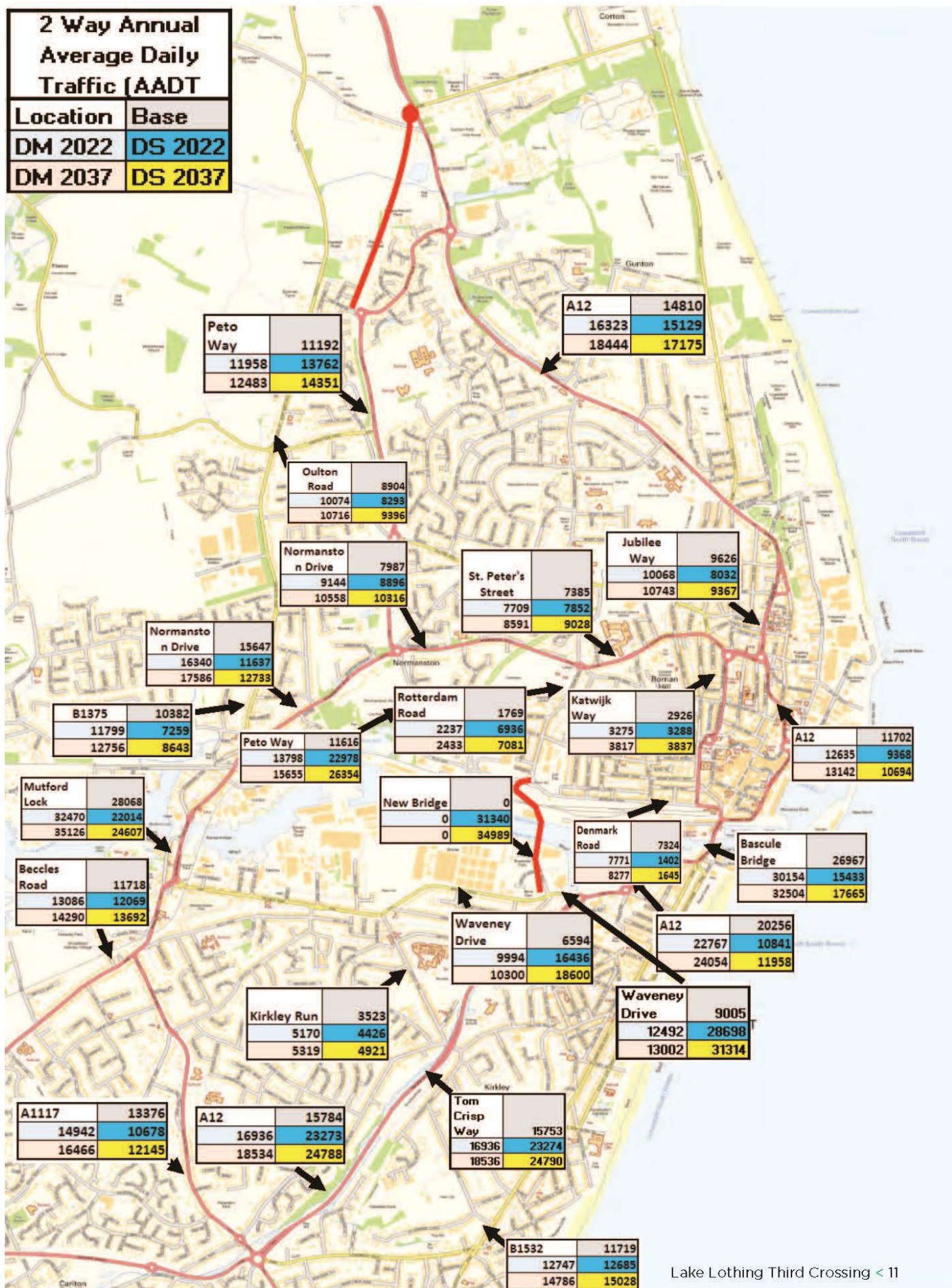
2022

2022 is the estimated opening year of the project

2037

2037 is a future year
(15 years after project opening)

2 Way Annual Average Daily Traffic (AADT)	
Location	Base
DM 2022	DS 2022
DM 2037	DS 2037



ENVIRONMENTAL IMPACTS

We aim to minimise impacts on the environment, local communities, local businesses, road users and residents where possible to do so.

The project requires an Environmental Statement (ES) within our application for development consent.

A Preliminary Environmental Information Report (PEIR) has been produced for consultation as a precursor to the ES. This gives information on potential environmental effects based on current information and potential measures to reduce those effects, to assist well-informed responses to the consultation. The PEIR and non-technical summary are available to view at www.suffolk.gov.uk/lakelothing3rdcrossing, at our consultation events and deposit locations.

The following pages outline the potential impacts during construction and operation of the project.

CONSTRUCTION IMPACTS

TRAFFIC AND TRANSPORT

During construction, temporary road works will be necessary. We will work to limit road closures but we are likely to need some single lane closures.

A Traffic Management Plan will be developed which will include temporary closures and lorry routes into the site. It will also show how access to property is retained.

We are aiming to minimise the impact on port traffic and will seek to maintain the navigation channel during construction.

We are working closely with Network Rail regarding impacts on the railway network and aim to limit the impact on rail services.

NOISE AND VIBRATION

Baseline readings for noise have been undertaken at the nearest properties to the proposed project and will be used to identify potential noise impacts during construction. The ES will propose methods to control potential noise and vibration impacts on surrounding homes and businesses during construction if necessary.

CONSTRUCTION COMPOUNDS

We plan to have three main construction compounds, one on the south side of the lake, accessed from Riverside Road and two on the north side of the lake, as shown on the plan opposite.

One of the northern compounds will be located off Peto Way and is primarily associated with the construction of the northern junction. A second, smaller compound will be required to the south of the railway on Network Rail/Associated British Ports (ABP) land. This is required to support the construction of the bridge over the railway line and works in Lake Lothing. This site would be accessed via Commercial Road.

All compounds would typically contain site offices, vehicle parking and storage of materials. Smaller compounds may be required in other areas to manage works in that immediate area.

BIODIVERSITY AND NATURE

Ecological surveys have been undertaken at targeted locations based on the likelihood of protected species being found there. We have identified a pair of peregrine falcons and the nationally rare Nathusius' Pipistrelle bat alongside common lizards and a variety of bird species.

Measures to mitigate impact on protected species will be set out in the ES.

GEOLOGY, SOILS AND CONTAMINATION

It is highly likely that contamination is present on site, although the associated risks can be managed through appropriate practices. Therefore, risks associated with construction are low. Further study of impacts on groundwater, geology and soils will be undertaken for the ES.

