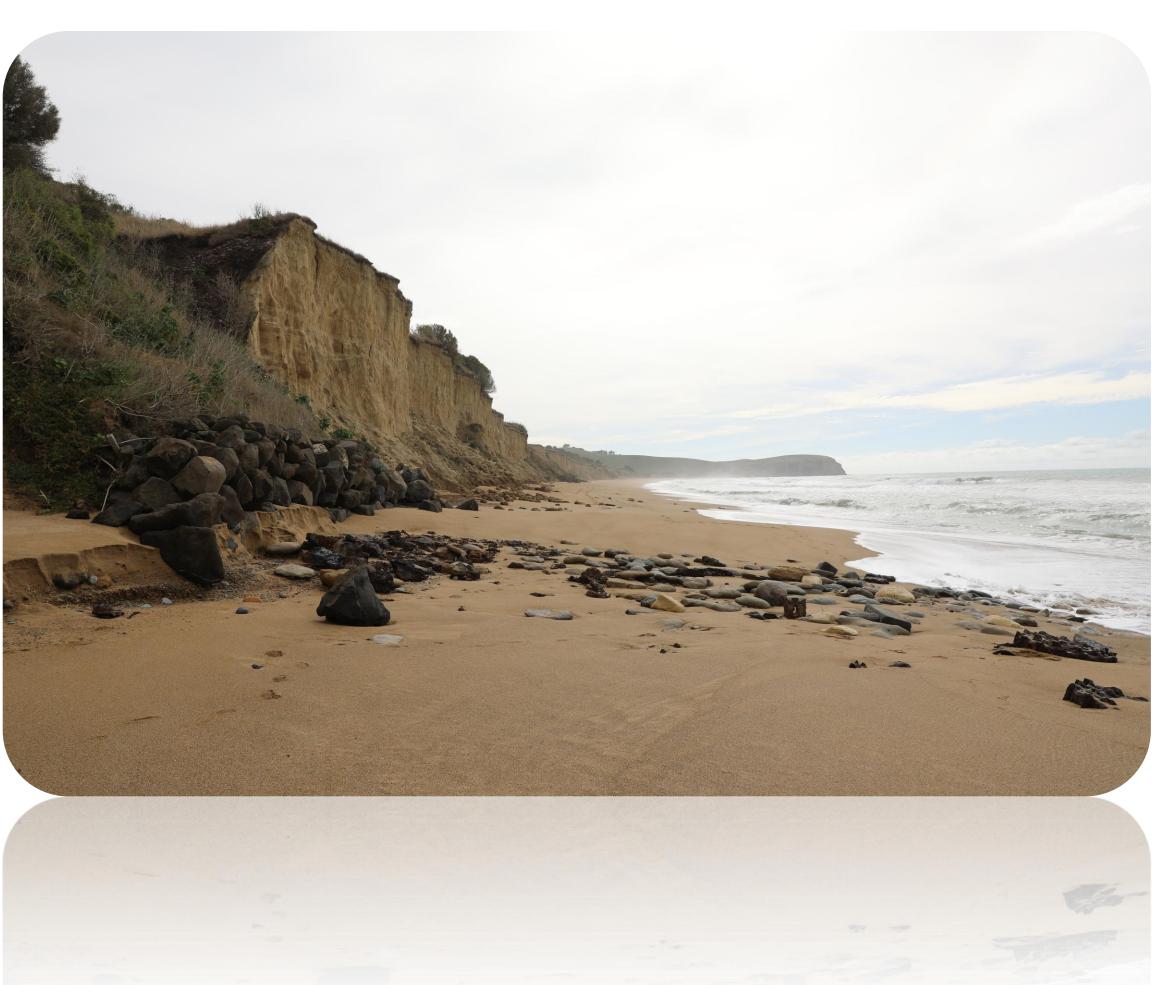


Historic Waste Disposal Along Coastline



Beach Road 15m High Cliff - Rock Protection Not Effective





Hampden Closed Landfill Moving Towards Sea Exposing Waste





Palmerston Landfill Capacity to Accept Site Remediation Waste





Key Environmental Risks



Safety

Working at heights

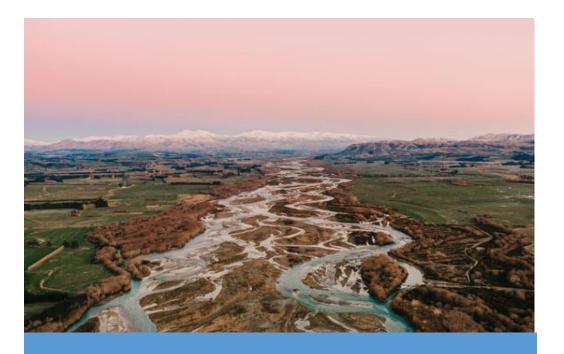
Traffic movements



Marine environment

Managing impact to native life (lizards and penguins) and surrounding marine life

