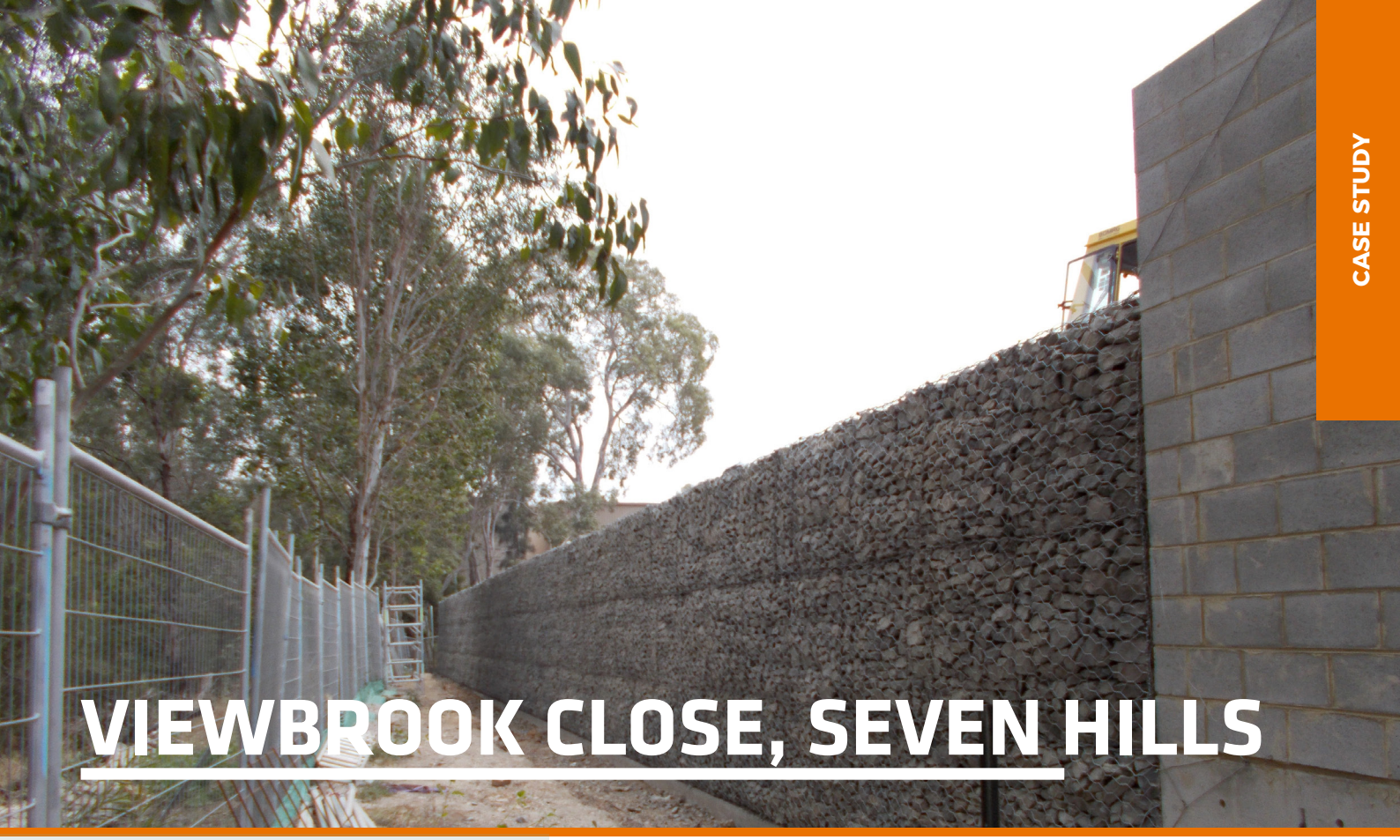

CASE STUDY

VIEWBROOK CLOSE, SEVEN HILLS

DATE: MARCH 2020
CLIENT: CW SYSTEMS PTY LTD
INSTALLER / CONTRACTOR: EARTHTEC
LOCATION: SEVEN HILLS, NSW

MACCAFERRI® GABION BASKETS

FEATURES

Maccaferri Gabions are rectangular woven wire mesh baskets that can be filled with rock to create flexible, permeable structures such as retaining walls for architectural, mining, industrial and road projects. They are also used for erosion protection, weirs and bank stabilisation and to create architectural and design features. Their strength comes from a double twisted hexagonal mesh of steel wire, reinforced by heavier gauge wire along the edges and internal diaphragms. Maccaferri Gabions have been widely used across Australasia for over 50 years.

CW Systems Pty Ltd was building an industrial warehouse for their business. To make full use of the expensive industrial land, he required the site to be level. This required a retaining wall to be built on the low side of the block. The subgrade was weak with limited bearing capacity. CW Systems Pty Ltd approached Geofabrics for a solution and recommend a gabion terramesh retaining wall structure.

The subgrade was soft and likely to produce differential settlements. The Gabions terramesh retaining wall was an ideal solution because this structure can withstand some differential settlements. Reinforced concrete block retaining walls were also considered but were rejected because of the subgrade conditions.

Geofabrics was able to suggest a gabion designer and installer. We worked with Earthtec to deliver a cost-effective solution quickly. The condition of the subgrade was only discovered after work has commenced so that this retaining wall construction was on the critical path. Geofabrics visited the site on several occasions to offer advice and expedite construction.

Earthtec proof rolled the subgrade and erected the gabion baskets. They laid the tails of the terramesh system and then filled the baskets with gabion rock. After they carefully placed and compacted selected fill on the tails. This process was repeated until the complete wall was built.

The completed retaining wall made for a level site that allowed the industrial building to be built on level ground. The wall was able to be founded on poor subgrade with limited bearing capacity. The wall also allowed for minor differential settlement.

Geofabrics was able to advise of a cost-effective solution with a quick turnaround. This prevented the client from being held up on his industrial construction.