

# EAGLES ROAD CLIFF STABILISATION

## DARTFORD, KENT

A 180-metre chalk cliff face in Greenhithe, Dartford had significant vegetation growth on a large proportion of its surface with 5 locations across the cliff identified as cause for concern due to the presence of trees, major fractures in the rock and a high degree of weathering on the face.

Three main access points were established to facilitate operative access to the cliff face for removal of vegetation by professional tree surgeons accompanied by an ecologist to ensure no wildlife was disturbed. A 50-tonne mobile crane was deployed to transport materials up and down the cliff.

Once the vegetation was cleared, a geotechnical specialist was required to inspect and complete a detailed assessment to inform the scope and design of remedial measures to ensure the safety of the residents living adjacent. Debris netting was installed with 4m long dowels/anchors grouted into pre-drilled holes formed with specialist's drifter drilling equipment and methods to the cliff face.

Once the risk of collapse had been mitigated a 'catch fence' comprising a sleeper wall construction was constructed as secondary protection to the properties at the toe of the cliff. A new stone access pathway was installed at the bottom of the cliff and rope

access points created at the top to facilitate future maintenance.

As the vegetation removal could have resulted in the loss of suitable nesting habitats, new and more appropriate shrubs were planted to the crest of the cliff. Bird boxes were installed and provided to the residents as a temporary stopgap until the new plants become established. In addition, a wildflower plant seed mix for chalk and soils was sown within suitable locations which will help the site's biodiversity.

Our management team contacted residents of adjacent housing at each stage of the project explaining the works and requesting restriction on the use of their rear gardens. Exclusion zones on the public side of the works area were set-up on a daily basis and road/pedestrian closures implemented when necessary.

Appearance standards are excellent with a range of provisions in place to ensure that the high standards are maintained. Community arrangements also excellent, bordering on being considered exceptional. Neighbours are regularly updated and supported and it is great to see that this site is continuing to carry out goodwill gestures at every opportunity. Environmental, Safety and Workforce arrangements all exceptional for a project of this size and type.

**Considerate Constructors Scheme** (Monitor's Site Report)

**Discipline:** Enabling Works

**Duration:** 18 weeks

**Value:** £650k

**Client:** Dartford Borough Council

