



## Dunsborough Waste Facility Cell 1 Construction



### Project Description

Leeuwin Civil's extensive fleet of equipment and experienced operators were a key factor in the award of works to construct Cell 1 at the Dunsborough Waste Facility.

Carried out by our CAT D8 Dozer, CAT 324, CAT 325 Excavators, CAT 740 ADT's with pad foot and smooth drum rollers, and associated Water Trucks – construction of the cell comprised the excavation of 161,500m<sup>3</sup> of cut, 31,000m<sup>3</sup> of fill and 30,000m<sup>3</sup> of excavation of legacy waste.

Equipped with “state of the art” Leica hardware and software, our excavators and dozers were also able to construct the cell to specified tolerances with ease.

During the process, drawings of each 1m layer, in addition to test positions of each compaction test, with X/Y/Z co-ordinates, were supplied to the Client. This was carried out using our equipment's GPS, which recorded the co-ordinates of each test for Quality Control.

A major challenge overcome on this project was the unexpected legacy waste encountered whilst carrying out the cut to spoil to reach the cell floor. To counter this, we had to excavate down to RL89 below the cell floor design level in places to remove the last remaining pieces of legacy waste.

Bearing in mind the floor of the cell is RL102, and the top of the cell (Berm) is RL106, the excavation had to become larger and steeper to excavate and re-fill effectively – changing the project scope. However, this was successfully overcome through close collaboration with our Client, and the teamwork shown by our onsite crews.

### Scope of Works

- wet hire of state of the art:
  - excavators (fitted with Leica software)
  - dozers (fitted with Leica software)
  - water trucks; and
- compaction testing for quality control and assurance.



### Location

Dunsborough, WA

### Dates

Jul 2015 - Oct 2015

### Client

City of Busselton

### Designer

Bowman & Associates

### Project type

Earthworks/Cell  
Construction

### Cost

\$750,000

### Job Number

1753

### Referee

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