

2013 National Lifelines Forum

SCIRT

'Update on

Christchurch Horizontal Infrastructure Rebuild'


6 November 2013



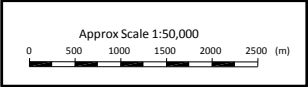
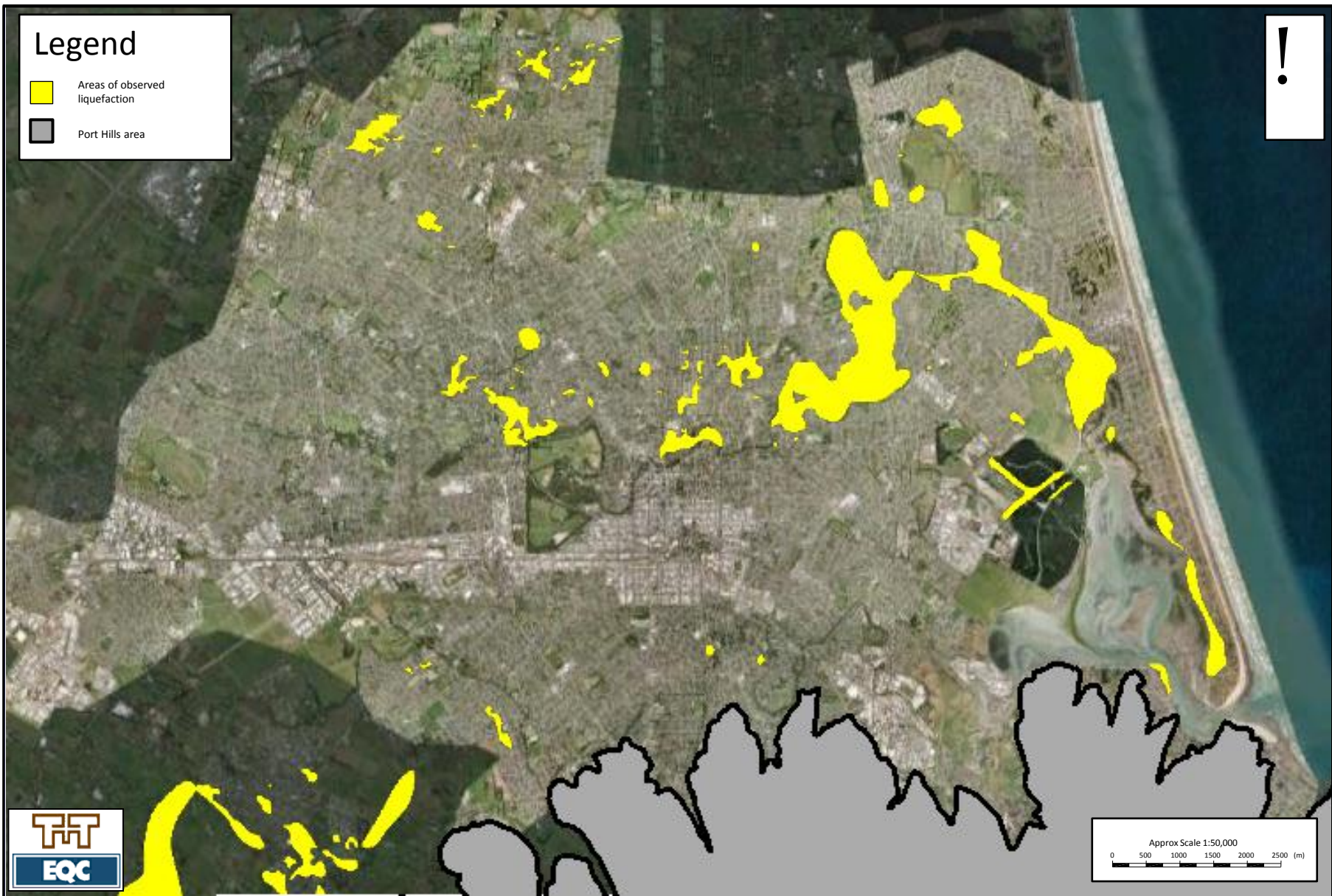
New Zealand Government



Legend

 Areas of observed liquefaction

 Port Hills area



Notes:
 Low-resolution aerial photos sourced from Google Earth (Copyright: 2009).
 High-resolution aerials provided by New Zealand Aerial Mapping (February 2011)
 Property boundaries provided by Christchurch City Council




**Canterbury
 Earthquake
 Recovery
 Authority**

DRAWN	
DRAFTING CHECKED	
APPROVED	
FILE :	
APPROX. SCALE (AT A3 SIZE)	
NTS	
PROJECT No.	

