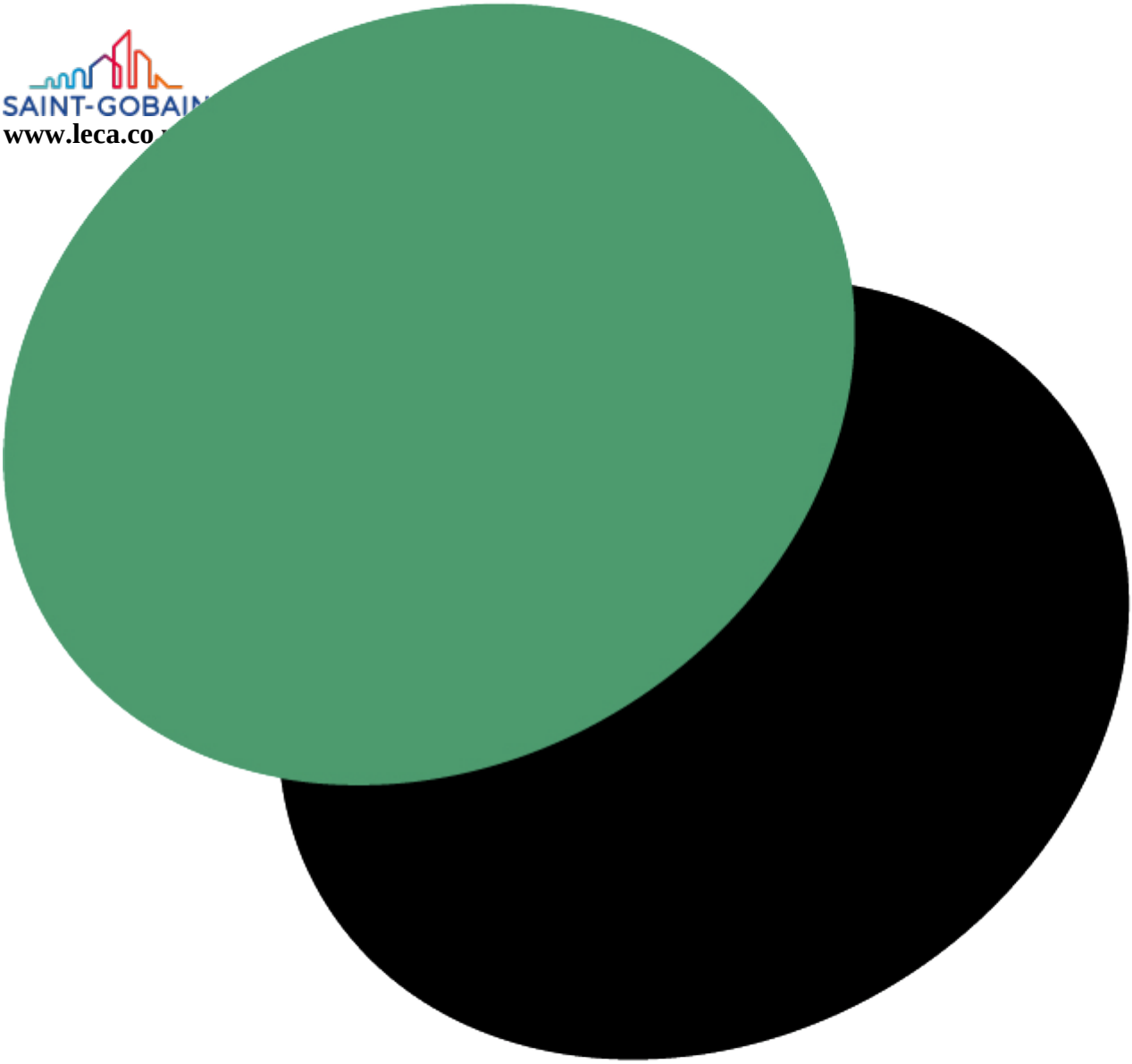

**LITTLEHAMPTON HIGHWAY CONSTRUCTION BRIGHTON**

Eastwood Engineers served as the designers and primary consultants for the new development in Littlehampton, working in collaboration with Persimmon Homes, a housing developer investing ambitiously in the local area. The work was carried out and overseen by Breheny Civil Engineering.

During the site assessment, it was discovered that the area had highly compressible soft ground conditions, posing an engineering challenge for the construction of the new highway connecting to Anderson Way. The surrounding wetlands and high water levels from the Black Ditch river made it impossible to place heavy loads on the site without causing significant ground settlement.

## FACTS

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**Amount of material:** 11,000m3 of Leca® 10-20mm

**Interesting Fact:** The surrounding wetlands and high water levels from the Black Ditch river made it impossible to place heavy loads on the site without causing significant ground settlement.

**Delivery Method:** Direct Shipping

To address this issue, over 11,000m³ of Leca LWA was shipped directly to the nearby port of Shoreham By-The-Sea and transported to the site, saving time and road miles at the project's outset. Leca LWA proved to be an essential solution for the soft ground conditions, as confirmed by the Leca UK team following a CPD session at Eastwood Engineers. Leca LWA was utilized in the transition area of the embankment where the highway structure meets the embankment for the bridge construction. Due to the poor ground conditions, piling was not a viable option, necessitating a lightweight alternative.

Leca® LWA is frequently used in highway development and railway structures as a light fill material to reduce subgrade settlement and improve the stability of structures on weak and unstable ground. It serves similar purposes in pedestrian and bicycle pathways, railway yards, and various platform and embankment structures.

In highway development and railway reconstruction, Leca® Lightweight Expanded Clay Aggregate can be applied to repair settlement defects, enhance leveling, and improve bearing capacity. Additionally, it enables the construction of widened highway embankments with minimal impact on the existing structure due to increased loading.