



CASE STUDY: DANNEMORA RESIDENTIAL SUBDIVISIONS

The Dannemora Development is a series of ongoing subdivisions in Manukau City, extending over 485 hectares. Northpower has been the preferred power reticulation design and installation contractor for Dannemora since 1999, and has been responsible for power reticulation to 2,300 sections.

PROJECT SCOPE

The ongoing project involved the design and installation of HV feeder cables and ring main units, transformers, service pillars and pits and streetlight cables and lights to network and regulatory standards.

It was essential that the designs provided a commercially viable means of supplying power to the subdivision while meeting the network operator's strict standards and requirements to allow for future growth.

CHALLENGES

The project's major challenge was meeting the often conflicting requirements of both the client and the network operator, by providing prompt and commercially viable design proposals. Northpower has always been able to meet the very tight construction timetables, working with the client and other utility providers in order to complete the works prior to releasing the sections for sale.

SOLUTIONS

Maintaining an ongoing relationship with the client's development consultant, Woods, was crucial to the success of the developments.

FACTS AND FIGURES

- 2,300 sections
- 42.2km of LV cable
- 10.6km of HV cable
- 41.0km of SL cable
- 28 HV substations (switchgear/transformer)
- 1,185 Service pillars and pits
- 631 streetlights

With this in mind, Northpower assigned the responsibility for liaison to one Design Estimator for all of the Dannemora subdivisions. Similarly, the allocation of a Senior Project Manager to be responsible for the construction work ensuring there was continuity in the design process, layouts, engineering solutions and decision-making.

Costs were kept to a minimum through effective use and location of substations, selection of optimum cable sizes and circuit lengths, and minimising the number of junction and link pillars needed, while at the same time maintaining the requirements of the network operator.

RESULTS

Working closely with the consultant engineers and contractors, Northpower achieved results to the satisfaction of our client, Dannemora Holdings. Despite the downturn in the residential market, we remain the contractor of choice to supply high-quality and cost-effective power design and installation services.

"Northpower has been a key member of the team building the Dannemora and WFH Properties subdivisions. They have, through the provision of a dedicated and responsive team, been able to deliver as and when required and have generally outperformed their competition. As consultants to the Dannemora and WFH Properties developments, Woods have established a strong relationship with Northpower and there have been many occasions we have had to call upon them to rise to the challenge to meet tight deadlines – they have rarely failed us."

John Gardiner, Director, Woods Limited, (formerly Wood & Partners Consultants Ltd), Consultants to Dannemora