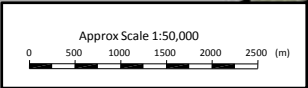
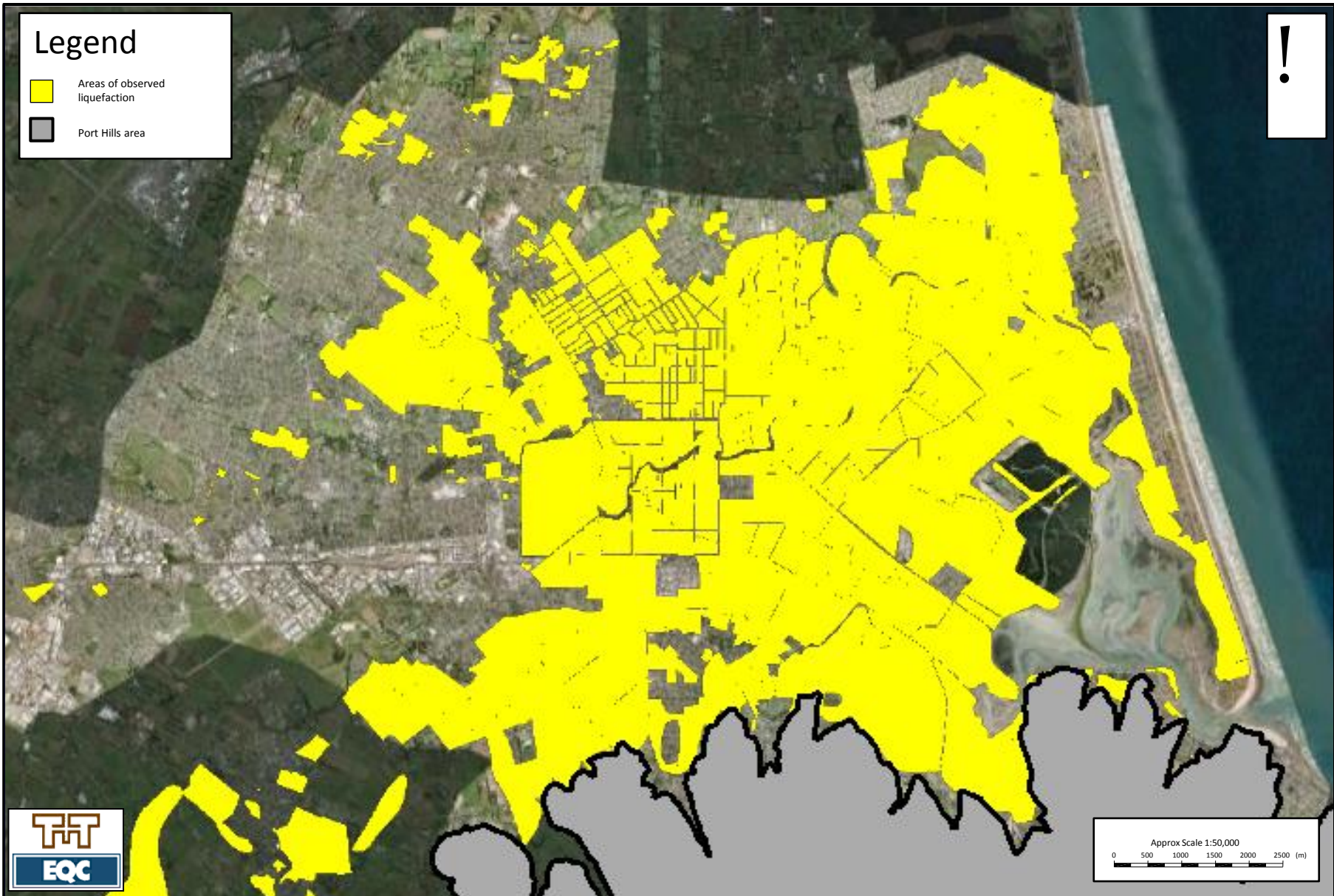
CERA
 CANTERBURY EARTHQUAKE RECOVERY
 Land Damage Map
 Land Damage After 4 September 2010

FIG. No.		REV.	0
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Legend

 Areas of observed liquefaction

 Port Hills area



Notes:
 Low-resolution aerial photos sourced from Google Earth (Copyright: 2009).
 High-resolution aerals provided by New Zealand Aerial Mapping (February 2011)
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PROJECT No.	

CERA
 CANTERBURY EARTHQUAKE RECOVERY
 Land Damage Map
 Aggregated Land Damage After 22 February 2011