AIR QUALITY

Construction activities could lower air quality in some areas through dust generation or plant emissions. Proposals to control potential impacts will be set out in the ES.

LAND

The delivery of the Lake Lothing Third Crossing requires the acquisition of, or access to, land which is owned or occupied by a number of third parties, which includes statutory undertakers such as Network Rail, ABP and other parties such as Waveney District Council, as well as private individuals.

As part of this consultation a plan of the land currently assessed as being required for the project's construction, operation and maintenance has been produced. This is known as the red line boundary as shown in the image below. As the Lake Lothing Third Crossing will be the subject of a DCO application, Suffolk County Council can apply for powers of compulsory acquisition over this land.

In an effort to reach agreements over the land required for the project, discussions are underway with the relevant parties.



OPERATIONAL IMPACTS

NOISE AND VIBRATION

Baseline readings for noise and a traffic model will be used to predict changes in noise levels around Lowestoft as traffic is diverted onto the new crossing. Diversion of traffic away from congested areas will likely result in significant positive effects in some areas, but increases in traffic elsewhere could have negative effects.

AIR QUALITY

The diversion of traffic away from congested areas will likely result in significant positive effects. The extent of any significant negative effects will be determined through modelling which will be included in the ES.

WATER, DRAINAGE AND FLOOD RISK ASSESSMENT

An assessment has considered the potential impacts of the project on flooding and water quality.

The drainage design will be developed to protect the local water environment from highway pollution and prevent increased flood risk.

The current flood risk assessment shows no significant negative impact on surface water flooding from the project, nor increase to flood risk elsewhere.

TRAFFIC AND TRANSPORT

The project will divert traffic away from some congested areas of Lowestoft. This will reduce traffic and congestion in the town centre, improve this area for pedestrians and cyclists and improve reliability for bus services. We are working with ABP to better understand and mitigate the impact on the port, including through vessel simulations. There will be no long term impact on the rail network.

VISUAL IMPACT

The landscape and visual assessment has established an area where the project can be seen from. An assessment will be undertaken on the visibility of the project from key viewpoints.

CULTURAL HERITAGE

Impacts upon built heritage (such as Listed Buildings) will be considered in the ES. Impacts on buried archaeology are unlikely to be significant given present knowledge although ongoing ground investigations will gather more information.

CUMULATIVE EFFECTS

Lake Lothing Third Crossing cannot be viewed separately to other developments proposed in the area. The ES will include an assessment of the project's likely effects alongside other developments within the same timeframe where possible. This will include the proposed tidal barrier and consented developments in the vicinity, including those on the Brooke Peninsula. The traffic model also takes natural growth in traffic into account.

OPTION SELECTION

Our proposed design has emerged following a comprehensive option selection process.

An initial long list of options for a Third Crossing was compiled. Each was assessed against its ability to meet the project objectives.

The preferred option is an opening bridge in a central location. This is considered to be the best value for money, produces the highest benefits and it is most likely to deliver the project objectives. This option is the scheme that the government has committed to providing funds for.

Option	Reason discounted
Western Alignments	<ul style="list-style-type: none"> ● Cost ● More land required ● Less effective at reducing traffic
Eastern Alignments Close to the existing Bascule Bridge.	<ul style="list-style-type: none"> ● Would not significantly improve access to regeneration areas south of Lake Lothing ● Would not improve severance between the north and south halves of the town ● Less effective at reducing traffic
Tunnel A tunnel under the lake	<ul style="list-style-type: none"> ● Not a solution for pedestrians or cyclists ● Insufficient distance between the Lake and the existing road network for a tunnel to pass under the Lake and achieve satisfactory gradients
Fixed Bridge/Flyover Fixed bridge high enough to allow ships and traffic to pass constantly	<ul style="list-style-type: none"> ● Would require 35m clearance, therefore more expensive than a lifting bridge ● Higher visual intrusion ● More land required ● More difficult to connect to existing roads
Floating Bridge A structure that would float on the lake surface attached to fixed piers swinging open for ships	<ul style="list-style-type: none"> ● The railway to the north means such a low level option would not be able to clear the railway. A level crossing would not be acceptable to Network Rail ● Would have to open for all vessels
Amsterdam-style Bridge Lock system with two bridges allowing one bridge to remain lowered	<ul style="list-style-type: none"> ● Too steep of a gradient is required for this style of bridge to get over the lake and clear the railway ● Would impede larger vessels due to the two bridges being close together, interrupting port activity ● Visual intrusion from height of quay walls needed to form part of the flood defence scheme

HAVE YOUR SAY

The consultation is your opportunity to express your views on the project. This is a significant project for Lowestoft and it is important we gather feedback to help ensure a well-considered and robust application is submitted to the Planning Inspectorate, who will examine the project on behalf of the Secretary of State for Transport.

This consultation will run for six weeks from **Monday 4 September – Monday 16 October 2017**.

PLANNING APPLICATION PROCESS

The Secretary of State for Transport has directed that Lake Lothing Third Crossing is to be treated as a Project of National Significance for the purposes of the Planning Act 2008. As such, we are required to make an application for a Development Consent Order (DCO) to obtain permission to construct, operate and maintain the project.

Following the formal public consultation, we will carefully consider all responses received and produce a report on the consultation.

This report will form part of our DCO application, to the Secretary of State.

The Planning Inspectorate will examine the application and make a recommendation to the Secretary of State for Transport, who will decide on whether or not the project will go ahead.

We currently intend to make our application for development consent in early 2018.

YOUR COMMENTS

Between **Monday 4 September, 12.01am and Monday 16 October 2017, 11.59pm** you can use the following methods to respond to the public consultation:

- Go online to access the consultation documents and fill out a questionnaire at: www.suffolk.gov.uk/lakelothing3rdcrossing

- Complete questionnaires or send other feedback to us at:

LL3X Consultation Team
Freepost RTUL-KAKE-BCTR
PO Box 73943 (Lake Lothing)
London
EC4P 4HN

- View and pick up consultation documents and a questionnaire at Lowestoft, Oulton Broad and Kessingland Libraries, the council offices at Riverside, Waveney District Council's Marina Customer Service Centre or Suffolk County Council's Endeavour House in Ipswich.
- Attend a public consultation event and complete a questionnaire or leave one at a deposit location.
- Email lakelothing3rdcrossing@suffolk.gov.uk
- Call on 03456 031 842 (open Mon-Fri 8:30am-6pm)

Contact the project team

Email: lakelothing3rdcrossing@suffolk.gov.uk **Call:** 03456 031 842 (open Mon-Fri 8.30am-6pm)

If you need help to understand this information in another language please call 03456 066 067.

