



Smart Soil Strategies: A Brownfield Development Fable

Sarah Ensoll and Nigel Mather



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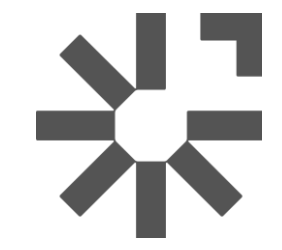




How did we get here?

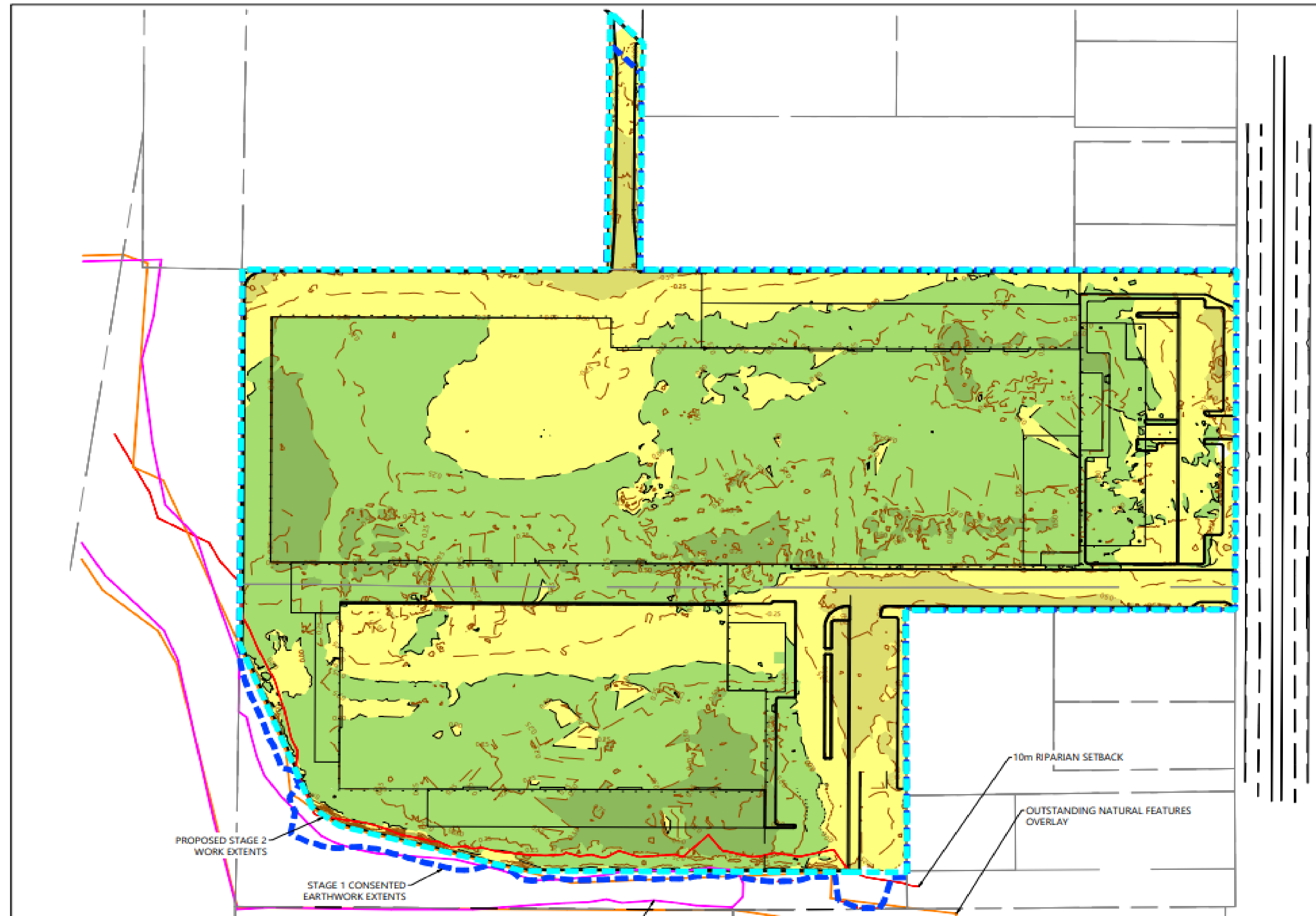
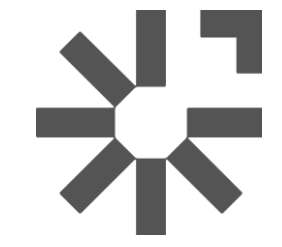
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History and Constraints

