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NEW ZEALAND

# Engineering

THE JOURNAL  
OF THE NEW ZEALAND INSTITUTION OF ENGINEERS



# geodrain systems

## Cut construction costs

GEODRAIN is a newly-designed system for controlling and removing ground water from soil that can be drained by gravity. The system surpasses anything that is presently being used, because it is able to *accomplish faster subsurface drainage at a lower cost.*

Available are  
GEODRAIN FILTER (G.D.F.) and GEODRAIN BARRIER (G.D.B.)

GEODRAIN FILTER (G.D.F.) consists of a water carrying PVC mesh enveloped in outer layers of non-woven polypropylene filter fabric to collect and transport ground water by gravity to a perforated drain pipe inserted in the lower section of the structure.

GEODRAIN BARRIER (G.D.B.) is similar to G.D.F. except that one filter face is replaced by an impermeable membrane.

Geodrain systems can save construction costs by:

- (1) Speedier installation
- (2) Reducing the need for permeable back-fill
- (3) Reducing trench width and obviating the need for shoring in deep trench work.
- (4) Reduce maintenance resulting from clogging in traditional systems
- (5) Replace the need for formwork where mass concrete is to be poured against a stable cut face

INSTALLED IN TRENCH TO CONTROL GROUND WATER



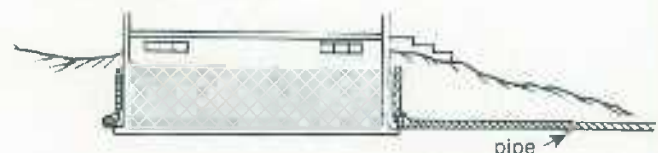
INSTALLED ALONG WET SLOPE TO PREVENT SLOUGHING



BEHIND RETAINING WALL TO REDUCE HYDROSTATIC PRESSURE



ALONG BASEMENT WALL



**GROUND  
ENGINEERING**

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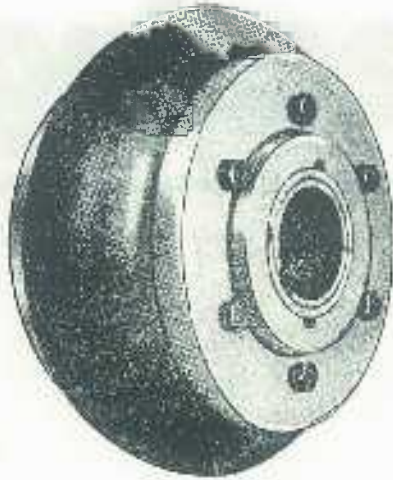
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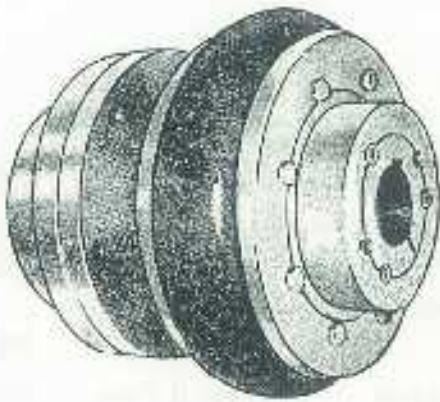
**Cover picture**

Aerial view of Huntly power station, March 1979 — see paper on p. 270.

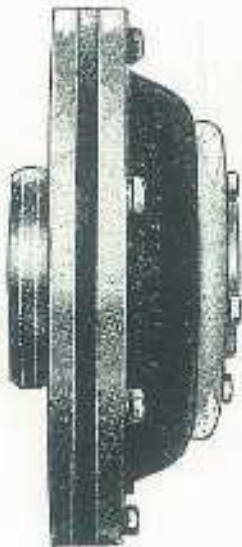




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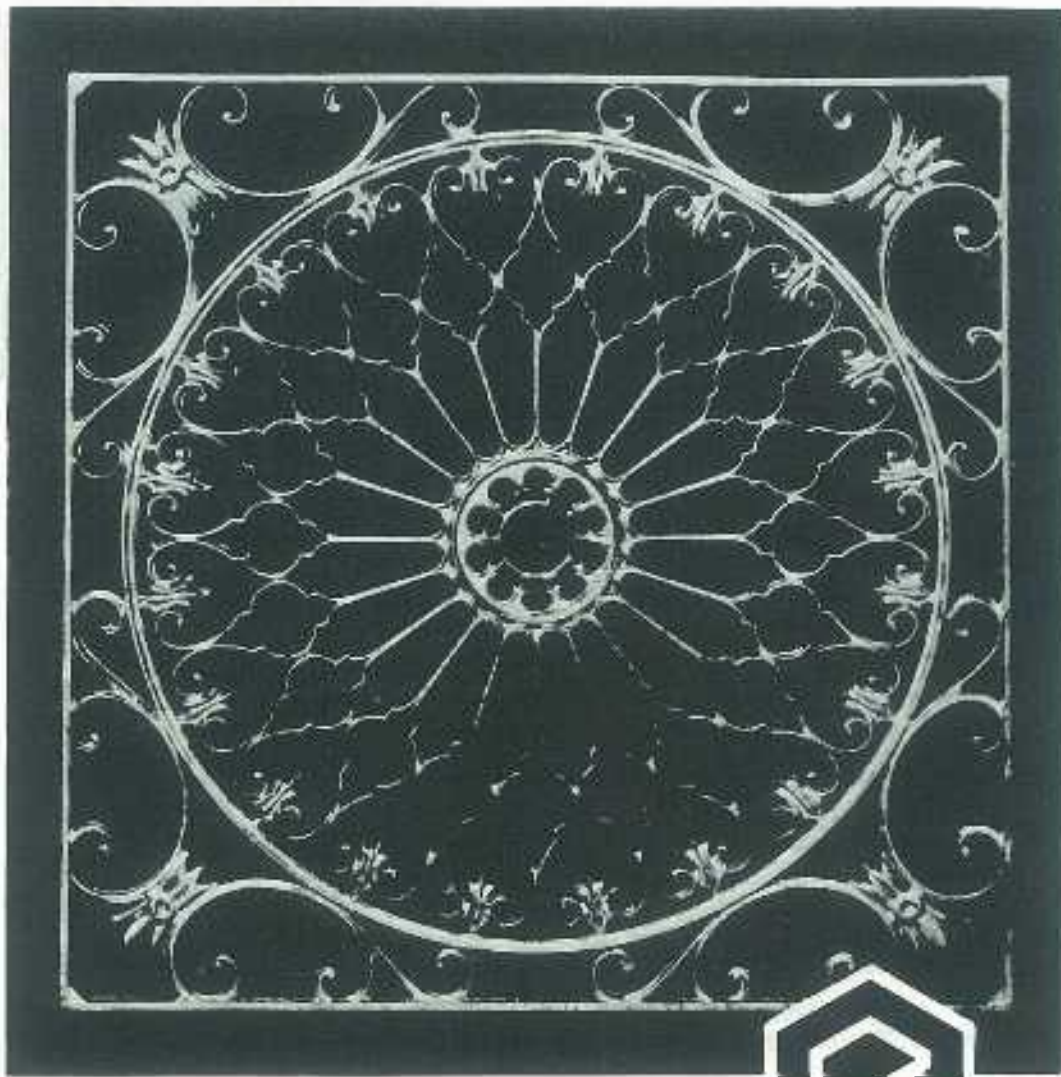
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