Se precisar de ajuda para ler estas informações em outra língua, por favor telefone para o número abaixo. 03456 066 067	Portuguese	Jeigu jums reikia šios informacijos kita kalba, paskambinkite 03456 066 067	Lithuanian
Jeżeli potrzebujesz pomocy w zrozumieniu tych informacji w swoim języku zadzwoń na podany poniżej numer. 03456 066 067	Polish	Dacă aveți nevoie de ajutor pentru a înțelege această informație într-o altă limbă, vă rugăm să telefonați la numărul 03456 066 067	Romanian
এই লেখাটি যদি অন্য ভাষাতে বুঝতে চান তাহলে নিচের নম্বরে ফোন করুন 03456 066 067	Bengali	Если для того чтобы понять эту информацию Вам нужна помощь на другом языке, позвоните, пожалуйста, по телефону 03456 066 067	Russian

If you would like more information in another format, including audio or large print, please call 03456 066 067.

Consultation Report Appendix 4.3

Consultation questionnaire

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QUESTIONNAIRE FOR LAKE LOTHING THIRD CROSSING CONSULTATION

Please provide your feedback between Monday 4 September, 12.01am and Monday 16 October 2017, 11.59pm.

Thank you for taking the time to complete our questionnaire.

You can submit your completed questionnaire at one of our exhibitions or deposit locations. Alternatively, you can send other to us at:

LL3X Consultation Team
Freepost RTUL-KAKE-BCTR
PO Box 73943 (Lake Lothing)
London
EC4P 4HN

Or email it to lakelothing3rdcrossing@suffolk.gov.uk

More information about the project in available at
www.suffolk.gov.uk/lakelothing3rdcrossing

QUESTIONS

1. Do you think a new crossing over Lake Lothing is needed?

- ☐ Yes
- ☐ No
- ☐ Don't know

Please add any comments here



Lake Lothing
**THIRD
CROSSING**



Suffolk
County Council

- 2. Do our proposals address the objectives of the proposed scheme as outlined on page 2 of the Consultation Brochure?**

- ☐ Yes
☐ No
☐ Don't know

Please add any comments here

- 3. A new crossing of Lake Lothing presents an opportunity to introduce a new focal point to the town. Do you support the proposed design of the crossing? Please refer to page 5 of the Consultation Brochure and the Design Process Summary**

- ☐ Yes
☐ No
☐ Don't know

Please add any comments here

- 4. The proposed scheme has been designed to ensure the operations of the Port of Lowestoft and activities of other marine users can continue. Do you consider this objective has been met?**

- ☐ Yes
☐ No
☐ Don't know



Lake Lothing

**THIRD
CROSSING**

Please add any comments here



Suffolk
County Council

- 5. Do you have any comments on the proposed northern road junction that links the new crossing to Peto Way between Rotterdam Road and Barnards Way? Please refer to page 7 of the Consultation Brochure**

Please add any comments here

- 6. Do you have any comments about the proposed southern road junction and the closure of Durban Way? Refer to page 8 of the Consultation Brochure**

Please add any comments here

- 7. The alignment and gradient of the new crossing will prevent access to existing property on Riverside Road via the current route, therefore a new access road from Waveney Drive, west of Riverside Road, is required. Do you have any comments on the proposals for this new road? Refer to page 9 of the Consultation Brochure**

Please add any comments here

8. Do you think the proposals for cyclists and pedestrians are appropriate?

Refer to pages 7 to 9 of the Consultation Brochure

- ☐ Yes
- ☐ No
- ☐ Don't know

Please add any comments here

9. The details of the proposed scheme's landscaping and public spaces are still being developed. Do you have any comments on current proposals for these areas? Refer to pages 7 to 9 of the Consultation Brochure and Design Process Summary document

Please add any comments here

10. There is regular and severe congestion across Lowestoft. The proposed scheme aims to improve journeys across the town. The initial outputs from the traffic modelling show how the proposed scheme is likely to alter traffic flows. Do you think that the scheme will reduce congestion and improve journey times in Lowestoft overall? Refer to pages 10 & 11 of the Consultation Brochure

- ☐ Yes
- ☐ No
- ☐ Don't know

Please add any comments here

11. Do you have any comments on the likely environmental effects of constructing and operating the proposed scheme and/or the measures proposed to mitigate these effects? Refer to pages 12 to 14 of the Consultation Brochure and the Preliminary Environmental Information Report (or its Non-Technical Summary)

Please add any comments here

12. Is there anything else you would like to add?

13. How did you hear about this consultation?

- ☐ Letter through door
- ☐ Local media
- ☐ Poster
- ☐ Online advert
- ☐ Word of mouth
- ☐ Other please specify



Suffolk County Council will use the information you have supplied in response to this consultation only for the purpose of assessing the proposals. Responses may be made publicly available. However, personal details will be kept confidential. You do not have to provide any personal information, but this information will help us understand the range of responses.

Please provide your postcode:

If you are responding on behalf of an organisation or business please state its name here:

DEMOGRAPHIC QUESTION SET:

Please note that this section is optional and you don't have to complete these questions if you don't want to. If you choose not to answer these questions, please tick the 'Prefer Not to Disclose' option so that we are aware of your choice.

By providing this information it allows us to see which groups of people are responding to our consultations and which groups are underrepresented. We can then make extra efforts to reach underrepresented groups so that we can consider the views of all groups who may be affected by our plans. It also helps us ensure that everyone is treated fairly and equitably in everything we do. Without your information, we can't always spot trends and issues which enable us to make appropriate changes or improvements.

All responses to these questions are anonymous; responses are added together and no individuals are identified. Any information provided is governed by the Data Protection Act 1998 which will be treated as strictly confidential.

- 1. If you choose not to answer any of these questions, please tick the 'Prefer not to disclose' option so that we are aware of your choice.**

☐ Prefer not to disclose

2. Are you:

- ☐ Female
- ☐ Male
- ☐ Prefer to self-describe (please specify): _____
- ☐ Prefer not to say

3. Which age group do you fit into?

- ☐ Under 16
- ☐ 16-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65-74
- ☐ 75+
- ☐ Do not want to say

4. The provision for disability within Equalities legislation defines a person as disabled if they have a physical or mental impairment, which has a substantial and long term (i.e. has lasted or is expected to last at least 12 months) and has an adverse effect on the person's ability to carry out normal day-to-day activities. Do you consider yourself to have a disability according to the terms given in the Equality legislation?

