

Eco Anaerobic Digestion Plant Feed Bunker

Client: Mildren Construction

Value: Circa £205,000

Duration: 5 weeks

Project Detail

Eco Sustainable Solutions operates one of the UK's leading organic waste recycling and renewable energy facilities, located near Christchurch, Dorset. The site processes green waste, wood waste, and food waste, converting it into compost, biomass fuel, and biogas. As part of an infrastructure upgrade to expand the Anaerobic Digestion (AD) plant capacity, the client required the construction of a new piled structure within the operational energy facility. Our scope of works involved the installation of a reinforced concrete guide wall followed by the construction of a secant pile wall, forming a key structural and retaining element for the AD plant redevelopment.

Working within an operational renewable-energy site with active heavy plant can bring its challenges, but through coordination with other contractors on site and monitoring vehicle movements this didn't affect our works on site. Our specific scope of works involved:

- Mobilisation to a live waste-processing and renewable-energy site.
- Installation of a guide wall to ensure alignment and positional accuracy for the secant piles.
- Construction of the secant pile wall consisting of alternating male and female piles.
 - Pile diameter: 600 mm, installed using our Comacchio CH450.

Time Constraints:

There were significant time constraints on this project. We operated under a strict programme, driven by the client's requirement to maintain the AD plant construction sequencing. Our piling works formed a critical path element of the project, requiring delivery on schedule to avoid delays to downstream contractors.

Challenges & How They Were Overcome:

Soft ground conditions made the original augered method unsuitable for cutting the female piles. As a consequence we revised the methodology to a cased bored technique, enabling cleaner and more stable female pile construction. The versatility of the Comacchio CH450 allowed us to adapt the methodology without requiring any additional

machinery, minimising delays. As well as maintaining quality and programme progress, the efficient use of the single CH450 piling rig reduced plant requirements and therefore the environmental footprint.

Conclusion:

The works were completed on time and in line with the agreed programme, despite ground-related challenges.

Photographs:

