

New Intercity Fleet Maintenance Facility

FACT SHEET: HYDROLOGY AND FLOOD MODEL

The site of the maintenance facility building is located on naturally elevated land. This will allow infrastructure to be installed to collect and detain stormwater prior to discharging back into the downstream catchment, without adversely affecting the local community.

All water falling on the site will be captured, stored and released into the natural system at a flow rate no greater than the rate prior to the facility being constructed, so that neighbouring properties and downstream catchments are not adversely affected.

Flood modelling results also indicate that the project will not have an impact on surrounding properties.

Design Principles and Flood Model

Flood assessment was undertaken using the Central Coast Council TUFLOW model as the baseline for the Ourimbah Creek Catchment Flood Study. The use of Council models is standard industry practice. The base design flood model is issued by Council to ensure consistent catchment modelling and rainfall data is used. The contractor delivering the maintenance facility project, John Holland, verified the model and updated it to reflect the project works.

The updated flood model was used to confirm project approval conditions are met, including the provision for scour protection (natural rocks or other submerged material) and no adverse flooding impacts to the community.

Flood Protection Design Features

Water detention basins will collect water on the site. Basin 1 has 12,000 m³ storage and Basin 2 has 800 m³ storage, which meet the storage requirement for the 100-year adjusted Average Recurrence Interval (<http://www.bom.gov.au/water/designRainfalls/ifd/glossary.shtml>)

Water discharged into the natural water systems will meet Central Coast Council requirements for water quality.

Culverts installed for the project will have no impact on the flow of flood waters in the local area.