- ☐ Yes
- ☐ No

5. To which of these groups do you consider you belong?

- ☐ Asian or Asian British: Indian
- ☐ Asian or Asian British: Pakistani
- ☐ Asian or Asian British: Bangladeshi
- ☐ Any other Asian background - please specify in the box below.
- ☐ Black or Black British: Caribbean



- ☐ Black or Black British: African
- ☐ Any other Black background - please specify in the box below.
- ☐ Chinese
- ☐ Mixed: White and Black Caribbean
- ☐ Mixed: White and Black African
- ☐ Mixed: White and Asian
- ☐ Any other Mixed background - please specify in the box below.
- ☐ White: English
- ☐ White: Irish
- ☐ White: Scottish
- ☐ White: Welsh
- ☐ White: British
- ☐ Gypsy or Irish Traveller
- ☐ Other white background - please specify in the box below.
- ☐ Do not want to say

If you are interested in receiving correspondence from us in relation to the Third Crossing, please email lakelothing3rdcrossing@suffolk.gov.uk

Consultation Report Appendix 4.4

Design Process Summary

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The design for the Lake Lothing Third Crossing has been developed since conditional funding was granted in March 2016. To ensure the feasibility of the Lake Lothing Third Crossing, an initial design was generated to test the road alignment and connections to existing roads. This design was also priced to ensure it was within the budget of the scheme.

Since this initial design, the proposed scheme has undergone further development to test the robustness of the design and align with Suffolk County Council's Design Intent.



Initial design for the crossing



Site visit during workshop with local authorities

DESIGN INTENT

The Lake Lothing Third Crossing will improve connectivity for everyone in Lowestoft; it will be symbolic of Lowestoft rising to meet the aspirations for economic prosperity and embrace the proud maritime history of the town.

DESIGN PROCESS

The crossing is being developed by a multidisciplinary team including; transport planners, environmental and architecture specialists, landscape and urban designers, as well as engineers specialising in highways, structures, geotechnics, and maritime. This integrated team has collaborated with the local authority to design the best scheme for the town.

The design needs to take into account many considerations to optimise the functionality of the road network, waterways, and crossing as a whole. As part of the ongoing discussions with Associated British Ports and Network Rail, parameters were set to ensure the port and railway operations will be able to continue during construction and lifetime of the crossing. Some of the design considerations are illustrated on the diagram overleaf, which show the opening section of the bridge and the approaches that connect to the existing roads.

Alongside the ongoing operational aspect of the crossing, a design-led approach was taken to develop the crossing as a new 'place' in Lowestoft. In line with the design principles for the project - developed in discussion with Waveney District Council, the crossing aims to offer a positive experience to all users, utilising the areas surrounding the bridge as potential destinations for people to enjoy.

The crossing design has evolved over the past year, with refinement in how the bridge could operate, look, feel, and has the potential to become a new emblem for the town.

DESIGN COMPONENTS

The design for the crossing has been an iterative process, where all options were compared and the best solution for the scheme has emerged. The crossing design can broadly be divided into the following components:

- **Bridge mechanism:** the opening section of the bridge
- **Support structure and piers:** the foundations beneath the crossing
- **Other structures and furniture:** control tower, lighting, signage
- **Approaches and public realm:** areas surrounding the bridge on North and South side of the river

Working with Suffolk County Council and Waveney District Council to determine the overall aspirations for Lowestoft and the role of the crossing in aiding regeneration of the town, the theme 'Marine Tech' was adopted. This theme reflects the forward thinking attitude of the town, particularly its identity as the UK capital of renewable energy. This has been applied to the crossing design and development of the bridge. Inspiration has come from the local context and emerging industries, and their connection with Lowestoft as a town.



Photo courtesy of Sembmarine SLP

Photo from Lowestoft's Port, reflecting 'Marine Tech' theme

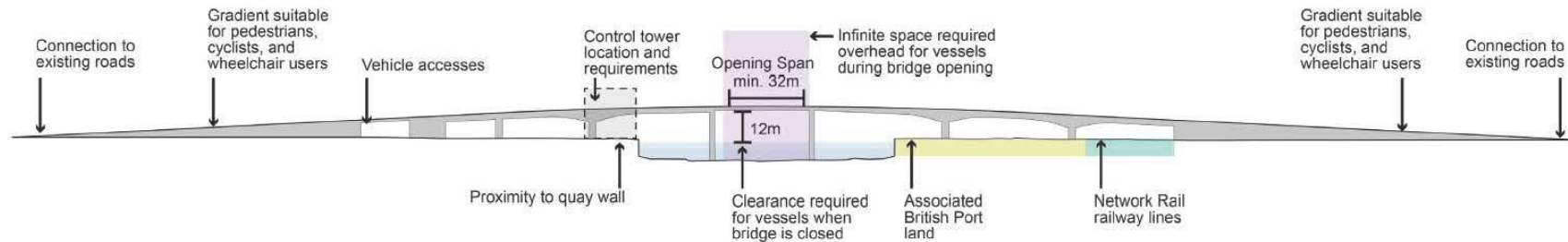


Diagram showing an elevation of the crossing with some of the considerations to be made during the design process

Bridge mechanism

The initial design for a twin-leaf bascule bridge was compared with alternative mechanism options, to determine if there was a more cost effective, attractive option, with less impact on the river through its construction. Key criteria for comparing the mechanism options include; safety, reliability, constructability, cost, environmental impact, and compliance with the design principles and intent. The most suitable bridge mechanism for the crossing was identified as 'rolling lift bascule bridge', which has been used on the Lower Hatea River Crossing in New Zealand.

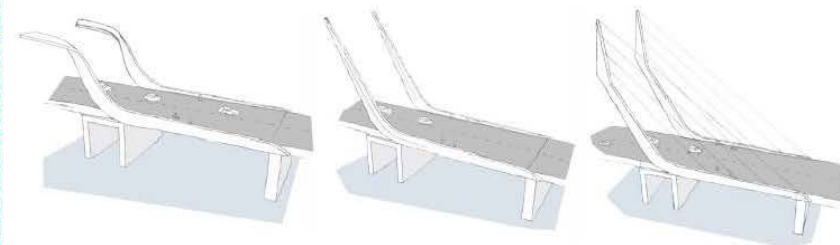
To open this bridge, hydraulic pistons work to lift the bridge deck, which rolls back on the vertical part of the structure that contains a counterweight. The counterweight and hydraulics lift the bridge deck to a specific angle, allowing vessels to pass safely through, before rolling back to its original position.

This mechanism enables the size of the in-water piers in the initial design to be significantly reduced, as the counterweight which was previously housed within in-water piers is now located in the air above the bridge deck. Reducing the piers where possible, is also cost effective. This mechanism type provides options for a visually striking bridge design.

