

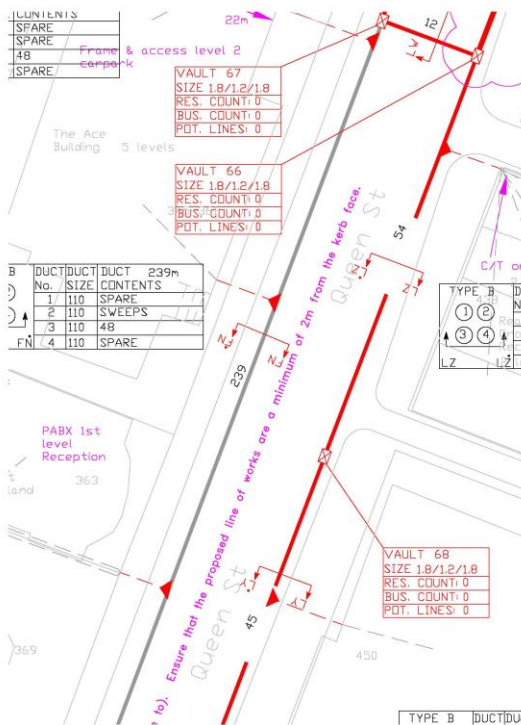
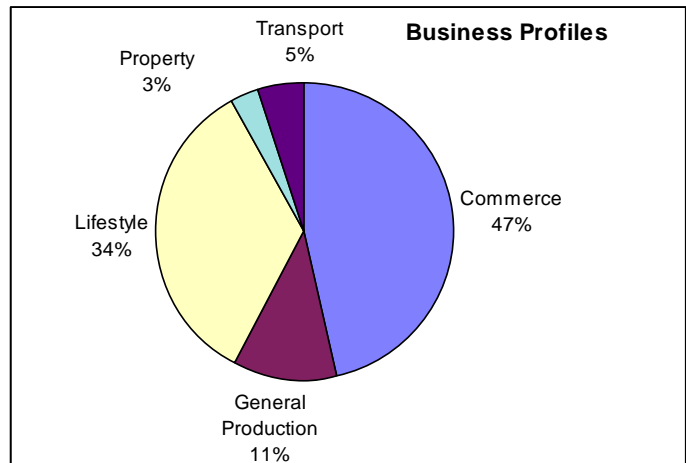
VODAFONE (TELSTRASATURN) CBD FIBRE NETWORK DESIGN

2000 - 2001

TelstraSaturn was born out of an acquisition by Telstra NZ of cable TV operator Saturn Communications. The new entity TelstraSaturn set out with an ambitious plan to build a fibre only network in NZ three largest Cities, being Auckland, Wellington and Christchurch. They chose Pulse Networks to carry out the Planning and Design of the Central Business Districts (CBD) of each of these Cities.

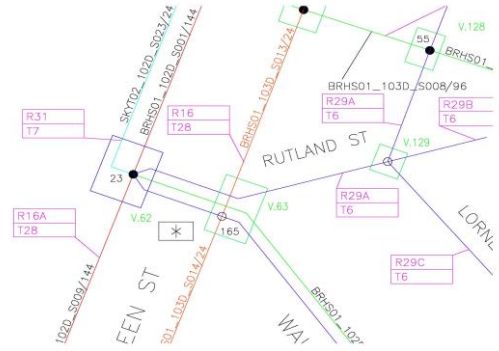
The Network Deployment Plans produced by Pulse Networks were used to develop a strategic plan for the rollout of broadband services by the client. It covered:

- Demographics
- Design Methodology
- Node Pocketing
- Preliminary Trench Routing
- Competitor Networks
- Stake Holder Inputs



Pulse Networks was required to Design all three CBDs in a relatively short time frame and had staff in different parts of the country feeding walkout data back to its Auckland Office for processing. Every building was scoped with details such as size, tenant list, building manager, duct entry points etc recorded and map onto GIS plans or tabulated in databases to assist the final Design process. The walkout plans provided to field staff included all known information such as building names and addresses, business list, underground services and preliminary trench routes. This meant field staff could scope large amounts of the City in a day having only to check and amend plans and tenant lists as they went. The resultant Civils Design Plans detailed the lay positions and vault locations that had already been sanity checked, meaning changes required by the contractors was kept to a minimum and Project Management became a lot easier.

The Fibre Design process was in-depth and involved the development in consultation with Auckland University of the first Fibre Diversity Optimiser (FIDO) software capable of producing a graphic fibre output in NZ. This was used by Pulse Networks Designers as the template for the detailed fibre design which included fibre schematics, splice plans and tray layouts.



This project was unique in that “Brown Fields” design of existing CBDs with thousands of businesses and potential customers is normally used to augment existing services, not to Design and Build a whole new network. Pulse Networks was involved throughout the life cycle of this project; from conceptual design and planning through to Contract Bid preparation and As Build documentation. Of particular satisfaction was the development of new design tools and CAD drawings and seeing the project through all its phases.

Extract from Company Reference from client:

“ ... Pulse Networks proved themselves as a comprehensive one-stop shop for Planning and Design of fibre and copper networks” – John Davenport, Planning and Implementation Manager