Sediment management



Cultural

Managing discovery of sites of significance to local iwi



Infrastructure

Upgrading infrastructure at Palmerston Landfill

Closure of Beach Road Landfill

Timeline

Planning

2018 - 2022

- Risks
- Feasibility study
- Business case
- Community and iwi engagement
- Funding

2022 - 2024

Procurement and construction

- Procurement
- ECI engagement
- Design and build
- Physical works

2025 - 2027

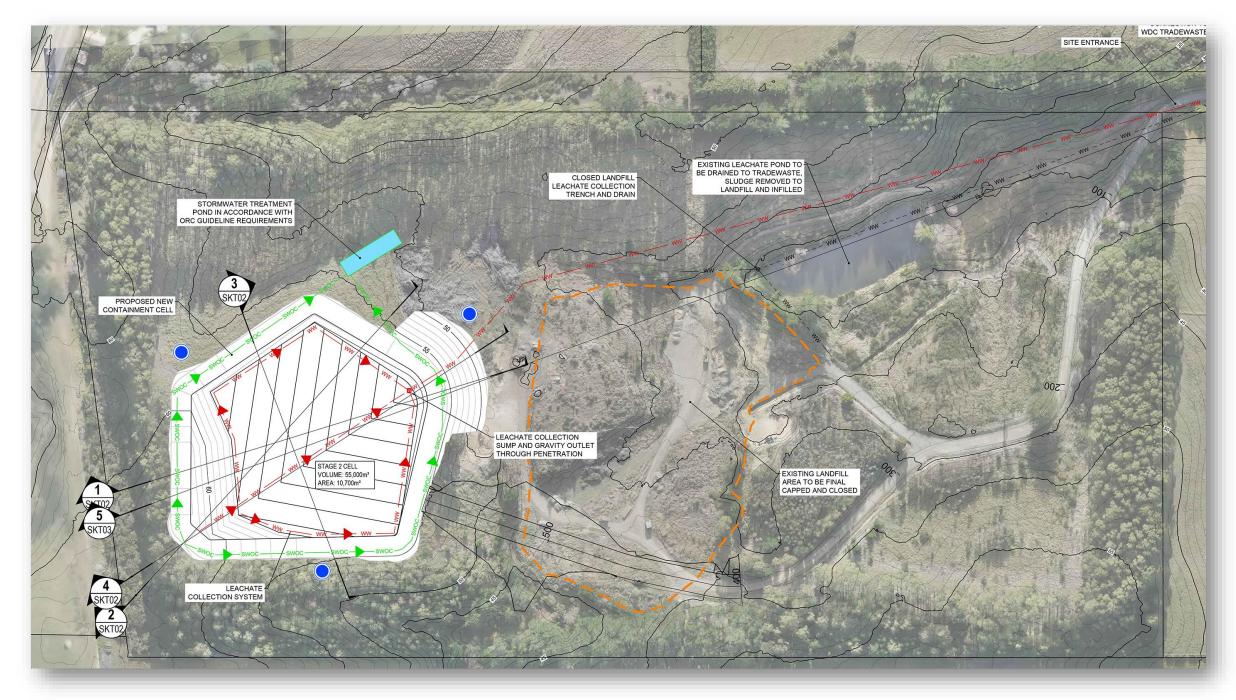
Available airspace until closure

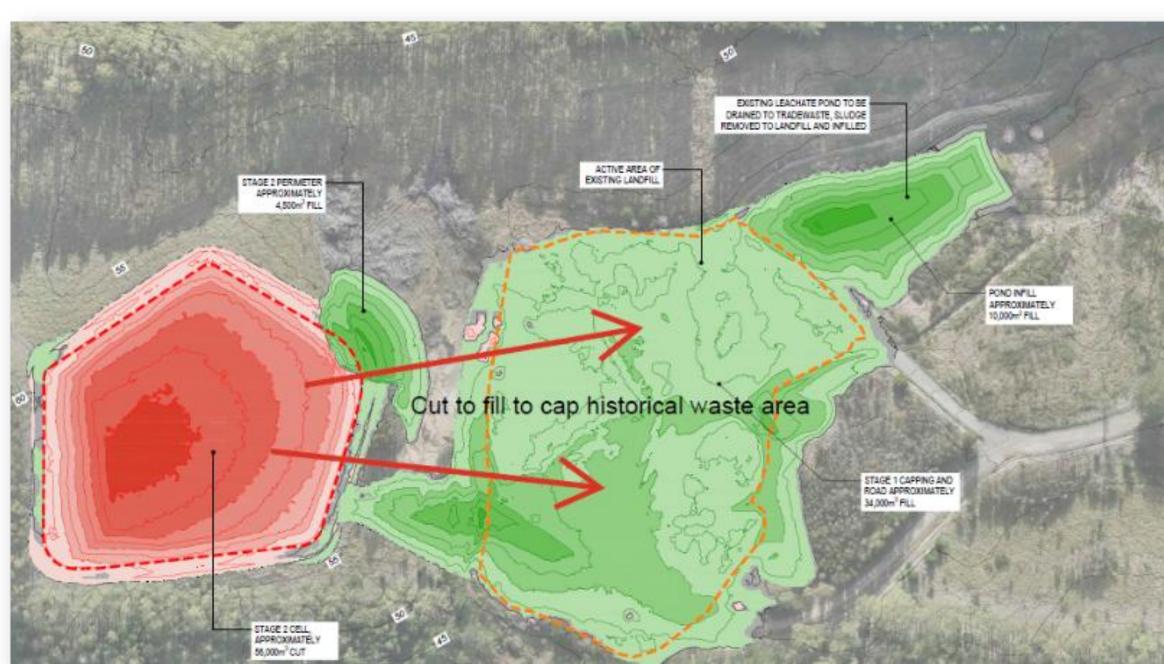
- Palmerston Landfill has remaining capacity to accept additional tonnes
- Final capping before closure

