

**ALEXANDER STADIUM**  
**PERRY BARR, BIRMINGHAM, UNITED KINGDOM****Reinforced Soil Walls and Slope Reinforcement****Problem**

The Alexander International Athletics Stadium in Perry Barr, Birmingham provides state-of-the-art track and field sports facilities hosting national championships and international competitions throughout the year.

The high-tech stadium building includes upper-level covered seating for spectators and indoor performance suites for a variety of sporting disciplines. Office space for commercial clients occupies lower floors with access to them provided by service roads with car parking at the back of the building.

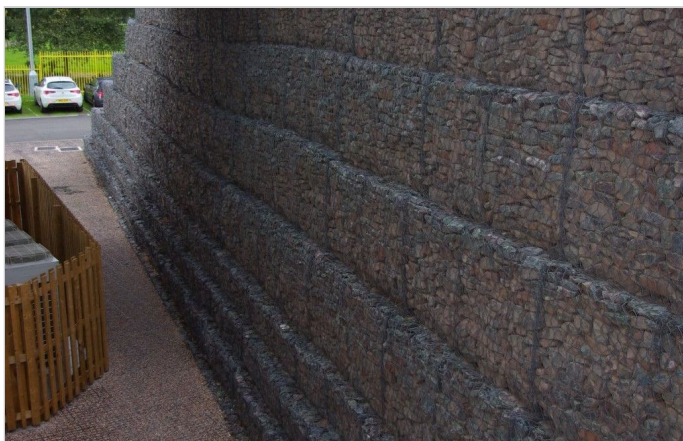
Abutting both ends of the stadium building are 8.0m high grassed embankments which surround the athletics track and an impressive oval amphitheatre. At the northern end of the building, the embankment doubles as a high-level access ramp to service facilities behind the spectator seating tiers.

Here designers Hydrock wanted a hard stop end to the embankment rather than a natural slope. This had the dual purpose of separating and clearly defining the building façade and at the same time integrating it with the surrounding embankment, by providing support for a short access over-bridge to the upper-level facilities.

**Solution**

An 8.0m high stone-filled Gabion Terramesh® facing wall placed approximately 5.0m from the stadium building and stepped back at each 1.0m high course by 150mm created a batter of 8.5 degrees from vertical into the embankment. The bridge bank seat (which provides vehicular access to upper levels of the stadium) is supported by steel columns extending through the Gabion Terramesh® structure.

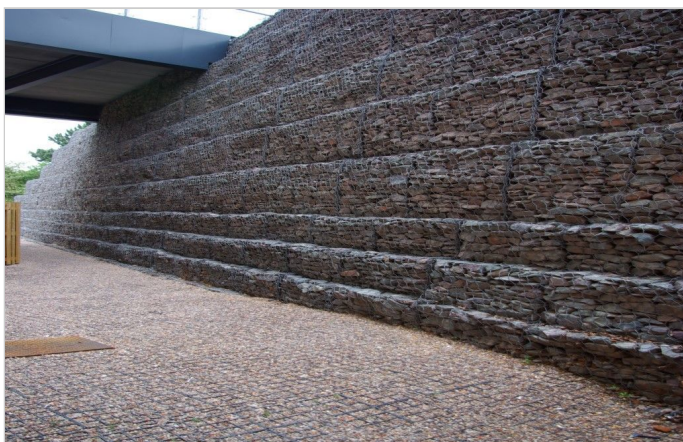
**Client:** Birmingham City Council**Designer / Consultant:** Hydrock**Contractor:** Thomas Vale**Products used (Qty.)****Date of construction:** 04/2011 - 07/2011[Google Maps](#)[Google Earth](#)**Completed Gabion Terramesh® wall****End view of Gabion Terramesh® Wall**



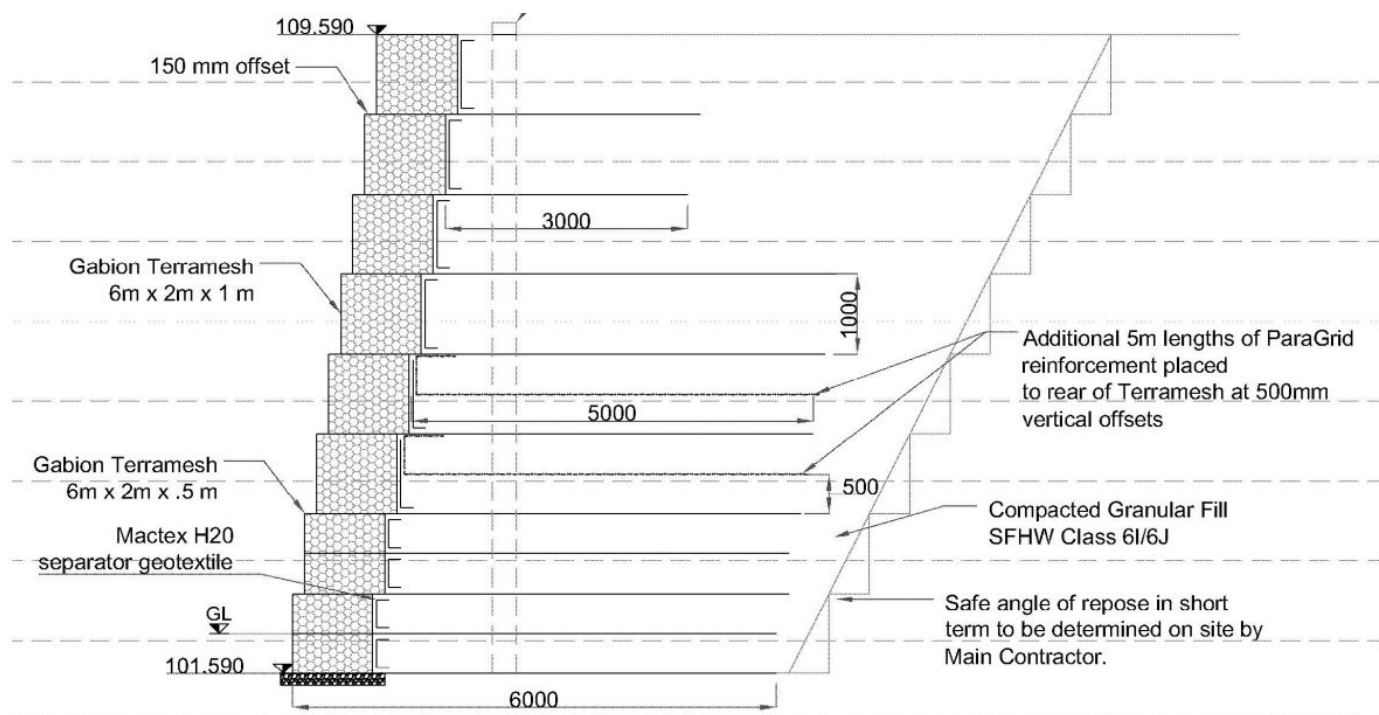
View of side of Gabion Terramesh® wall



View of bridge bank seat



View of bridge bank seat



Typical section