NCTIR
RECONNECTING COMMUNITIES

RAMM PIT
RAMM Pickup Integration Tool

Hamish Kingsbury
• Introduction
• The Problem
• The Solution
• Future
Introduction
(Field) Collection

Administration
- H&S & HR
- Site visit Reports
- Auditing

Spatial Data Capture
- Geotech mapping
- Archaeological mapping
- Asset assessment

Event Logging
- Slope movement
- Rain gauge
- Extensometer
Choosing the right tool for the right job
Integration – 12d Design

Visualizing design in GIS
Providing daily updates of design
Integration – RAMM

Damages Database Download
Latest spreadsheet of identified damages database, note download date on file name. Refer direct to RAMM for photos/inspection notes (progress notes)
The Problem
### Guard Rail attributes from RAMM

#### 1. Rail Type

<table>
<thead>
<tr>
<th>Rail Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKL</td>
<td>Steeler Bar Rail</td>
</tr>
<tr>
<td>R1</td>
<td>Rivet Rail</td>
</tr>
<tr>
<td>CABLE</td>
<td>Cable Barrier</td>
</tr>
<tr>
<td>GREAT</td>
<td>Great Crash Rail</td>
</tr>
<tr>
<td>SPC</td>
<td>Steel Post and Plate Rail</td>
</tr>
<tr>
<td>SWRA</td>
<td>Steel Wire Rope and Anchor Rail</td>
</tr>
<tr>
<td>TFRC</td>
<td>Traffic Rail (Steel) Guard Rail</td>
</tr>
<tr>
<td>TWR</td>
<td>Traffic Rail (Wood) Guard Rail</td>
</tr>
<tr>
<td>MD</td>
<td>Metal Design Guard Rail</td>
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</table>

#### 2. Terminal End

<table>
<thead>
<tr>
<th>Rail Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>GREAT</td>
<td>Great Crash Rail Ends</td>
</tr>
<tr>
<td>CABLE</td>
<td>Cable Safety System - CRP</td>
</tr>
<tr>
<td>SPC</td>
<td>Steel Post and Plate Terminal</td>
</tr>
<tr>
<td>MD</td>
<td>Metal Design Terminal</td>
</tr>
</tbody>
</table>

#### 3. Shape

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>S</td>
<td>Straight</td>
</tr>
<tr>
<td>C</td>
<td>Curved</td>
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</table>

#### 4. Ground Fix

<table>
<thead>
<tr>
<th>Rail Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>GREAT</td>
<td>Great Crash Rail Ends</td>
</tr>
<tr>
<td>SPC</td>
<td>Steel Post and Plate Fix</td>
</tr>
<tr>
<td>SWRA</td>
<td>Steel Wire Rope and Anchor Fix</td>
</tr>
<tr>
<td>TFRC</td>
<td>Traffic Rail (Steel) Guard Rail Fix</td>
</tr>
<tr>
<td>TWR</td>
<td>Traffic Rail (Wood) Guard Rail Fix</td>
</tr>
</tbody>
</table>

#### 5. Notes

- **Contract Name**
- **Contract Number**
- **Organization (Contractor)**
- **Road ID**
- **Road Name**
- **Date**
- **Start RP (m)**
- **Start Name**
- **End RP (m)**
- **End Name**
- **Length (m)**
- **Rail Height (mm)**
- **Offset Kerb - Start**
- **Offset Kerb - End**
- **Railing Type**
- **Railing Material**
- **Railing Height**
- **Start Terminal End**
- **End Terminal End**
- **Start north facing**
- **Start south facing**
- **Install date**
- **Original Cost $**
- **Ground Fix**
- **Post Count**
- **Post Material**
- **Length Adjust**
- **Reason**

#### 6. Attachments

- **Rail Type**
- **Description**
- **Post Count**
- **Post Material**
- **Length Adjust Reason**

#### 7. Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Excellent</td>
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<tr>
<td>2</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Average</td>
</tr>
<tr>
<td>4</td>
<td>Poor</td>
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<tr>
<td>5</td>
<td>Bad</td>
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<tr>
<td>6</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

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*Programme funded by New Zealand Government*
The Solution
Design
**RAMM Fields**
- Domains
- Formatting
- Field types

**Suppliers**
- Material types

**Design Info**
- Geometries
- Chainage
- Attribution (limited)

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Future
AS BUILT SURVEYING
Summary

• Old ‘paper’ based procedure
• Health and Safety improvements
• Spatial based process
• Improved efficiency, collection → validation
Questions?

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