Collaborative Team Effort To Complete The Project

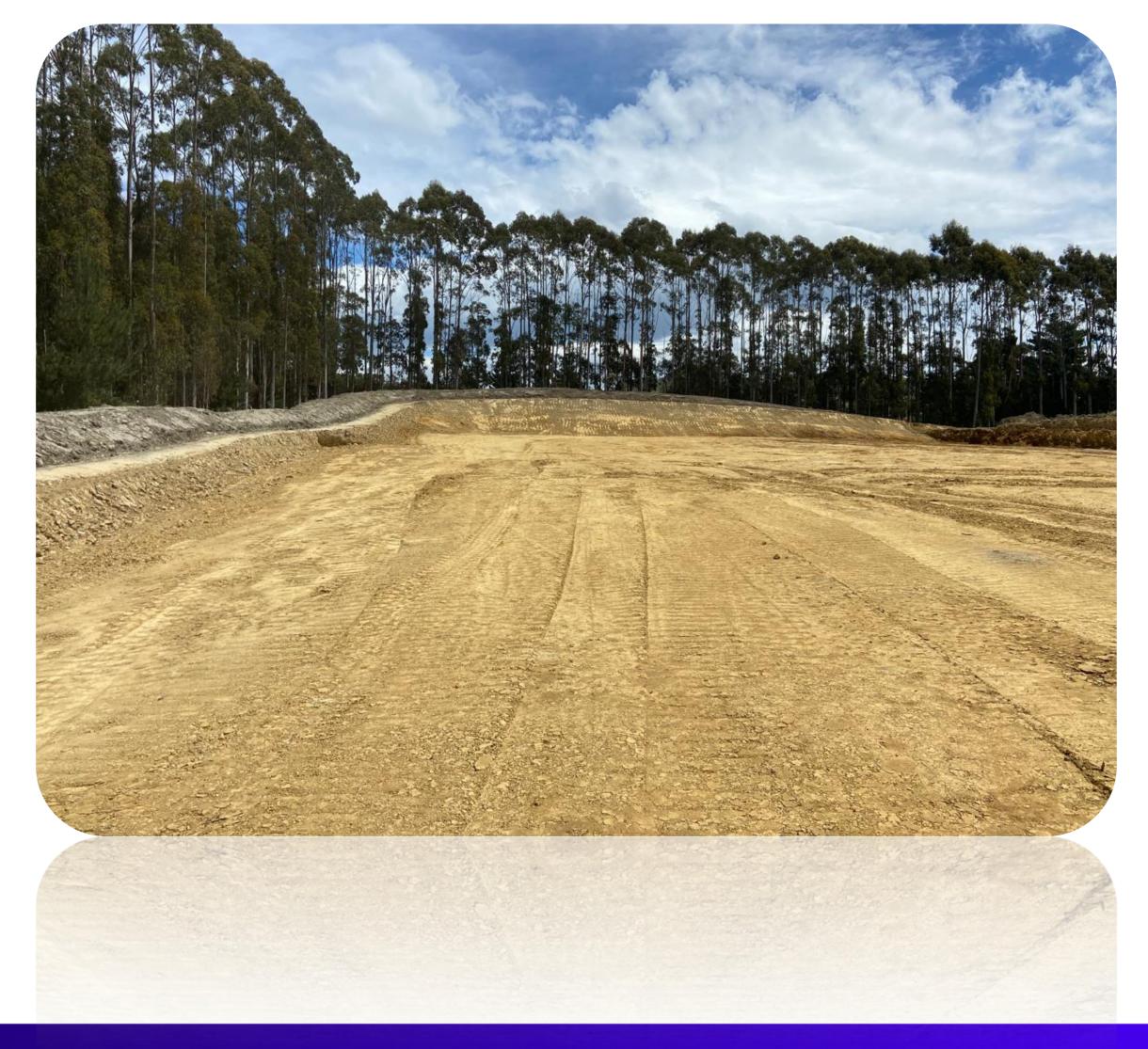


Design of New Class 1 Lined Cell and Capping of the Historic Waste Area at Palmerston Landfill





