



## Key achievements

- Only company with necessary resources to install multiple structures in the necessary timeframe.
- Working adjacent to a live carriageway whilst also adhering to the Client's specific safety regime.
- High levels of quality consistently maintained through out the project

### • The project

The A21 in Kent is a busy arterial route in desperate need of upgrading to accommodate the high levels of traffic. The two lane carriageway between Tonbridge and Pembury was to be upgraded to a dual carriageway with work starting in 2015 and due to finish in late 2017. The £70 mill scheme involved the construction of several bridge structures, with Phi Group constructing reinforced soil structures to form the new bridge bank seats and wing walls.

### • The challenge

The main challenge on this project was the tight build programme stipulated by the Contractor. The H&S regime on site was stringent with the requirement for a non-working supervisor on site at all times. Add to that the fact this is a live highways environment, it meant that co-ordination of deliveries and working with Balfour Beatty was paramount.

### • The solution

The Client's Engineer specified a Tensar reinforced soil modular block system to form these structures. Designed and supplied by Tensar, with Phi Group responsible for the installation. Reinforced soil is widely used for these applications, and thanks to there experience on this and other projects, together with their superior resource levels, Phi Group are the market leader in this field.

#### Application

Earth Retention

#### Technique

Modular Block Reinforced Soil structure

#### Market

Roads

#### Client

Highways England

#### Main contractor

Balfour Beatty Civil Engineering Limited

#### Contract Value

£900,000

#### Keller companies

Phi Group