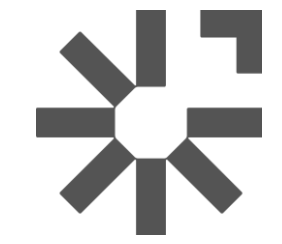


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Proposed Development



Intrusive Investigation Summary



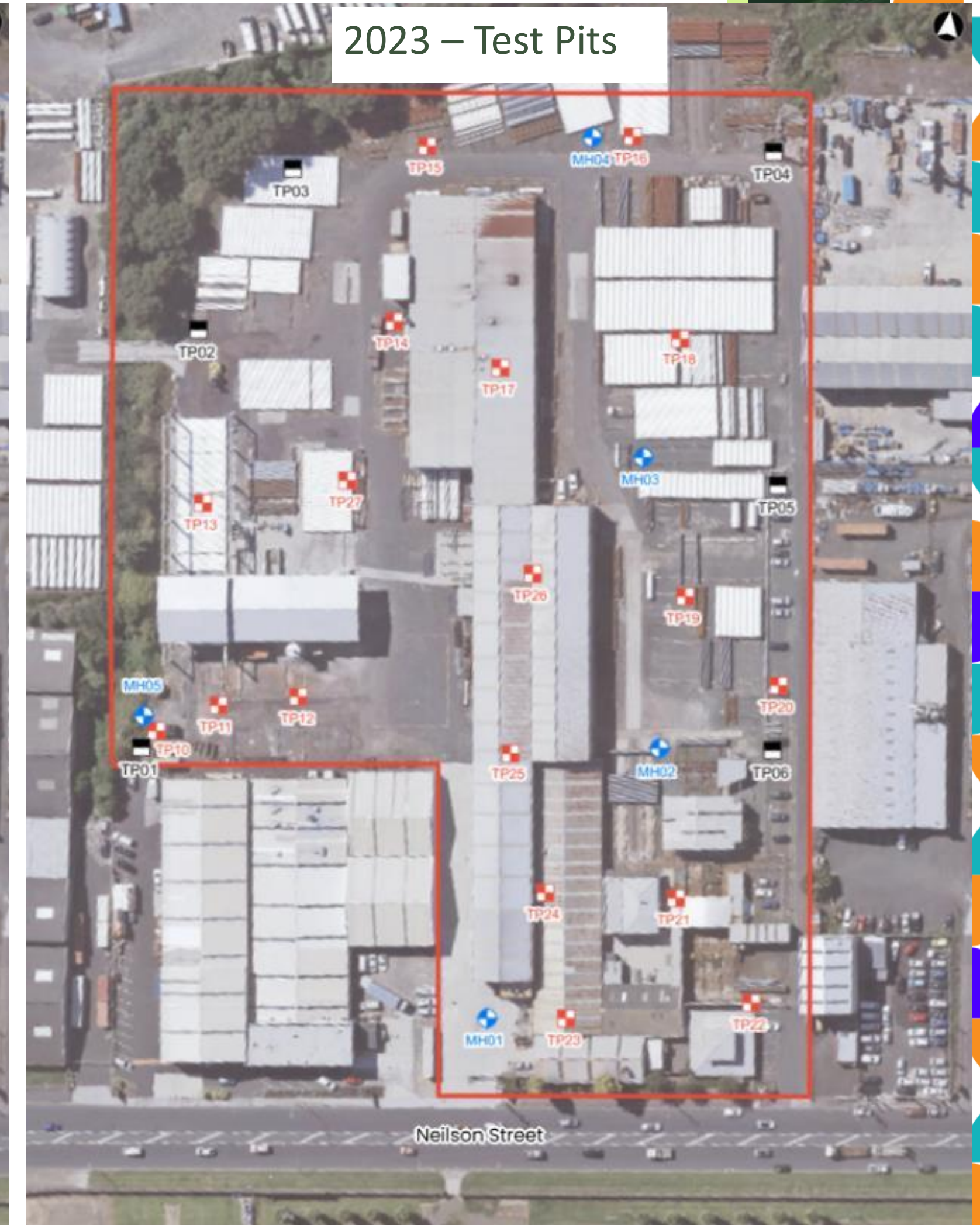
2019 – Test Pits



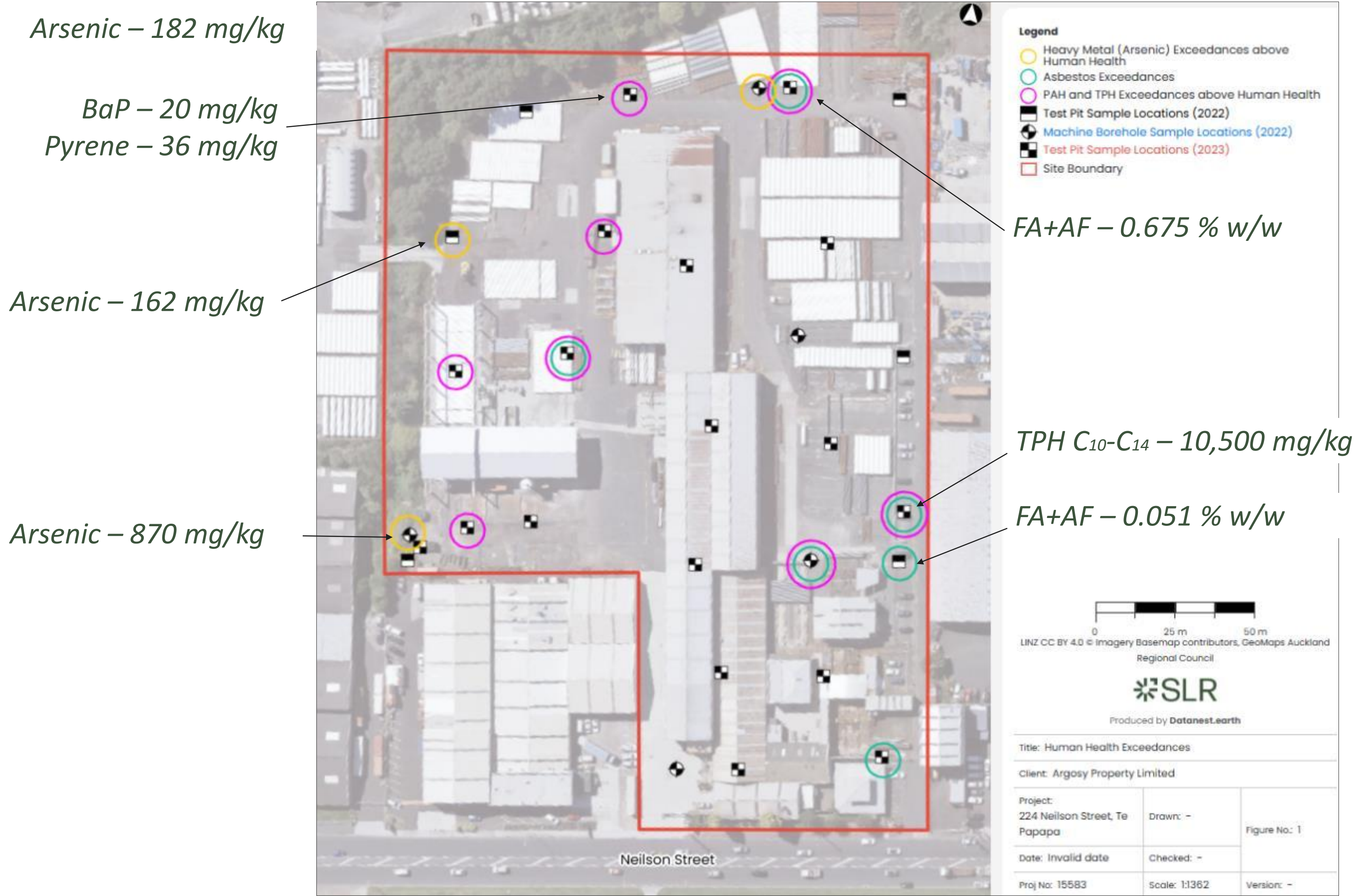
2022 – Boreholes



