



DUX Geogrids

Matthews Quarries Dump Wall

Innovation is a hallmark of Rob Matthews approach to business.

So in 2020 when the old crusher and dump wall at his Tyers quarry was up for replacement he looked around for good ideas and in discussion with project manager Gary Tate of Project Services decided on a wall system comprising geogrid-reinforced soil with concrete facing panels. **DUX** polyester geogrids, ranging from 80 to 150kN/m UTS are installed at 500mm lifts to take the extreme lateral pressure off the concrete facing panels. The side wing walls utilised simple, low-cost geogrid “wraparound” design which enabled rapid construction.

DUX polyester geogrids have a design life of 120 years ensuring these walls will be serviceable for many years to come. Southern Geosynthetics provided valuable design support for this demanding structure.

In-house design, fabrication and construction resulted in over 30% cost savings.



The new walls are constructed of 2.5m high reinforced concrete panels, set into steel uprights. First lift shown. The final walls will extend to the top of the hopper.



Wingwalls are built of simple, low-cost bent mesh face with DUX Geogrid “wraparound”



The old walls were buckling under the enormous loads.



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DUX Geogrid provides soil reinforcement to take the load off the back of the facing panels



The completed 12m high dump wall in use



25 years ago Rob Matthews pioneered the use of woven geotextiles in road construction works on Old Melbourne Road , Morwell