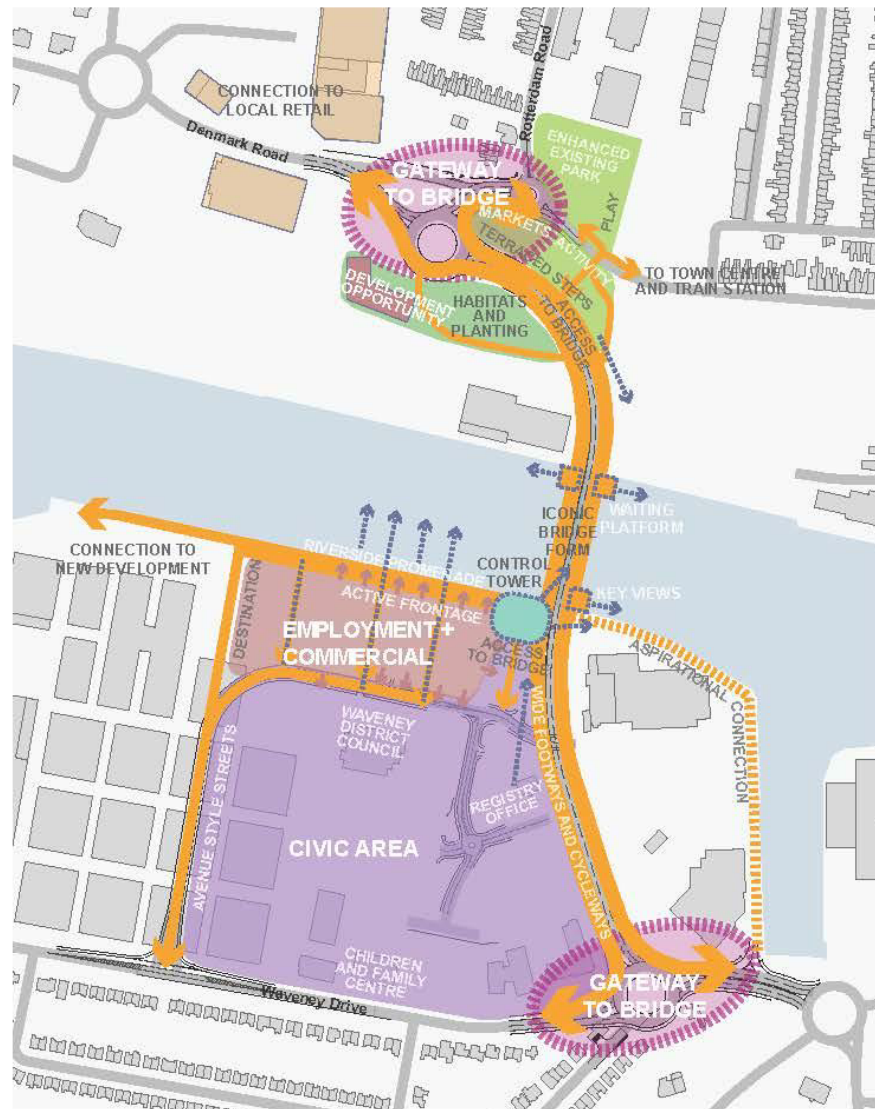
Designers generated many sketch options of how the vertical counterweight for the bridge could look. The new design is a simplistic but striking 'blade' form, which is intended to lie flat beside the bridge deck when it is opened. This shape reflects the innovation and excitement associated with the 'invisible forces' moving wind turbine blades. The bridge opening will be a spectacle for locals and visitors to enjoy from around Lowestoft, as it subtly hovers on the town's skyline.



Sketch showing how the theme applies to the crossing as a whole



Examples of conceptual bridge mechanism sketches



Illustrative plan showing opportunities adjacent to proposed scheme

The northern bridge approach connects to an existing play park on Denmark Road, where a proposed crossing point provides access to a new public space. This adaptable space could host pop up markets, activities and performances. It is intended to be surrounded by grass terraced steps and ramps to provide ample seating and alternative access up to the bridge deck.

An underpass will provide pedestrian and cycle access through to a green area on the western side of the bridge. This green area features an essential drainage system and pond, with planting designed to ease the flow of surface water run-off into the mains drainage system. This area also offers space for future community initiatives which the local authority can pursue based on local aspirations and needs. These could include gardens, habitat learning areas, pop-up café space and so on.

The southern bridge approach is within a designated enterprise zone promoting employment opportunities for future development. The land east of the bridge is privately owned by commercial businesses, with access provided via underpasses and a new road from Waveney Drive. The area to the west of the bridge is an opportunity site for future development as identified in the Waveney District Council's Area Action Plan and the council is looking to develop a masterplan for this area in the future.

Conclusion

Whilst components of the bridge are still under development, the design process is underpinned by a robust review process to ensure the scheme provides the best response to the opportunities and aspirations for the crossing and its connection to the wider context. The design process ensures that the crossing will be a new 'place' in the town as well as a strategic transportation route for all users to enjoy in Lowestoft for years to come.



Artist's impression of the proposed Lake Lothing Third Crossing

Consultation Report Appendix
4.5

Consultation Q&A August
2017

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Consultation Q&A published in August 2017

Questions and Answers: Consultation Edition

If your question isn't answered here, please email it to
LakeLothing3rdCrossing@suffolk.gov.uk.

Overview

Why do we need the Third Crossing?

The existing bridges over the lake at Mutford Lock and the A47 Bascule Bridge are inadequate to meet current and future traffic demand. Delays and congestion are a common occurrence for drivers, particularly during peak hours, and pedestrians and cyclists often have long and difficult journeys as they travel across the town.

There have been improvements to local roads in recent years, but the Third Crossing remains a missing link. Provision of an additional crossing will reduce congestion and severance, and allow the road network to operate efficiently, providing vital extra capacity. This new crossing presents an opportunity to introduce a focal point for the town enhancing its identity. This will help to regenerate the area and attract new investment in the local economy.

How much would the crossing cost and how would it be funded?

It is estimated that the Lake Lothing Third Crossing would cost in the region of £100 million (2020 prices). In March 2016 the Government agreed to provide around £73.4 million towards the crossing.

The remaining amount, would need to be secured from local funding sources such as New Anglia Local Enterprise Partnership and Waveney District Council. In the meantime, the money has been underwritten by Suffolk County Council (SCC).

Can this funding be used for other local transport proposals?

No. The money has been awarded following approval of the Outline Business Case, which demonstrated its very high value for money. The funding was also based on the preferred option for a bascule bridge in the current location.

