

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

NZTA utilities minimum standard and best practice

Story: Utilities Location and Protection

Theme: Programme Management

A presentation which explains that NZTA have adopted SCIRT's approach to utilities management and sets out the reasons why.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz



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NZTA

UTILITIES MINIMUM STANDARD AND BEST PRACTICE

NZTA ZERO HARM ROAD SHOWS 2015

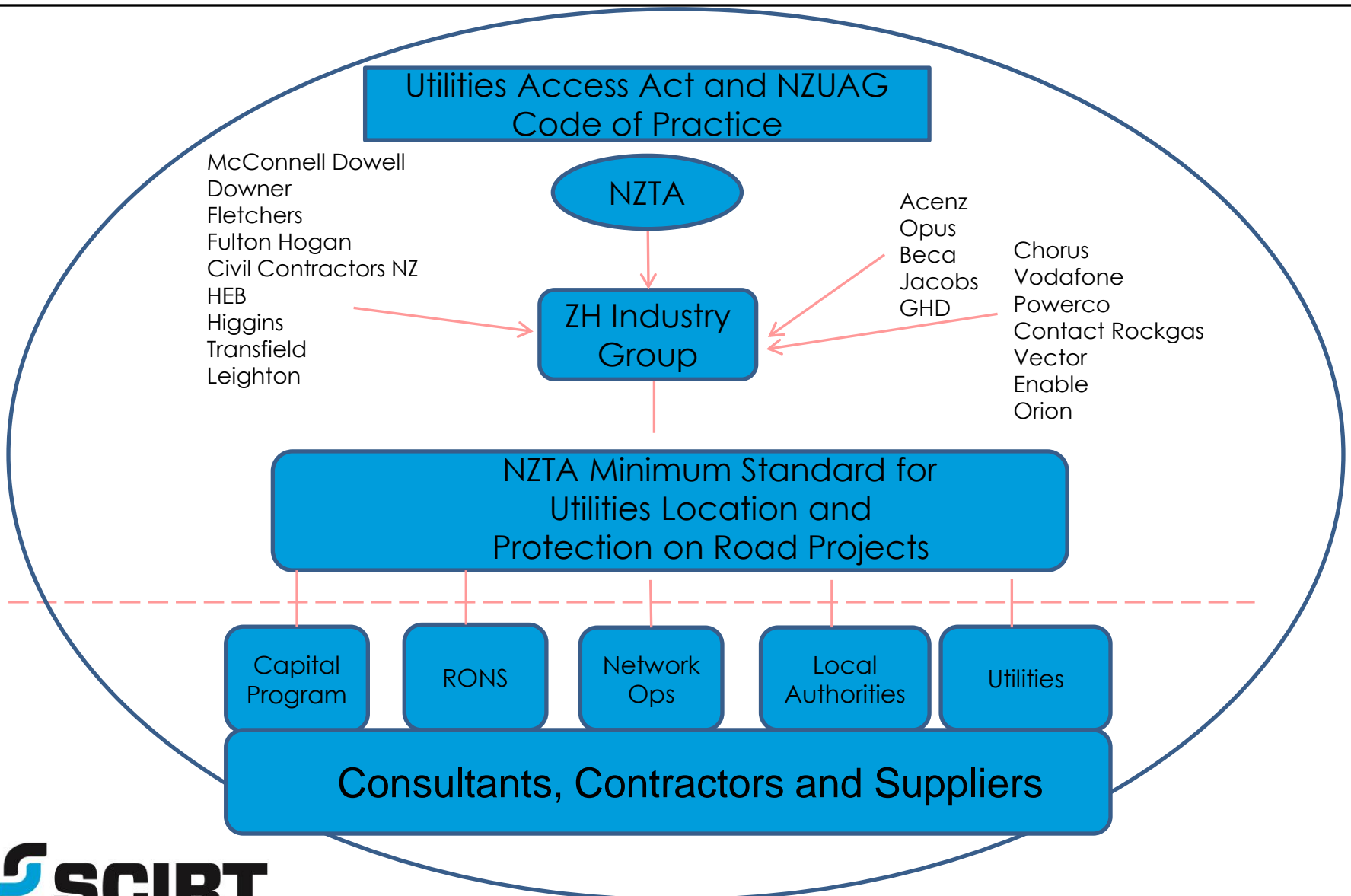


Why have a minimum standard?

NZTA have adopted SCIRT's Minimum Standards and Best Practice in relation to Utilities:

- Lifts the bar in Health and Safety Performance
- Ensure all horizontal asset owners are working together
- Minimise disruption to road users, businesses & residents
- Provide the efficiency gains and cost benefits

