



Ultramender

An innovative new maintenance material

Sound Familiar?

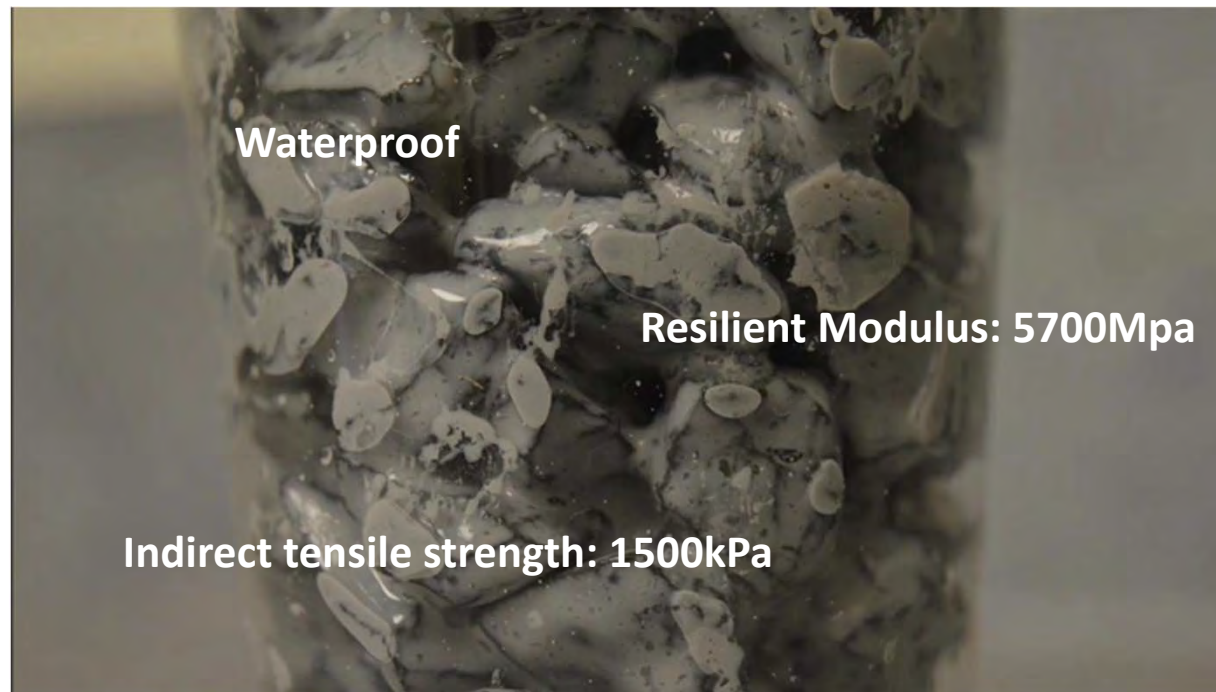




Ideally we want to stop it from getting worse at this point

Ultramender

Cold Applied Polymer Binder



Case Study

Putaruru-Lichfield

- Localised deformation and cracking
- Multiple repairs using cold and hot mix
- Repair frequency of 1 month
- Hope was that Ultramender would last 6 months until the planned reseal





Cost Benefits?