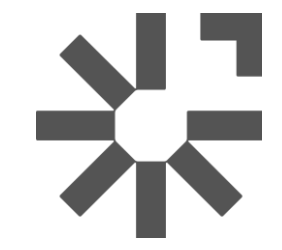
2023 – Test Pits



Intrusive Investigation Summary



Intrusive Investigation Summary



Agreed Management Strategy

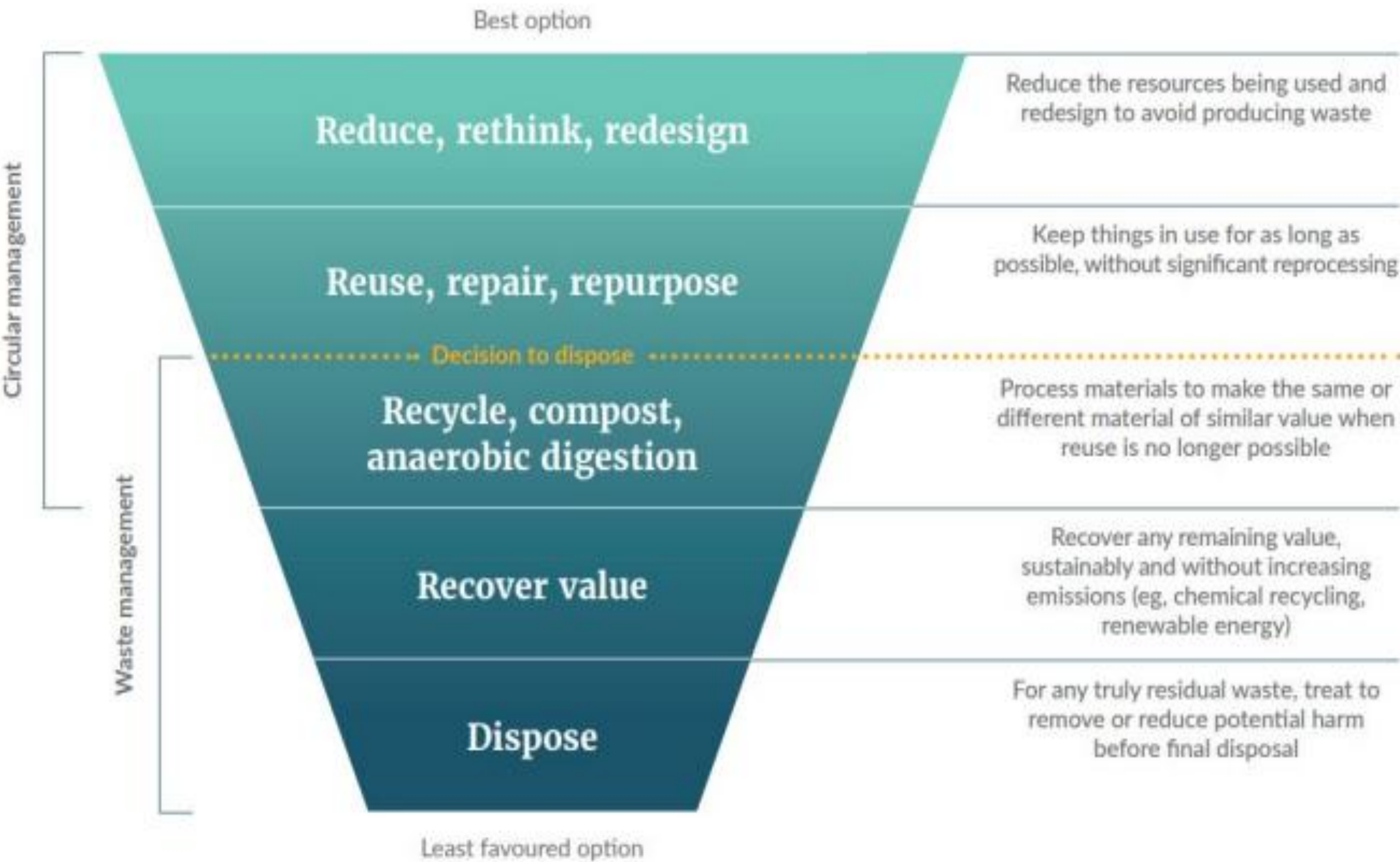
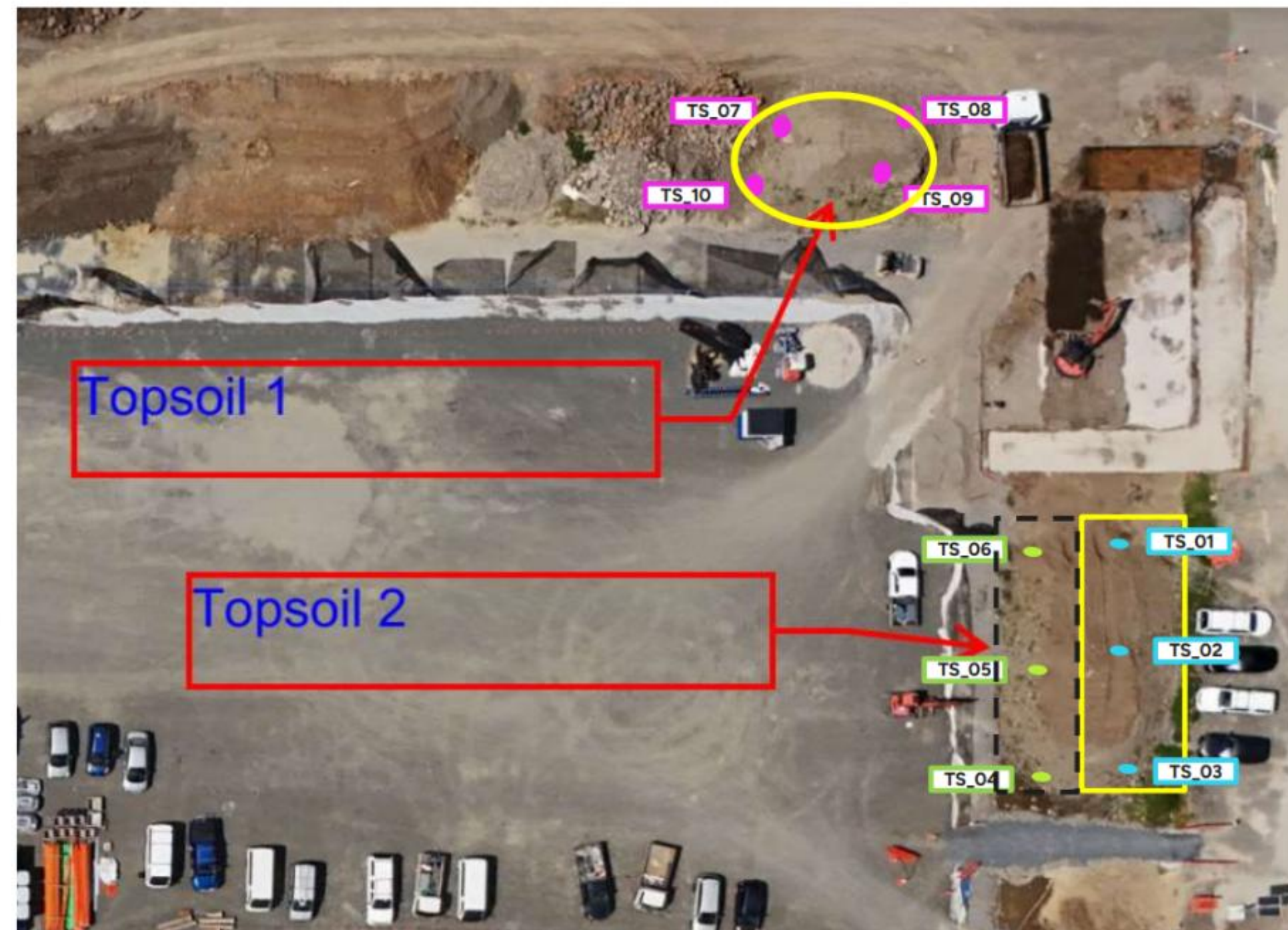
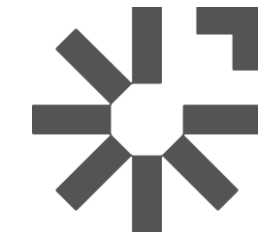