Working Together

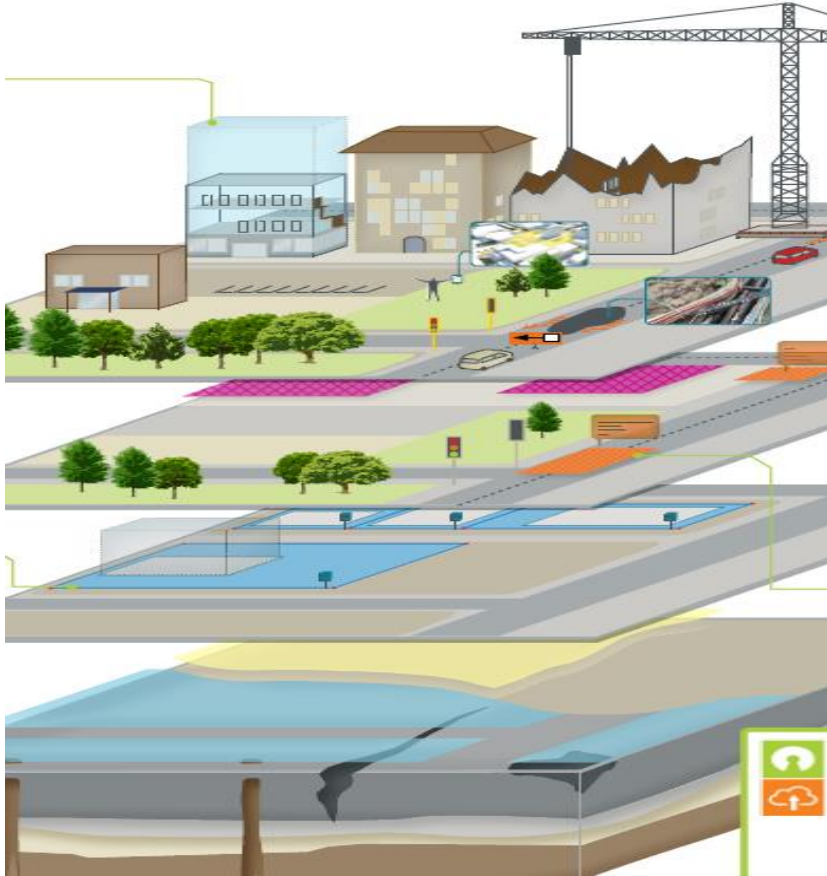


Community Impact



Can't finish her online exam
"What do I tell her??"

How does my project interact with others?



- Consult
- Coordinate
- Collaborate .



Roles and Responsibilities

<p>Purpose: Define roles and responsibilities of each party to meet their obligations under section 2 of the NZUAG COP</p>	
<p>NZTA</p>	<ul style="list-style-type: none"> Require Utilities Management plan and Utilities Detection program as part of tender response Require evidence of bidders performance in relation to service strikes as part of tender response Enforce Utility Operator compliance with the Code.(refer Utilities below) As Corridor Manager, NZTA will also need a process to monitor/measure damage and performance, especially if this is to be a defined performance metric in the contract
<p>Designer</p>	<ul style="list-style-type: none"> Providing thorough utility clash analysis and document result of utility investigations as part of detailed design report Proactive use of Service plans in the design process. Proactive early engagement with the Utilities involved for their input Considering constructability issues as well as design requirements Proactively engage with contractor for their input.
<p>Contractor</p>	<ul style="list-style-type: none"> Early Involvement in the project and proactive engagement with the design team to achieve a best for project outcome in relation to utilities Engaging early with relevant utilities for their input Accurately locate and provide adequate protection to utilities using industry best practice guidelines and where necessary, engaging an appropriate service provider.
<p>Utilities</p>	<ul style="list-style-type: none"> Providing up to date and accurate as built records of their network (including known redundant services) Provide technical assistance to designers and contractors to locate services. Provide technical assistance to designers and contractors in design and construction methodology to protect or relocate services.

Utilities Consideration throughout Project – Critical Path

1- Client and Consultant
Implementation

2- Client and Consultant Scope

3 – Designer Consultant Concept

4 – Designer Detailed Design

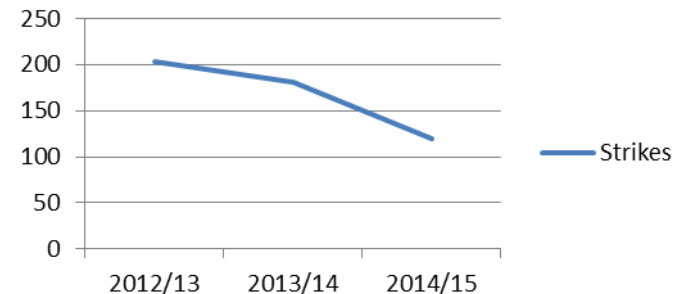
5- Contractor Pre Construction

6 - Contractor Construction

Are we doing enough and are we doing this right?.....

- Reduced Service strikes?
- Fewer Contract variations ?
- Less Disruption to residents and businesses?
- Cost Savings and efficiencies?

SCIRT Strike Trend



It starts with Leadership

It starts with Leadership – walking the talk

- Empower and train your teams
 - Where are the Utility hold points?
 - Do they have the authority to say “no”?
- Designer awareness
- Spotter Competency
- Be Consistent – what’s the difference between power gas and telco?,
- Collaboration with Utilities and Competitors,

NZTA Utilities Best Practice and Minimum Standards

- **“How To” document for Design Organisations on managing utilities risk**
- **“How To” document for Contractors on managing utilities risk**
- **Best Practice for Positive Identification of Utilities**
 - Quality Level D,C,B,A
- **Best Practice for Hydro excavation, GPR**

Next Steps



- Implementation of **NZTA Minimum standard for Utility Identification and Protection on Road Projects**.
- Consistent application of minimum standards across design organisations and contractor teams.

<http://hip.nzta.govt.nz>

Your Questions??