



Tensor InterAx geogrid helps to reduce pavement depth



## Subgrade Stabilisation Nº 455

### North Heybridge Estate Road

📍 Chelmsford, Essex

CONSTRUCTED IN 2022

#### Benefits

**£177,000 (54%)  
estimated reduction**  
in construction cost

**12 days (50%)  
estimated reduction**  
in construction time

**80,000kg CO2e (57%)  
estimated reduction**  
in environmental cost

### Reducing pavement construction costs whilst achieving project performance targets

To facilitate the construction of a new road at North Heybridge, a Tensor Mechanically Stabilised Layer (MSL) incorporating Tensor InterAx geogrid was utilised to act as a capping over low strength soils which was required to achieve a Foundation Class 1 as required by Essex County Council's specification from CD225: Design for New Pavement Foundations.

#### CLIENT'S CHALLENGE

A cost-effective solution was required when low strength subgrade soils were encountered across the site. The pavement design needed to achieve a prescribed CD225 foundation class to allow Essex County Council to adopt the carriageway. Project granular fill costs were high as it was being imported from outside of the local area.

#### TENSAR SOLUTION

Tensor determined the thickness requirements for a Mechanically Stabilised Layer (MSL) design using Tensor InterAx geogrid to meet the CD225 foundation requirements as well as dealing with construction trafficking close to the low strength subgrade. The Tensor stabilised capping layer reduced granular fill quantities as well as project excavation operations and also offered a more sustainable solution by reducing the carbon footprint of construction and transportation activities.