Construction of New Cell Palmerston Landfill



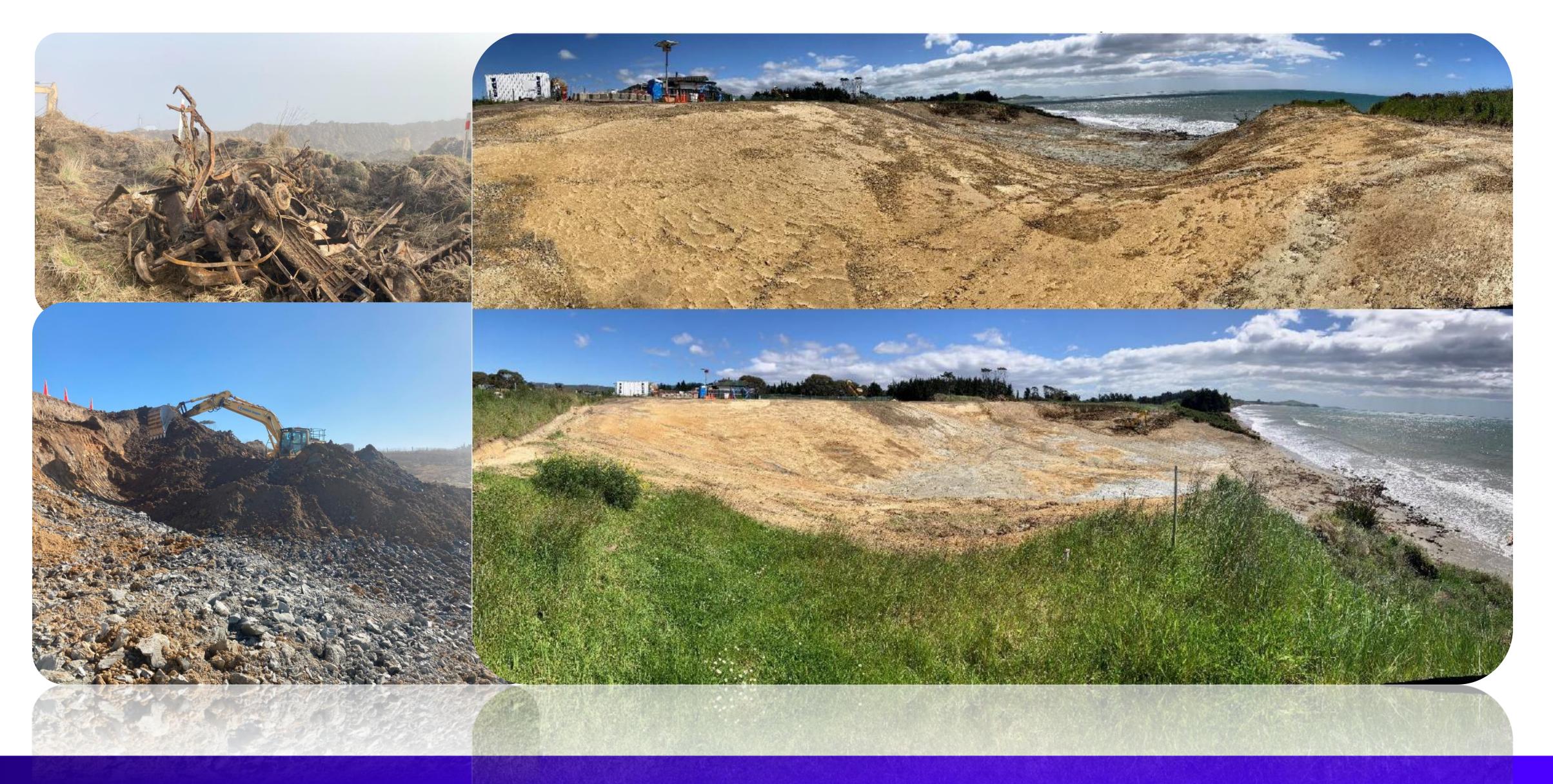


Alterations to leachate and stormwater systems, removal of evaporation pond

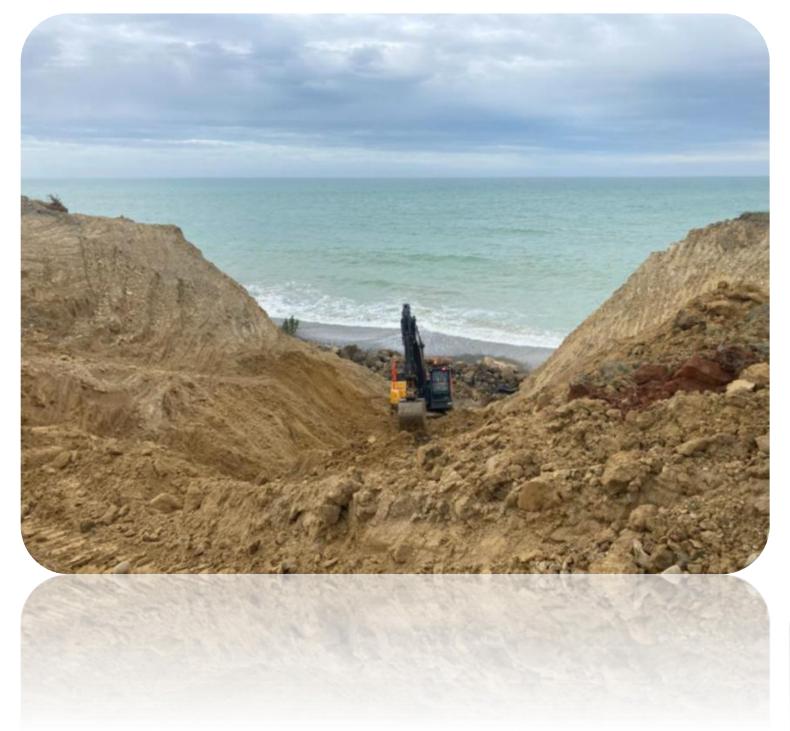




Hampden Closed Landfill Waste Removal



Beach Road Waste Removal







Final Site Restoration Hampden



Final Site Restoration Beach Road



Palmerston Landfill Intermediate Cover





Key Learnings from Project Reclaim

Many local authorities are facing similar closed coastal landfill problems

Following best practice pays off





- Significant timeframes from problem identification to project completion
- Support from MfE for ETS levy charges
- Significant cost for out-ofdistrict haulage and disposal
- Early Engagement with contractors
- Trust and respect between parties
- Open and clear communication