What are the risks to funding, following the outcome of the European Union membership referendum?

Advice from the Department for Transport is the funding remains in place and there is no uncertainty around this. Peter Aldous MP has also reassured us that the Government funding is firmly committed subject to a successful planning application, to be submitted in early 2018, and a case continuing to show high value for money.

Programme

Why are you consulting again?

The Secretary of State for Transport has directed that this project is to be treated as a project of national significance for the purposes of the Planning Act 2008 requiring a Development Consent Order (DCO) to construct, operate and maintain the project.

While there has already been significant consultation on the principle of a third crossing in Lowestoft over a number of years, this consultation is the statutory consultation required by the Planning Act 2008 and it will run from 4 September to 23:59 16 October 2017.

It is important for us to understand the views of those who live, work and visit the town or who may be interested in the development of the Lake Lothing Third Crossing.

Feedback received from this consultation exercise will help shape the development of the final project proposals, which will form the basis of the application for development consent.

How and when will development consent be given?

The application is likely to be made in early 2018, after which a public examination would be undertaken on behalf of the Secretary of State by the Planning Inspectorate. The Secretary of State would then make a decision in summer 2019.

When would the crossing be constructed?

Subject to development consent, construction could start in 2019/20 and would take two to three years.

Why won't the crossing be finished until 2022, has it hit any complications?

The Lake Lothing Third Crossing is well underway. The project has not hit any complications.

To obtain the necessary consents and planning approval we must follow a statutory planning process. The Government has streamlined the planning process to deal with Nationally Significant Infrastructure Projects such as the proposed crossing but it is still time consuming.

Project benefits

What are the benefits of the crossing?

The Lake Lothing Third Crossing will result in quicker journeys, reductions in delay, fewer accidents and benefits to businesses.

The new crossing will also create a striking visual feature across the river, enhancing the identity of the town.

The project has been developed to deliver the following objectives:

- Reduce congestion and delay on the existing bridges over Lake Lothing;
- Reduce congestion in the town centre and improve accessibility;
- Reduce community severance between north and south Lowestoft;
- Encourage people to walk and cycle, and reduce conflict between cyclists; pedestrians and other traffic;
- Improve bus journey times and reliability;
- Reduce accidents;
- Open up opportunities for regeneration and development in Lowestoft; and
- Provide the capacity needed to accommodate planned growth.

How were the benefits calculated?

A traffic model was used to calculate the transport benefits. The traffic model included the whole of Lowestoft.

The transport benefits and wider benefits and costs were calculated in the Outline Business Case which was prepared in accordance with Department for Transport Guidance and is available on the project website:

www.suffolk.gov.uk/lakelothing3rdcrossing

We have looked at the impact on journey times as a result of the crossing on a range of key routes across Lowestoft and in particular the A12/A47, where significant improvements arise.

Options appraisal

Have any other options been considered?

An initial long list of 15 options for a third crossing was compiled. The long list included bridges and tunnels in three broad corridors; eastern, western and central, as well as non-road and low-cost options, and a flood barrage option. Ten different options for a bascule bridge were included in the initial “long list”, four in the east, and three in each of the central and western corridors. Each was assessed against its ability to meet the project objectives.

All of the non-bridge options were discounted as these did not meet the project objectives. The flood barrage would not be practicable and would significantly disrupt port operations.

All tunnel options were fully explored but would not be possible in Lowestoft. There is not enough distance between the river and the road network for a tunnel to safely go under the river, and would also not provide a link for walking and cycling.

Options considered, but not included in the long-list:

- Fixed bridge options - The provision of a fixed bridge high enough to remain open to both traffic and shipping at all times was considered in principle. It would need to have a 35m clearance and would be more expensive than a lifting bridge, more visually intrusive and – because of the levels involved – more difficult to tie back into the existing roads. For these reasons, fixed bridge options were excluded from the long list.
- Floating bridge options - Consideration was also given to the possibility of constructing a floating bridge. The superstructure would float on the surface of the lake, constrained by fixed piers. A pivoted central section would open as a swing gate to allow vessels to pass through. This method of construction has been used successfully elsewhere, for example in Dubai. Although a floating bridge could be significantly cheaper than a conventional bridge, it would not be feasible for this project because of the railway line on the north shore. It would not be possible to achieve sufficient clearance over, or under, the tracks from a bridge just above water level, and a level crossing would not be acceptable to Network Rail and would reduce the transport benefits. A floating bridge would also have to open for any size of vessel, whereas a conventional bridge would allow smaller vessels to pass without opening. For these reasons, floating bridge options were excluded from the long list.

There were three tunnel route options initially considered as part of the process; a Western, Central and Eastern Tunnel with bored tunnel and immersed tube tunnel options being considered. After review, it was found that the bored tunnel option would not be suitable due to the need for the crown of the tunnel having to be 12m below the base of the channel, resulting in the tie-in of the tunnel being hundreds of metres further in land to achieve the required gradient. This would result in the purchase of multiple properties for demolition and construction of the portal, which would increase project costs considerably.

An immersed tube tunnel would require significant engineering works to create the temporary opening within the existing lake walls to allow construction. The required maximum gradient of 6% can be achieved at the western crossing, whilst tying the tunnel into the existing road network, however this requires substantial realignment of existing roads. At the central crossing, the achievable vertical alignment for an immersed tube tunnel is 10% which exceeds the design guidance. It was concluded that the only potentially viable tunnel option is the immersed tube tunnel at the western crossing location.

Three alternative tunnel options were fully explored but have been considered unfeasible due to impact and cost. Whilst there are a number of advantages to the tunnel option; no interruption to ships passing through the port, no disruption to road traffic and less visual impact than a bridge, the disadvantages far outweigh these. There would be no provision for cyclists or pedestrians, there would be significant disruption to port and railway operations during construction, and it would be necessary to divert and reconstruct existing roads affecting woodland area, recreational area, and residential properties. Additionally, the overall cost of a tunnel

is substantially higher than the central crossing option. This would reduce the benefit-to-cost ratio and affect the Business Case.

How did you select the potential location for the crossing?

Having identified a long list of fifteen options, the next stage was to identify any which do not represent realistic solutions. An initial sift was therefore undertaken to identify any “showstoppers” which are sufficiently serious to rule an option out. This resulted in a short list which was the subject of more detailed investigation to determine its feasibility and relative cost.

The proposed scheme is the central crossing option. It is the least expensive of the short-listed options, it produces the highest benefits, it is most likely to deliver the objectives, and it has a high level of public and business support.

Why were the plans outlined by Peter Colby not taken forward? Why can't we have an Amsterdam style bridge where one road is always open?

