



PROJECTS

HYDROGEOLOGY

Hydro18

PIONEER CONCRETE

Mineral landbank development with low-level restoration

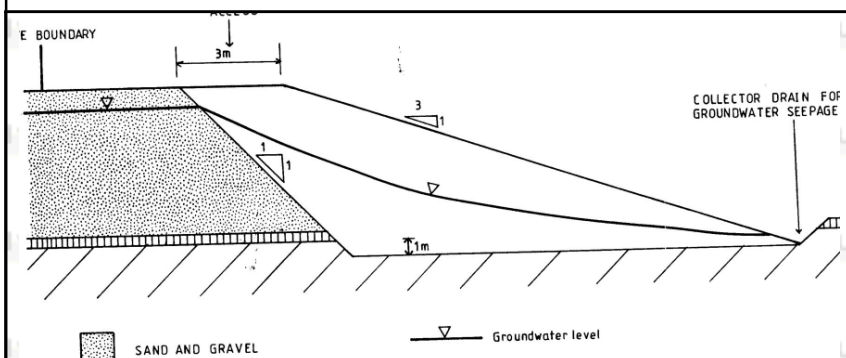


Options to extract aggregate and restore the site were reviewed for a sand and gravel lens above liassic clay.

No constraints on dewatering by conventional means were identified. The dewatering scheme included the recirculation of abstracted water via two settlement ponds, to permit mixing and the regulation of groundwater quality.

Options for the low-level restoration of the site were examined. The use of in-situ materials was identified to be the most cost-effective option compared to construction of a bentonite slurry wall as a permanent groundwater exclusion structure. Long-term incidental rainfall and likely seepage rates were identified using numerical modelling.

Recommendations were made for internal and external drainage structures to be incorporated into the design.



A geotechnical appraisal of the suitability of on-site clays to form the exclusion structure was undertaken.

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