

Slope Stabilization for German Road Bypass



The picturesque town of Idstein, northwest of Frankfurt in Germany, is a popular destination with a stunning church, palace and castle. In 2002, the area's transport authority was keen to build a new connecting road to

Company: Naue
Client: City of Idstein
Location: Idstein, Germany
Application: Stabilizing earthworks around a new road system with a geogrid-reinforced slope
Benefits: Carbon emission reduction, cost and time savings, conserves natural resources

improve traffic conditions around the historic location. As the topography of the site required extensive filling works in combination with a retaining structure on the side facing the town center, the tender requested the inclusion of a concrete retaining wall. However, a greener and more cost-effective solution lay in using a geogrid reinforced soil structure.

NAUE offered and deployed an alternative design, using its Secugrid® geogrid solution to reinforce the earth slope. This provided economic and environmental benefits impossible with a concrete retaining wall solution.



The International Geosynthetic Society (IGS) is a learned society dedicated to the scientific and engineering development of geotextiles, geomembranes, related products, and associated technologies. We are registered as a non-profit corporation.

Choosing the geogrid reinforced soil solution rather than a concrete cantilever wall enabled a reduction of more than 80% of CO₂, cut project costs by half, reduced construction time, and provided a more aesthetically-pleasing solution for a town renowned for its beautiful buildings.

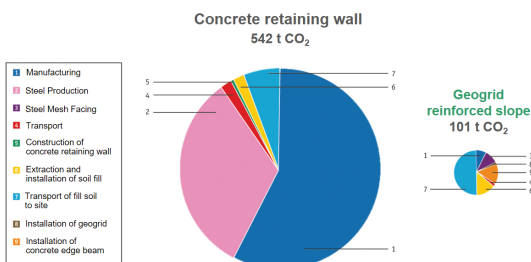
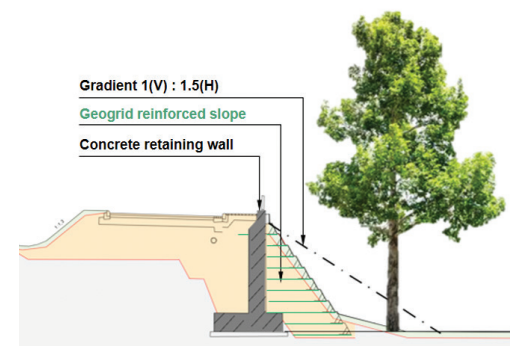


Figure 2: Comparison of Carbon Emissions



To find out more, contact V. Jörg Klompaker at jklompaker@naue.com.

The IGS Sustainability Committee is committed to communicating the positive environmental impact of using geosynthetics, improving worldwide understanding of the sustainability benefits of geosynthetic materials, and supporting the geosynthetics industry maximize the sustainability potential of their projects. For more information, visit our webpage at www.geosyntheticssociety.org/sustainability.

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