





Hanchurch Service Reservoir – Severn Trent Water Case Study

Client:

J N Bentley working as part of the MMB (Mott MacDonald Bentley) joint venture.

Project detail:

Construction of a new service reservoir in Hanchurch for Severn Trent Water as part of the AMP6 programme.

Application of Polybed and Polyagg:

The basic concrete structure of the reservoir has a footprint 147m by 72m and once constructed will require a toe drain around the perimeter. The purpose of this is to prevent a build up of ground water around the structure.









Traditionally toe drains consist of perforated pipe surrounded with a gravel bedding and backfill, and a geotextile envelope. Polybed was chosen by J N Bentley's site agent Oliver McMahon who stated "...the product was chosen due to the quick installation time with significant programme and labour savings compared to traditional practise".

The application at Hanchurch required 450 meters of 6" single wall land drain with a geo-textile wrap. This was installed in just 4 days amounting to an estimated programme saving of 10 days verses traditional build. Mr McMahon confirmed following installation "The install has gone very well and very quickly... cost and time savings are estimated to be around 50% on this project."





Conclusion:

Polybed requires no aggregate on this type of installation as it is delivered pre-lagged with the required geosynthetic drainage bead surround and geotextile wrap. The Polybed product is easy to lift, position and connect, requiring just an 'as dug' backfill in many cases. This equates to less labour, plant, operations and less spoil being removed from site.

Polybed is the simple to use, no fuss, economical way to construct small diameter drainage and lateral connections from 3" to 6" diameter.

