

# **Questions and Answers**

February 2018

## About the project

# Will Roads and Maritime Services be impacting any heritage buildings in Windsor for the project?

No heritage buildings will be demolished or damaged as a result of the project.

# The existing bridge looks in good condition and experts say it is safe, why is it being replaced?

The existing bridge has cast iron piers which are almost 140 years old. These piers have been assessed by expert bridge engineers in 2011 and 2012 and found to be suffering from graphitisation. Graphitisation is a process where the cast iron reduces in thickness and becomes more brittle. Some examples of the deterioration are horizontal and vertical cracks in the piers, reduced thickness of non-graphitised cast iron to as thin as 2mm in places.

The deck of the bridge has wide cracks, corroded steel reinforcement at the ends of the deck slab, carbonation of concrete, and spalling. Spalling is a result of steel reinforcement within the concrete corroding and causing pieces concrete close to the surface breaking off or "spalling".

While the bridge was assessed in 2012 as able to carry legal loads, there is a risk from overloaded trucks or a large flood that the piers may be further damaged and not able to survive.

### Why can't the existing bridge be repaired?

Upgrading the existing bridge would have large implications on the use of the bridge during this work, including extended significant night work to avoid lane closures during the day. It would also mean spending many millions of dollars on an asset that is past its design life and cannot meet current design requirements. Such repairs would only be temporary and would need to be repeated regularly. Upgrading the bridge would not provide additional capacity or ease traffic congestion.

## What works are currently being undertaken?

The work being carried out includes archaeological salvage, which is required to be undertaken prior to construction. The work identifies, salvages where required, or determines a preservation procedure for existing artefacts.

All work is in accordance with the project approval issued by the Department of Planning and Environment following extensive environmental assessments.

#### Has asbestos been discovered on site?

Yes. During the early removal of the top layers, bonded asbestos pieces were found and the site was placed under the strict control of a licensed asbestos hygienist. A hygienist has also been kept on standby for any stray particles found in lower layers. All material impacted by asbestos has been disposed of at a licensed facility in accordance with best practice and Safe Work NSW and Environmental Protection Agency guidelines.

### Why can't the public go onto the site?

The work is being undertaken within a construction site. The site is a constrained area with a maze of trenches and excavation holes, with moving construction equipment, and is a dangerous environment for the public.

All persons working on or entering the site are fully trained, familiar with risks and the site access rules and are qualified to work in such a configuration. We are updating the project webpage with project updates and photos to keep the public informed about what is happening.

### **About the salvage**

#### Will Roads and Maritime destroy the Barrel Drain?

The brick barrel drain will not be destroyed.

Roads and Maritime has engaged a team of expert archaeologists to discover and record the barrel drain, the location of which was previously hidden. The barrel drain is located many metres deep and has required extensive excavation to locate.

The location of the barrel drain is being determined. The western retaining wall is being redesigned to avoid impact on the barrel drain. Further design amendments will be checked when the archaeological survey is completed.

### Will the Barrel Drain be able to be seen when the project is completed?

The barrel drain is too deep to be able to be left visible in situ and because the bricks have been buried for over 150 years, they have now become more brittle and would suffer rapid deterioration if left exposed.

Roads and Maritime will include the brick barrel drain in the archaeological and historic interpretation for Thompson Square.

#### How is the Archaeological Investigation being done?

The top layers of the site are highly disturbed and of low archaeological significance. These layers are able to be removed by excavators without impacting the heritage

aspects. Excavators are also used to transport hand excavated material from below ground up into the truck.

Most of the excavators being used are some of the smallest available for civil sites. The excavator operators work under the supervision of a specialist archaeologist. A larger excavator is required when excavating within a shoring box to support the trench and when installing and removing the box.

### Is Thompson Square going to be impacted?

The project will enhance Thompson Square and improve its accessibility and usability. The road through Thompson Square will be relocated to the eastern edge and create a single unified green space to safely connect George Street to the Hawkesbury River.

Once the new bridge and connecting road have been built the existing road will be removed and backfilled to be part of Thompson Square which increases the available green space.

Noise levels in the parkland will be reduced as the road is moved to the eastern side of Thompson Square. Traffic noise will be further reduced by limiting the need for drivers to speed up and slow down on the steep hill to the current bridge.

# Is the purpose of the project to allow sand mining upstream?

No. The purpose of the project is to replace the existing bridge which has reached the end of its viable life.

#### What community consultation is Roads and Maritime undertaking?

Roads and Maritime has engaged extensively with the community through formal consultation periods, newsletters and letter box drops when there is news to share with the community. We have also been keeping the community informed through Facebook updates and the project webpage, so make sure you are following these channels for the latest updates.