Figure taken from: Ministry for the Environment (2023). Te rautaki para | Waste strategy.

Construction Monitoring and Ongoing Sampling

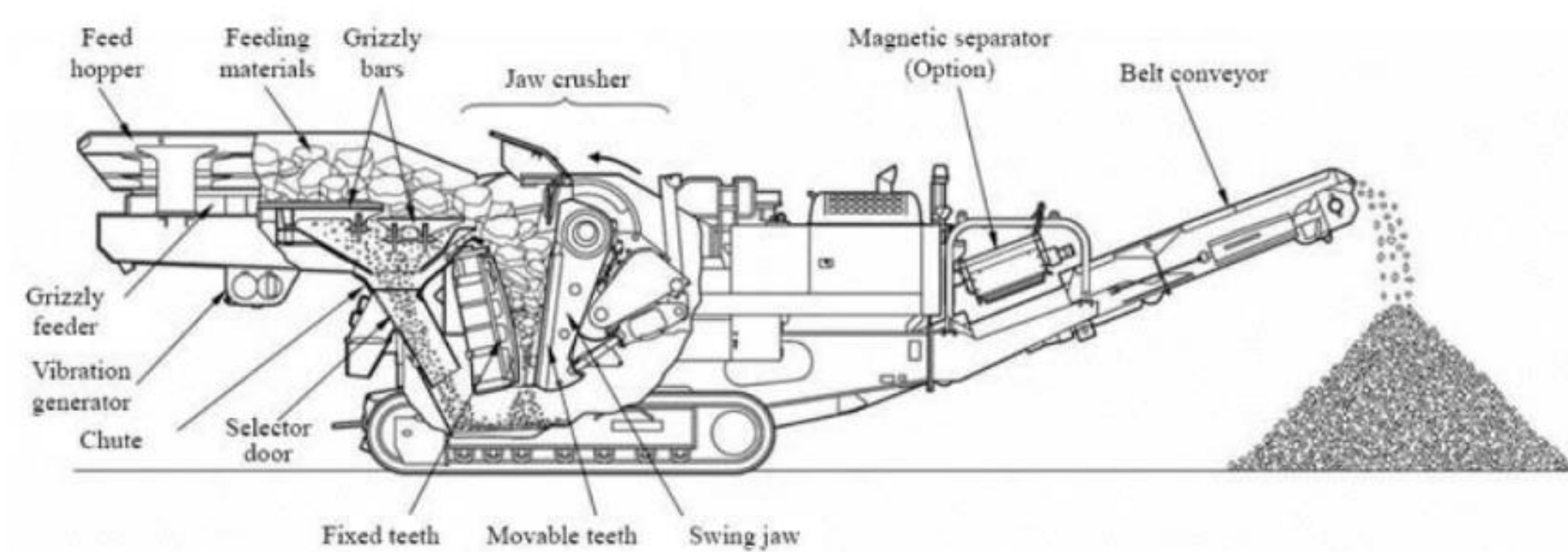
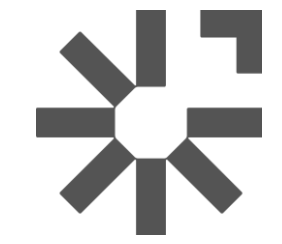


Stockpile Treatment



- Lead concentrations of 18,000 mg/kg from a composite sample, and TCLP of 52 g/m³.
- Highway Stabilisers conducted a trial of mixing the stockpile with multiple lime and cement mixes, with SPLP analysis conducted on the treated material.
- All mixing and handling of the stockpiled material had to occur under Class B asbestos controls.
- 610 m³ of stockpiled contaminated fill was treated and re-used.

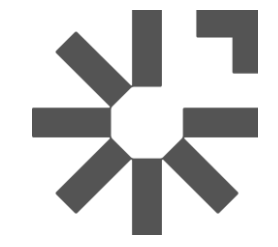
Asbestos-Containing Crushed Concrete



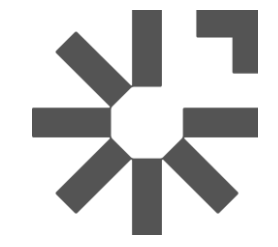
3,936 m³ recycled contaminated crushed concrete



Unexpected Discoveries

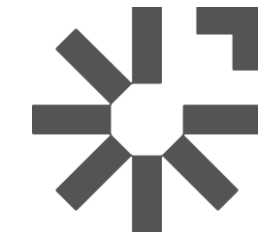


How did all this help and lessons learnt?



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Thanks!



Argosy^{Property}



Nigel Mather
*Technical Discipline Manager /
Environmental Services*



Sarah Ensoll
Senior Environmental Consultant