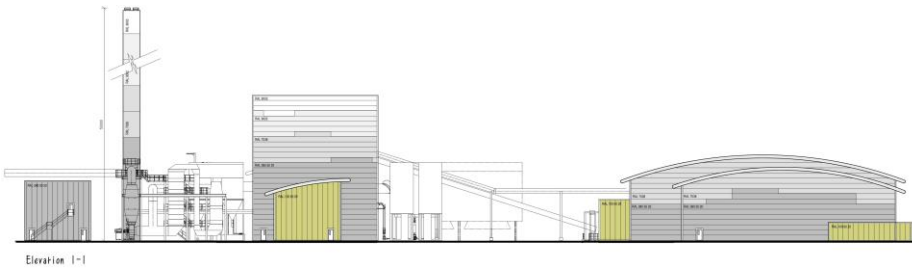


# J G Pears – Bio-Mass



Client:	J G Pears
Project Manager:	Cobalt Energy
Process EPC:	Aalborg Energie Technik a/s
Civil Design:	Melia Smith & Jones
Civil Contractor:	East Midlands Civil Engineering

Cobalt Energy asked Melia Smith & Jones to provide civil works design support for a project they were managing on behalf of J G Pears at their site in Low Marnham near Newark. The new CHP plant provides energy to Pears existing operations significantly reducing their operating costs. The CHP is a bio-mass facility fuelled by meat and bone meal (MBM), technology provided by Aalborg Energie Teknik (AET).



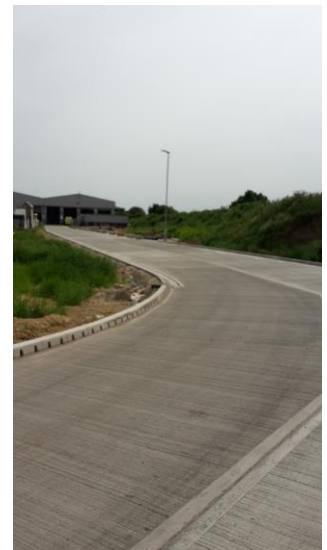
AET required that all the sub-structure for their equipment was to be provided by the Pears. Pears appointed Cobalt to manage the Process/Civil interfaces, with MSJ carrying out the substructure designs for execution by a traditionally appointed civil contractor.

In addition to the CHP building, Pears needed to upgrade their site infrastructure (access roads, drainage, weighbridges, trailer washing, and refuelling island) and to provide a fuel store for the MBM. MSJ's commission extended to the design of all of these additional works.



The ground conditions required pre-cast concrete piles and fully suspended substructures. MSJ designed the whole fuel store (sub- and super-structure) with the fuel feed system by AET.

The new CHP required a new entrance route through the existing site including weighbridges and office.



Ground water was encountered at around 1m below the ground surface requiring a shallow drainage scheme to be developed alongside a very flat SUDS scheme and pumped discharge.

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