



Project name: Chatham Islands quarry management
Client: Screenworks
Geotech Supervisor: Daniel Skilton
Project date: Dec 2015 – July 2017



Project description

Geotech were contracted to Southern Screenworks Limited, to establish and operate a quarry on Ohinemama Farm on the Chatham Islands. The quarry was a Greenfields project, for the establishment of a quarry approximately 26,000m² in area. The project required:

- Construction (in conjunction with Screenworks) of a decant pond prior to the start of ground engaging
- Establishment of a 26,000m² quarry with a processing area of around 9,000m²
- Establishment of the site office
- Construction of an access track through pastoral land to the quarry
- Set up of stockpile areas for overburden and material
- Establishment of Geotech explosives magazine
- Quarry blasting to meet required screensize
- General quarry management works, production, stockpile management and cartage
- Explosives management
- Design for subsequent rehabilitation



The quarry was being established to provide concrete aggregate for building concrete x-blocks/breakwater armour for the Chatham Islands wharf upgrade.



Resources applied

A range of resources were mobilised to the Chathams to support the project, including:

- Sandvik Ranger 500 top drive surface track drill
- PC300 excavator
- HM400 ADT
- Emulsion unit mounted on unimog
- Light vehicles
- Explosives magazine



Services

A decant structure was constructed prior to any other ground engaging to establish the quarry. This system would manage water runoff from the quarry, and the established early on in the greenfields project. Geotech undertook drill and blast for quarry establishment. Blasts were a modest size (generally limited to around 5000m³) in part due to the lack of space as the quarry was developed, but also to meet the screensize for the Screenworks crusher.





Geotech operators assisted with general quarry works, stripping, cartage, stockpile management and quarry operation. We were also the lead role in explosives management, overseeing the legislative compliance for all blasting, from explosives transport and storage, magazine management, and blast design and delivery.

Project value
\$497,000 to date

GEOTECH GROUND ENGINEERING
7370 State Highway 6
Charleston, Buller
West Coast, New Zealand
www.geotech.net.nz