The ‘Colby plans’ or ‘Amsterdam style bridge’ proposals were considered along with many other options for a crossing when the Outline Business Case (OBC) for the Lake Lothing Third Crossing was being prepared. The main attractions of having an Amsterdam style bridge on Lake Lothing are that it would allow one of the two bridges to remain down, and open to traffic, at all times thus reducing traffic delays, also the lock would form part of a tidal barrage.

However, it has been concluded that such a scheme would not be deliverable due the likely environmental effects - the introduction of a lock system would effectively change the tidal basin of Lake Lothing into a static water level which would be a significant change from the current situation.

Furthermore, a large double lock structure would effectively sever the Port around the location of the existing Lake Lothing ship turning circle which would create a greater adverse effect for Associated British Ports (ABP) and the operation of the Port. Additionally, the Port Harbour Master, has advised that vessels of the larger size and type that currently use the Port would not be able to stop and position themselves between the two closed locks. Therefore, both locks would have to open at the same time for larger vessels, eliminating the potential traffic benefits.

Could there be a link from Commercial Road over the railway?

Previous options for the scheme which had a third crossing positioned to the east of the lake did include an over bridge at the end of Commercial Road spanning the railway. This option was not taken forward when a scheme in the central location of the lake was selected which crossed the lake and railway together.

Environmental Assessment

How will the impact on the environment be assessed?

We aim to minimise impacts on the environment, local communities, local businesses, road users and residents where possible to do so.

The project requires an Environmental Statement (ES) within our application for development consent. In early 2017 Suffolk County Council asked the Secretary of State for a scoping opinion of the approach to the Environmental Impact Assessment. This identified the studies and assessments that should accompany the Development Consent Order (DCO) application in the Environmental Statement (ES) for the project. A Preliminary Environmental Information Report (PEIR) has been produced for consultation as a precursor to the ES. This gives information on potential environmental effects based on current information and potential measures to reduce those effects, to assist well-informed responses to the consultation. The (PEIR) and non-technical summary are available to view at www.suffolk.gov.uk/lakelothing3rdcrossing, at our consultation events and deposit locations.

Will flooding affect the new crossing? How are we mitigating this risk?

The new crossing will have a vertical clearance of a minimum of 12m above Highest Astronomical Tide (the technical term for the highest level which can be predicted to occur under average meteorological conditions). This is significantly higher than both of the existing bridges and will mean that the new crossing is at significantly less risk of flooding than the current crossings.

Proposals for a strategic tidal flood barrier are also being developed for the Outer Harbour, which will be of benefit to the project, when it is in place.

Land

Are you talking to potentially affected landowners, and would any compensation be offered to those who affected by the construction or operation of the Third Crossing?

A red line boundary is provided as part of the consultation showing the area over which SCC may seek authorisation for the compulsory acquisition of interests in and rights over land, the temporary use of land and the overriding of easements and other rights in connection with land.

We have started meeting with affected landowners and will continue to do this in the coming months. We are also continuing our discussions with ABP and Network Rail to ensure the impact on the port and railway are minimised as far as possible.

Where SCC needs to acquire land permanently or temporarily for the project, it will seek to do that via agreement in the first instance, however, SCC can fall back on compulsory acquisition powers if required and compensation claims would then be settled through the prescribed process for doing so. Owners/occupiers of properties that are found to be adversely effected by the operation of the Lake Lothing Third Crossing may be eligible for compensation under Part 1 of the Land Compensation Act 1973.

It is possible that the construction phase will cause some disruption to other property owners or occupiers and SCC will be developing mitigation measures to reduce those effects associated with noise and construction traffic.

Design

What will the new crossing look like?

The design for the Lake Lothing Third Crossing has been developed since conditional funding was granted in March 2016. To ensure the feasibility of the Lake Lothing Third Crossing, an initial design was generated to test the road alignment and connections to existing roads. This design was also priced to ensure it was within the budget of the project. Since this initial design, the project has undergone further development.

Working with SCC and Waveney District Council to determine the overall aspirations for Lowestoft and the role of the crossing in aiding regeneration of the town, the theme 'Marine Tech' was adopted. This theme reflects the forward-thinking attitude of the town, particularly its identity as the UK capital of renewable energy. This has been applied to the development of the crossing's design.

Careful consideration has been given to the design of the opening mechanism to ensure it functions efficiently. This also presents the opportunity to introduce a distinctive design, with the potential to become one of the town's landmarks.

How will Suffolk County Council ensure that the crossing is well designed?

The crossing is being developed by a multidisciplinary design team including; transport planners, environmental and architecture specialists, landscape and urban designers, as well as engineers specialising in highways, structures, geotechnics, and maritime. This integrated team has collaborated with the local authority to design the best scheme for the town.

The design team have worked with Built Environment Experts from Design Council CABE who have reviewed the design at key points along the design process. Suggestions and advice provided by Design Council CABE have ensured a good quality design can be achieved. The Built Environment Experts will perform a final review of the design before an application is submitted for development consent.

Does the new design mean it is more expensive?

Whilst an initial design was generated to establish the feasibility of the crossing as a whole, the design has been developed to make the structure more efficient and cost effective.

For example, the in-water piers proved one of the most costly parts of the crossing to construct and were large enough to house the moving counterweight of the bascule bridge (in the same way the existing A47 Bascule Bridge works). By challenging the design of this mechanism, it was possible to develop a more innovative design which reduced the size and impact of the piers required in-water. Whilst working to the cost constraints of the initial design, the new design is more effective on providing a good quality design for the crossing as a whole.

Highways design and traffic impacts

What are the traffic impacts of the new crossing?

Computer-based transport modelling has been used to assess the potential impacts of the new crossing and how it will change the traffic movements across Lowestoft.

The model was created using a range of data sources such as road traffic surveys, predictions of development in the town and information on road layout, dimensions and speeds. The method used for modelling is a national standard. The results show the impact of traffic re-routing as a result of the new crossing being in place on the year of opening (2022) and the additional increase in traffic flows associated with developments coming forward in the area up to 2037 (15 years after project opening).

The traffic modelling will help identify whether any improvements to local junctions will be required to mitigate any significant adverse impact that the project may have.

The key findings from the traffic modelling are:

- Traffic flows drop significantly on the two existing bridges (by at least a third) compared to the current situation;
- Traffic journey times and network efficiency across the town improve considerably;
- Traffic from the two existing bridges re-route to use the new crossing, for journeys where a central crossing of the lake is more convenient and quicker for their journey; and There are increases in traffic flows on routes to the new crossing (Peto Way, Rotterdam Road, Waveney Drive and Tom Crisp Way).

