

# VOYAGER II QUARRY

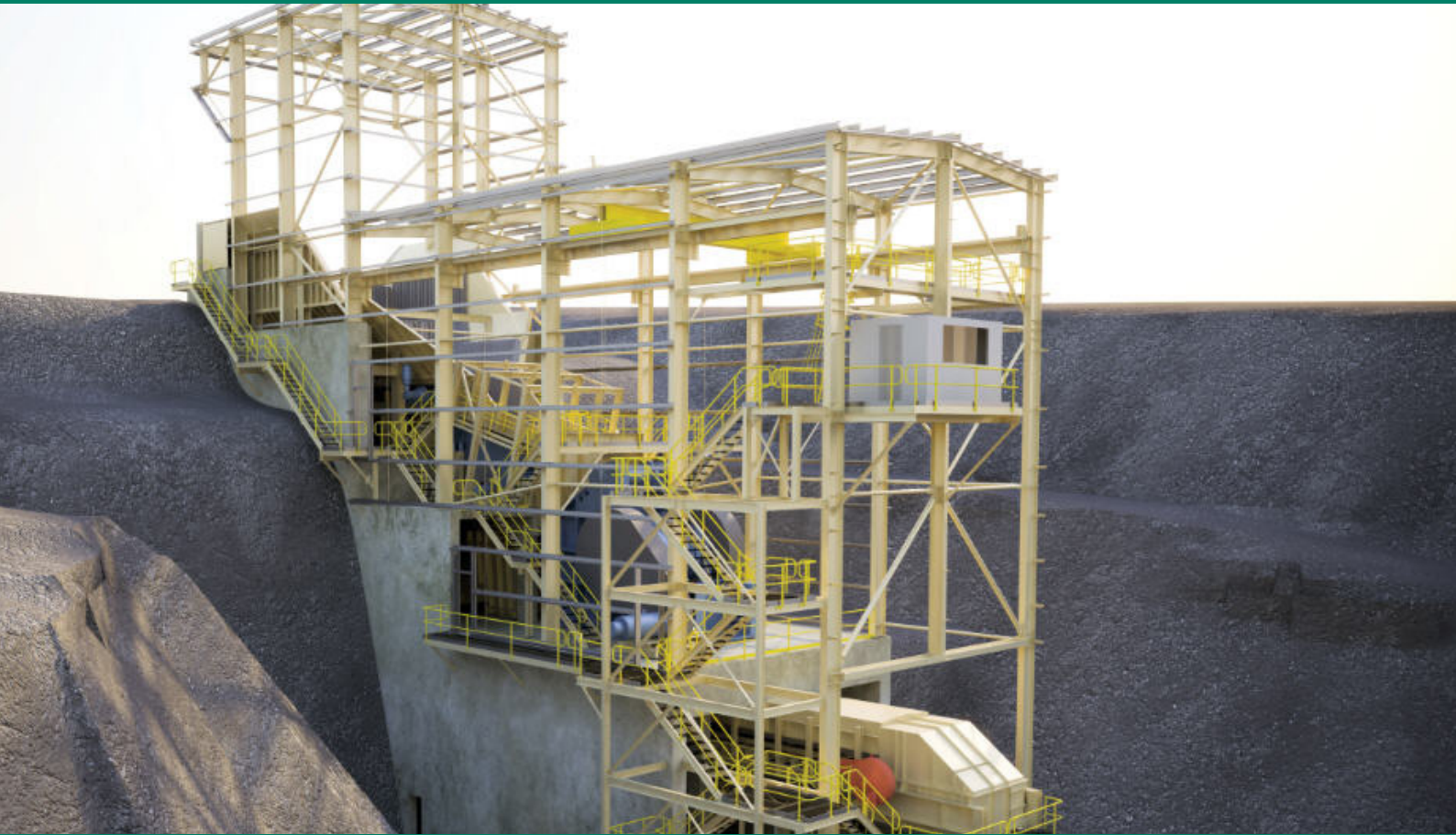
Great Southern HWY | The Lakes | WA

**CLIENT**  
BGC Quarries

**DISCIPLINE**  
Structural

## PROJECT COST

\$2.5m



BGC Quarries has been operating the original Voyager Lakes Quarry since 1990, extracting and crushing Granite for concrete aggregate, paving blocks, asphalt, road seal, road base and general fill. The new Voyager II Quarry is located in The Lakes area, 55kms east of the Perth CBD with a lifetime capacity of 2 million tonnes of gravel, 12 million tonnes of clay and 60 million tonnes of granite resources.

Due to the nature of the site, blast vibration and air overpressure were two vital elements our team needed to take into consideration when providing our design. Structerre was engaged by BGC to prepare structural documentation for the reinforced concrete components on a number of items. This included the new primary aggregate crusher and 30m wide x 60m long x 13m high steel framed work shop and admin facility, various concrete tunnels and ground slabs and pad footings which formed part of the aggregate conveyor system.

The blast vibration duration, amplitude, frequency, and rate of occurrence were all key issues in the design process.

 Residential  Geotechnical  Commercial & Infrastructure  Inspect & Investigate  Energy Assessment  Environmental

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