



↑ A concept design for how two of the three planned crossings could look across the River Orwell FOSTER + PARTNERS

# Trio of bridges set to take shape in Ipswich

A scheme to deliver three new and improved crossings of the River Orwell is due to start construction in 2020, reports Steve Dale.

Urban regeneration and relieving heavy congestion around the docks of Ipswich are key objectives of a major bridges scheme being taken forward by Suffolk County Council.

The Upper Orwell Crossings project comprises three structures spanning the River Orwell near the town centre.

The most significant of these, known as Crossing A, will be a new 715m bridge for motorists and active users connecting the east and west banks, and incorporating an opening section over the navigation channel.



*“The main crossing will provide relief to congested parts of the network.”*  
Suzanne Buck

Crossing B is a smaller bridge over a stretch of river known as the ‘new cut’, connecting the west bank to the Wet Dock Island redevelopment site. Crossing C will see a swing bridge over the Prince Philip Lock refurbished for use by pedestrians and cyclists, linking the east bank with the Wet Dock.

The £97M project received a provisional funding agreement of around £77M from the Department for Transport’s large local major transport schemes fund in March 2016, based on its outline business case.

It also achieved the designation of a ‘Nationally Significant Infrastructure Project’ (NSIP) due to the congestion relief it is expected to bring to the A14, which runs over the existing Orwell Bridge south of Ipswich.

As a result of its NSIP status the Upper Orwell Crossings will go through the Development Consent Order (DCO) process, with the council’s application to the Planning Inspectorate expected to be submitted early next year.

“The DCO process provides us with a lot more certainty,” says Suffolk County Council’s project manager for the Upper Orwell Crossings Suzanne Buck.

“We know that after we submit our application, within 15 to 18 months we will have a decision from the Secretary of State and we will come out with all the powers we need to start our development.”

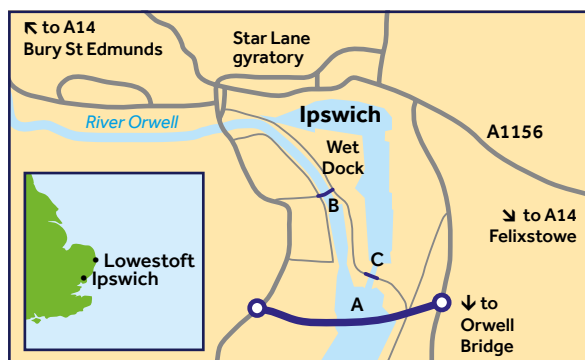
However she notes that the process does require a significant volume of work and investment to be put in up front by the council, which can be a challenge for local authorities with limited resources.

Recent progress made towards submitting the planning application has included the completion of ground investigation works this April, and before that the announcement of preferred alignments for the two new bridges in March.

“This is an incredibly complex site and we have done a lot of work on the alignment of the main crossing to make sure we minimise impacts to businesses and landowners,” says Suzanne Buck.

Final design concepts for the crossings – including details of the main bridge’s opening mechanism – are expected to be revealed this month. Architecture firm Foster + Partners has been working with the project team to develop designs since its appointment to the scheme last year.

A formal public consultation will



## Lowestoft structure to have cutting edge design

Construction of a rare 'rolling bascule' bridge could begin by the end of next year in Lowestoft, further up the coast of Suffolk. The proposed £93M Lake Lothing Third Crossing has been called for in the seaside town for close to half a century.

It will provide a new north-south link over the lake, relieving pressure on two existing crossings including a bascule bridge on the seafront that raises more than 10 times a day for tall boats, each time causing major traffic tailbacks.

"Taking traffic off that bridge and putting it onto the new crossing will not only improve journey times but also open up opportunities for Lowestoft to develop and feel like a proper seaside town," says project manager for the Lake Lothing Third Crossing Jon Barnard.

"Our design is cutting edge," he adds. "People will come to Lowestoft from across the country to see this bridge in operation – to see what we have done and how it works." The plan



↑ Offshore wind turbines near Lowestoft have inspired the bridge's design

is for a rolling bascule bridge, thought to be one of the first in the UK, with a larger clearance than the existing bascule bridge.

"The opening mechanism doesn't work around a fulcrum or a pivot point, but uses a

track to roll back the opening section so we achieve the necessary air draft height quicker for tall vessels to pass," says Jon. The design of the bridge's 'blades' is inspired by Gulliver – the large offshore wind turbine near Lowestoft.

then begin in the autumn and the scheme's main contractor will also be announced later this year. Subject to obtaining development consent, construction could start in 2020 with opening by the end of 2023.

Suzanne Buck explains that the main bridge will provide key congestion and transport benefits by increasing cross-river capacity and providing new journey options.

"There is a one way system to the north of the marina called the Star Lane gyratory, which is a key congestion area at most times of the day, particularly during the morning and evening peaks," she explains.

"We currently have no existing crossing points south of there, so the main crossing will provide relief to that part of the network and hopefully improve air quality."

In total the project is expected to reduce journey times during the morning peak by 17%, and during the evening peak by 27%, as well as improving journey time reliability.

It is also projected to provide £120M worth of peak hour journey time savings for vehicles on the A14 over a 60 year period, and bring £6.5Bn of wider economic benefits. Suzanne adds that crossings B and C will provide connectivity to the Wet Dock to support its redevelopment.

However response to the project has not all been positive from the public. "I think it certainly hasn't been high in the public's mind," says Suzanne Buck. "That's why in 2016 as soon as we got the funding we undertook an informal consultation to raise people's awareness of the project, state our objectives and gauge their views.

"As you can imagine, the biggest concern was around traffic impacts," she adds. "We have been clear about which areas we think will experience increased traffic, and we are engaging with local residents to ensure we understand their concerns and identify potential mitigation.

"I believe that as people come to understand the project more, see it develop and see that they are being involved in its development, they will come to support it."

The council is also engaging with a number of stakeholder groups including those representing maritime interests, bus companies, cyclists and those with mobility issues.

"We are trying to engage as much as possible," says Suzanne. "It's all about trying to bring people along with us and making sure we give them new information as we get it, so they don't come to the formal consultation and have to take in a huge amount of detail all in one go."

## Opinion split over Orwell scheme



**Sandy Martin**  
Ipswich MP

"If the bridge is built – which may still not happen if the cost proves prohibitive – I believe it may prove to be a massive white elephant.

"On the other hand, if the bridge does get enough use to justify its cost, it will be diverting heavy traffic through sensitive residential streets."



**Paul Simon**  
Communications manager  
Suffolk Chamber of Commerce

"We have been a strong supporter of the Upper Orwell Crossings project. We believe that it will help speed up east-west journey times for both vehicles and pedestrians and will, therefore, boost the levels of economic activity in the town."



**Peter Miller**  
Sustainable transport specialist

"According to information from both Suffolk County Council and Ipswich Borough Council the island site could be developed without an expensive new crossing, and there is no guarantee that the site will be developed – with or without the bridge – given the availability of easier to develop sites in the town.

"Furthermore, the business case relies strongly on journey time savings, ignoring historical experience that these savings typically get eroded by car centric developments that often follow a major road scheme."