

Flinders Link Project

Piling Fact Sheet

June 2019

Artist Impression - Flinders Link Project



The Australian and South Australian Governments are jointly funding the \$125 million Flinders Link Project to extend the existing Tonsley rail line to the Flinders Medical Centre, creating new connections to the health, innovation and education precincts.

The project will include:

- A 650 metre extension of the current Tonsley rail line, including an elevated single track over Sturt Road, Laffers Triangle and Main South Road, linking Flinders Medical Centre and Flinders University to the passenger rail network;
- Construction of a new Flinders Station and removal of the existing Tonsley Station; and
- An integrated shared pedestrian/cycle path adjacent the rail line from the new ramp located at the corner of Sturt Road and Birch Crescent to the new Flinders Station.

What is piling?

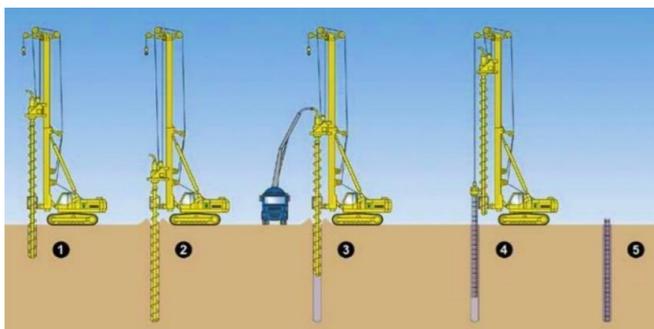
Piling is the construction of columns in the ground that provide vertical and horizontal support to a structure, such as a bridge.

Piles are installed vertically into the ground and can be made from reinforced concrete, steel or timber. There are various piling methods used in construction, but generally it involves boring or driving them into the ground.

For the Flinders Link project, the primary method of piling used will be Continuous Flight Auger (CFA) piling. CFA piling is an efficient method and has the least community impact.

With this method, a pile is formed by drilling a shaft into the ground with an auger (a drill resembling a large corkscrew) by a piling rig. Concrete is then injected under pressure through the hollow stem of the auger, and the auger is removed.

On completion of concreting, a steel reinforcing cage is inserted into the concrete to complete the pile (refer to image below).



CFA Piling Process

What machinery will be used for piling works?

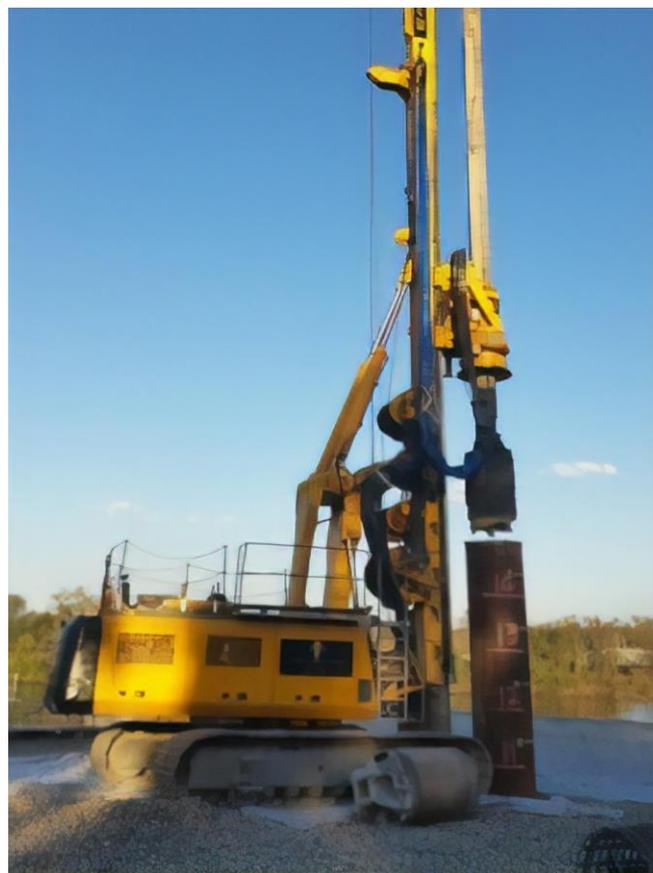
A 25 metre high CFA piling rig, crane, excavator and concrete trucks will be used during piling works. You will notice additional activity around the project site during the works, with vehicles transporting the steel reinforcing cages to site and removing spoil.

Where will piling works be undertaken?

Piling works will be undertaken along the length of the Flinders Link project site. The piles will support the new rail bridge over Main South Road, the elevated walkway and the lift and stair facilities on both sides of Main South Road.

Piling will commence in late June, starting on the western side of Main South Road and progressively moving towards the northern end of the project site (Sturt Road and Birch Crescent intersection). Once completed the piling rig will be moved to the location of the new Flinders Station before finally completing piles at the far northern end of the project.

These works will be completed mid-August and there will be a total of 147 piles installed for the project. 82 piles are being installed for the new rail bridge and 65 are being installed for the elevated walkway and lift and stairs facilities.



CFA Piling Rig

More information

Advance notice will be provided regarding construction works and activities. To find out more about the Flinders Link Project and register for future email updates, you can contact the project team using the contact details below.

Contact us:

- Contact the Flinders Link Project team by:
- Phone: 1300 928 345
- Email: dpti.flinderslink@sa.gov.au
- Visit: dpti.sa.gov.au/FlindersLink

Translation of project information can be provided upon request. Please call the project enquiry line if you wish more details on how to access this service.



Government of South Australia
 Department of Planning,
 Transport and Infrastructure