Additional traffic modelling will be undertaken ahead of the DCO application.

Why does Durban Road have to close?

The new roundabout must be able to provide adequate capacity for the forecast traffic flows. There is not enough space within existing highway land to accommodate an appropriately sized roundabout.

To accommodate the roundabout required, we need to close Durban Road at its junction with Waveney Drive. Access to and from Durban Road at this location will however continue for cyclists and pedestrians. A turning head will be added to Durban Road to allow vehicles to turn in the road.

It is expected the traffic currently accessing Waveney Drive via Durban Road will instead access Waveney Drive via Kimberley Road.

Why are the new roundabouts so big?

The roundabouts need to be large enough to accommodate the forecasted traffic flow to ensure they operate efficiently now and in the future. The roundabouts being proposed are of a similar size to other adjacent roundabouts (for example Tom Crisp Way roundabout).

Why has the crossing not been designed as dual carriageway?

Our traffic modelling has shown the project will provide the capacity required in the year of opening (2022) and the additional increase in traffic flows associated with developments coming forward in the area up to 2037 (15 years after project opening). There are also no dual carriageways on the surrounding highway network.

Finally, a dual carriageway would increase land-take, increase complexity of the opening section and have potentially greater implications for the operation of the port/marina

What provision would be made for cyclists and pedestrians?

The scheme design considers the experience and needs of all users including pedestrians and cyclists, who will benefit from this key new route in Lowestoft. The highway design for the crossing includes generous footways where possible, at a gradient that is comfortable for all users. There are crossing points proposed at key locations to enable pedestrians and cyclists to continue along their preferred routes around the area.

The design looks to connect to the existing cycle networks and infrastructure surrounding the scheme, facilitating more sustainable modes of transport to be used by locals and visitors. The proposed crossing features a segregated cycle lane on the western side and a shared cycle/footway on the eastern side, allowing a choice for cyclists of varying confidence levels and experience. The exact details of the cycle infrastructure are yet to be designed.

What are the opportunities for open space?

The areas of land around the crossing offer opportunities for public space and destination points for people to enjoy. These areas connect to the existing road network and pedestrian routes.

A47 Bascule Bridge

What are the future plans for the existing A47 Bascule Bridge?

SCC has regular communication with Highways England, who are responsible for maintaining and operating the existing A47 Bascule Bridge. In addition, technical meetings have taken place to discuss the potential design of the new crossing and the potential impact of the project on the Strategic Road Network within Lowestoft.

As part of these discussions Highways England has confirmed that there are no plans to remove or 'retire' the existing A47 Bascule Bridge, should the project be constructed. Once the new crossing is constructed and traffic flows divert onto the new crossing, there will be a significant reduction in vehicle movements using the existing A47 Bascule Bridge. This will provide opportunities to consider different layouts in the areas either side of the A47 Bascule Bridge, but this is currently not within the scope of the Lake Lothing Third Crossing project.

How are we working with Highways England and are our plans in line with their plans for A47?

SCC is working closely with Highways England, who is a member of the Stakeholder Group for the project. Highways England is supportive of the project given the benefits that the Third Crossing would bring to Lowestoft and the Strategic Road Network, in particular reduced traffic flows on the A47, improved network resilience and improvements to air quality on the A12 associated with the existing A47 Bascule Bridge.

Construction

When will a contractor be on board and what are the procurement timelines? Will they be UK based and will there be a requirement for jobs/suppliers to be local? Will the contractor have to offer apprenticeships or work with local schools?

We are currently working with our procurement team to tender the work to deliver this project. Due to the scale of this project we will have to advertise this opportunity to companies in the UK and abroad. We currently anticipate that the contract will be awarded in 2018 and will take into account many factors including quality and price. As part of the tender procurement process we will include measures to encourage the contractors to make use of local suppliers, offer apprentices and work with local schools.

Where will the construction sites be and where will construction traffic go?

We plan to have three main construction compounds, one on the south side of the lake, accessed from Riverside Road and two on the north side of the lake.

One of the northern compounds will be located off Peto Way and is primarily associated with the construction of the northern junction. A second, smaller compound will be required to the south of the railway on Network Rail/ABP land. This is required to support the construction of the bridge over the railway line and works in Lake Lothing. This site would be accessed via Commercial Road.

All compounds would typically contain site offices, vehicle parking and storage of materials. Smaller compounds may be required in other areas to manage works in that immediate area.

The DCO will secure the provision of a Code of Construction Practice and Traffic Management plan by the Contractor for approval before works can commence.

Crossing opening regime

Where will the control tower be located?

The crossing is proposed to be operated from a new control tower, currently proposed on the south side of Lake Lothing, at the request of ABP.

Who would control the opening of the crossing?

ABP operate the opening and closing of the existing A47 Bascule Bridge on behalf of Highways England and ABP's Harbour Master is legally responsible for ensuring the safety of port users.

Although agreements are not finalised at this point it is likely that ABP will become responsible for operating the new crossing on behalf of SCC.

How will you notify people when the crossing will open?

The Intelligent Transport Systems (ITS) to support the crossing (such as variable message signing) are yet to be developed and finalised. It is likely that the new crossing will operate in a similar manner and have similar signing strategy to the existing A47 Bascule Bridge, but this is to be confirmed.

Why are maintaining the port operations so important?

The Port supports a large number of jobs and economic benefits for the region and hosts a number of industries and leisure activities. A fixed bridge of a similar height to that proposed would restrict commercial port and recreational activity.

Which boats will require the crossing to be opened? How often will the crossing open? Will the new crossing need to open at the same time as the existing A47 Bascule Bridge when vessels are passing through?

The crossing is designed to be a minimum of 12m above Highest Astronomical Tide (which is the technical term for the highest level which can be predicted to occur under average meteorological conditions). The need to open it will be determined by the air draft of the vessel, the state of the tide they wish to transit the crossing and the opening protocol for the crossing. The latter is yet to be determined, but will likely be similar to that associated with the existing A47 Bascule Bridge.

We do know that the new crossing will open significantly less frequently than the existing A47 Bascule Bridge as it will be significantly higher enabling more vessels to pass underneath it without the need for the crossing to be opened. It will also be located west of the Kirkley Ham ship turning area so many of the larger vessels will not need to go under the new crossing to access the quays. However, as the Port continues to develop, it can be expected that in the future more commercial traffic may seek access to quays west of the crossing. On a small number of occasions, for the larger vessels that are destined for a location to the west of the lake (such as the old Shell base), the Harbour Master may decide to open both bridges simultaneously for safety reasons. This is being explored further through vessel simulations.