

3-D Modelling - Land Development

Tonkin & Taylor's computer aided design (CAD) capabilities have continued to expand in response to client needs for specialist services in the infrastructure, land development and solid waste sectors.

T&T has an impressive track record in these areas, having had a significant input into high profile projects such as SH 20/20A extension to Mangere Airport, Vector Tunnel, Northern Gateway (Albany to Puhoi motorway extension), Kate Valley Landfill, and Redvale Landfill.

Key features of our design capability includes:

- A high level of technical expertise
- Team commitment
- Efficiency and productivity.

Design capability can be divided in to alignment (string based design) and Land development (terrain modelling).

Land Development

The design of land development projects includes landfills (solid waste), quarries, housing subdivisions, commercial development, dams (Water supply and power generation). Land Development Desktop (LDD) is the principal design software used for these types of projects.

Key features of LDD include:

- Fully integrated into AutoCAD
- Comprehensive surveying, design, analysis and documentation solution to deliver land development and solid waste projects faster and with improved accuracy



- Used extensively for earthworks modelling and extrapolation of volumes
- Production of rendered images for high quality presentations and photomontages
- Data transfer between LDD and 12D for design and integration of roading and stormwater components.

Some of our recent design projects that have utilised LDD include:

Landfills

- Redvale Landfill - 20 Mm³ capacity
- Kate Valley Landfill - 11 Mm³
- Silverstream Landfill (Stage 2) - 5.3Mm³
- Whitford Landfill.

Commercial development

- Westfield Albany Shopping Centre - earthwork designs
- Botany Town Centre - earthwork designs.

Dams

- Lake Hood (Ashburton) - Design of a recreational lake.

