Wee Waa High School redevelopment

Fact sheet June 2021



Expert advice will inform the redevelopment of Wee Waa High School to ensure the new school is a fit for purpose facility, engineered to suit the weather conditions and distinct topography of the town.

The project will combine innovative architectural design and modern methods of construction to deliver a future-focused solution specific to the needs of Wee Waa. This multi layered approach will ensure that the new high school is a safe learning environment for students and staff for many years to come.

Wee Waa High School Redevelopment - building for the future



Wee Waa

Wee Waa is a town located on a flat highly reactive black soil plain that experiences extreme weather events including heat and flooding. It is characterised by low lying land, with natural stormwater channels and minimal formal drainage, kerbs or gutters are in some areas.

The town was prone to flooding and is surrounded by a protective levee intended to mitigate the impact of potential inundation. Whilst the levy has not been breached due to the river rising, at times of heavy rain, water requires to be pumped outside the levy and causes localised flooding.



Construction method and materials

Building contractors are required to meet the latest Australian construction standards and will use innovative building methods to address the unique challenges of the area.

Construction and design methodologies have progressed significantly in recent decades and there is a move away from bricks and concrete due to the intensive site labour required, limited expansion ability and potential risk of water absorption. Modern construction methods using lightweight structures made of steel and wood framing as well as modular technology which are options under consideration for the new high school.



NSW Department of Education – School Infrastructure

Wee Waa High School Redevelopment - building for the future



Design

Wee Waa High School will encompass a fit for purpose design taking into consideration the specific geographic and topographic characteristics of the town. The design approaches will consider these characteristics with design responses such as raised flooring, extra ventilation and use of specific material known to prevent moisture build up.

The original school met building codes of the time, and school design principles were often standardised. In some cases, this may have limited the adaptability to specific site topography and weather patterns.

Appropriate ventilation, water sustainability and accessibility will be key components the design for the new school.



Waterflow and drainage

Open water drainage channels run through the preferred site, which retain water due to natural elevation. It is common practice to modify and reroute water channels and adjust elevation accordingly during early works of construction.

Geotechnical engineers, hydrologists and environmental experts are informing our approach to address waterflow at the preferred site, including harnessing water for usage in the new agricultural facilities. We are also working closely with Narrabri Shire Council town planners to ensure that our design will complement the town's existing stormwater infrastructure.

A stormwater drainage system and management plan will ensure water sustainability for the new school and effective integration with the local water management system.



Educational
Facilities Standards
and Guidelines

School building design standards have evolved and now encourage innovative solutions that consider local context and needs of the individual school and community.

The Wee Waa High School redevelopment will be guided by these principles, acknowledging that building a facility that is reflective of the town's specific landscape and characteristics is key to the future of the high school and community.

