

## Stranton Cemetery, Hartlepool

## Saturated ground for graves



Stranton Cemetery, a municipal facility similar to the above and owned and managed by Hartlepool Council, was having increasing problems with storm water. For families to tend to their loved one's grave they use grass paths. However, with increasing heavy outbursts of rainfall these paths were becoming impassable. In addition, burials were becoming difficult due to saturated ground.

### System Design

We were asked to design a GD90™ system to deal with the saturated ground. The problem was worse in the South-East corner of the site and we designed 10 lines of GD90s™ running North to South with a gap of 5.5m between them. The installation needed to be carried out sensitively, as the Cemetery stayed open during the installation. We installed 70 x 6m GD90s™ and 40 x 12m GD90s™.



**£2 MILLION**  
**WARRANTY**

Every GD90™ installation has £2 million of Professional Indemnity cover. We can increase this for individual projects.

## The GD90™ Transforming Drainage Design & Scope

The GD90™ is an internationally patented product with unique characteristics that solve a multitude of drainage problems. We launched it in the UK under licence in 2012, since when we have completed over 300 successful installations, from commercial and residential new builds to car parks and cemeteries. We also have our 'Hall of Fame' installs.

Made from high density polyethylene (HDPE), standard drainage extrusion, the unique GD90™ design uses a multiple open chamber system that creates lateral (horizontal) water transfer to soil stratas to a depth of over 12 metres (go to [www.groundwaterdynamics.co.uk](http://www.groundwaterdynamics.co.uk) for full information).

Our ethos is that the time has come for a new drainage solution that:

- does not move large amounts of storm water from A to B in conventional horizontal pipes creating problems "down the line", including the flooding of water treatment facilities that then discharge into critical marine, river and stream ecosystems
- improves the carbon footprint by removing external energy requirements to deal with storm water, with no need for pumps moving water or the energy requirements of treatment works
- stimulates plant growth, creating GD90's™ CARBON NEGATIVE standard
- does not take storm water directly off the surface into deep borehole systems creating possible pathways for contaminants.

Instead, we have introduced a drainage system that takes ground water, indirectly, laterally through the ground into an installation of multiple GD90s™, **changing the drainage characteristics of soils which previously were unable to accommodate positive infiltration rates.** That's the game changer.

"The GD90™ design requires no maintenance, has no mechanical moving parts and needs no external energy requirement to function. It uniquely harnesses soil based gravitational pressure, porosity and waters enthusiasm to keep on moving."

"The unrivalled result is that a GD90™ installation uses the entire volume of soil to a depth of 12m below the ground for water drainage, creating a massive volume of earth to deal with storm water. For new build sites this results in less area for drainage, more for building and higher GDVs."



Edgbaston CC



Gleneagles



Royal Ascot



Silverstone