Using Standard Maintenance Materials

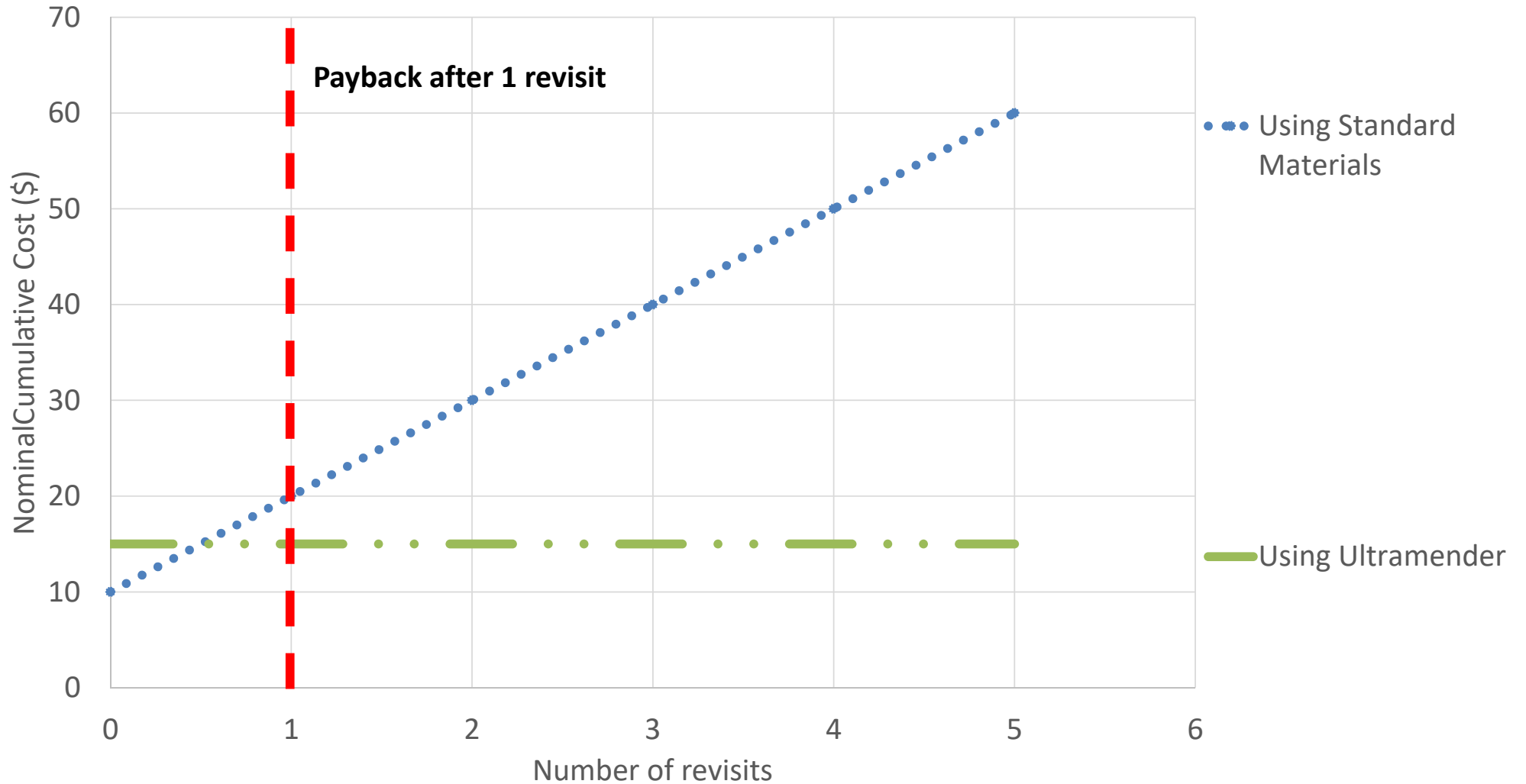
Cost Description	Proportion of total activity cost	Nominal cost	Total nominal cost
Material	10%	\$1	\$10
Plant and People	90%	\$9	

Using Ultramender

Cost Description	Proportion of total activity cost	Nominal cost	Total nominal cost
Ultramender	40%	\$6	\$15
Plant and People	60%	\$9	



Cost comparison over number of revisits





Conclusions

- Surface defects can propagate into bigger problems when the root cause is not treated properly
- Root cause is that the materials currently used are not strong enough and don't provide the required waterproofing
- Ultramender is a product that can fix the root causes and prevent propagation of defects
- The cost benefits of using higher cost products like Ultramender is in the prevention of revisits and rework because most of the cost is associated with people and plant – not product cost