FIG. No. REV. 0

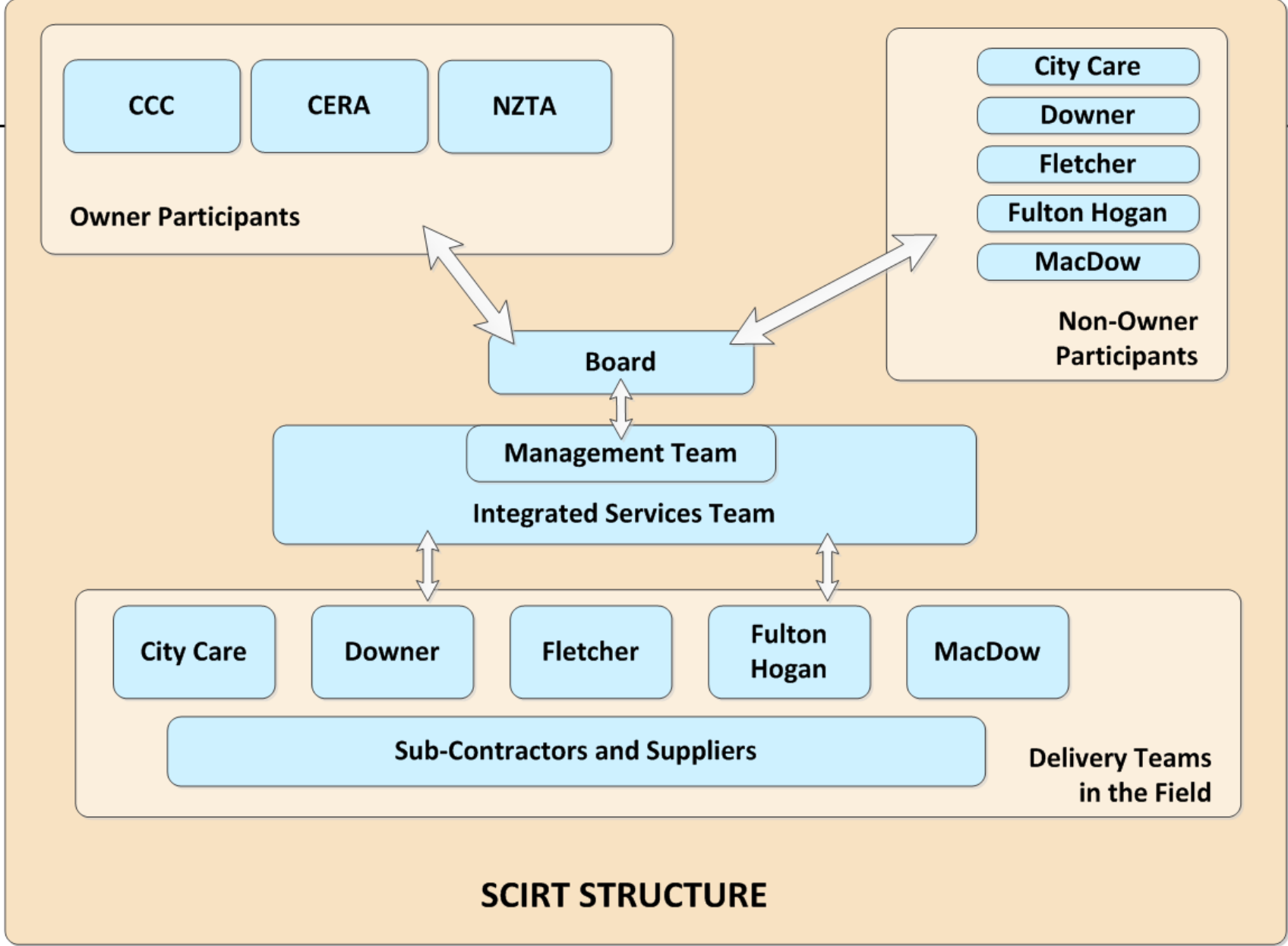
CHALLENGES – Getting Started

- Huge scale – biggest in NZ history
- Damage and scope unknown
- Urgent establishment
- Fast ramp up of throughput
- Delivering Value

AGREEMENT – Client Objectives

12 Subjects – 40+ Clauses

- Lift industry – Safety and Performance
- Demonstrate Value
- Community Engagement
- Asset Condition Aspects
- Market Stability



SCIRT STRUCTURE

SCIRT Model

- Relationship contract
- Mix of public and private organisations
- Programme of projects
- Performance incentivised
- Competitive delivery
- Collaborative environment

WHAT WE'RE HERE FOR :

*Creating resilient infrastructure
that gives people security
and confidence
in the future of Christchurch*



New Zealand Government

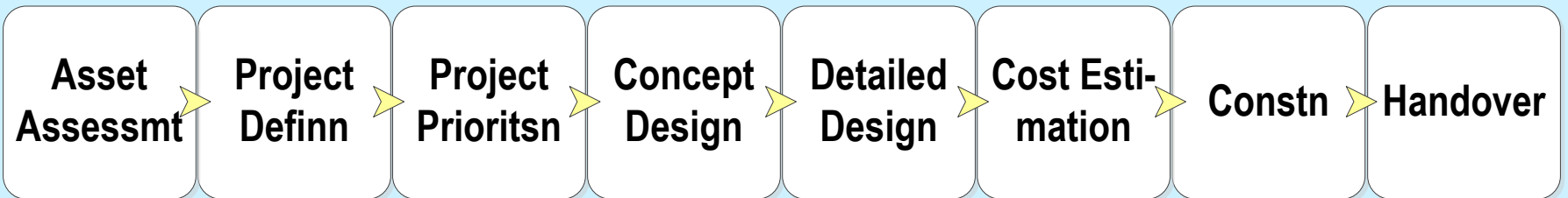


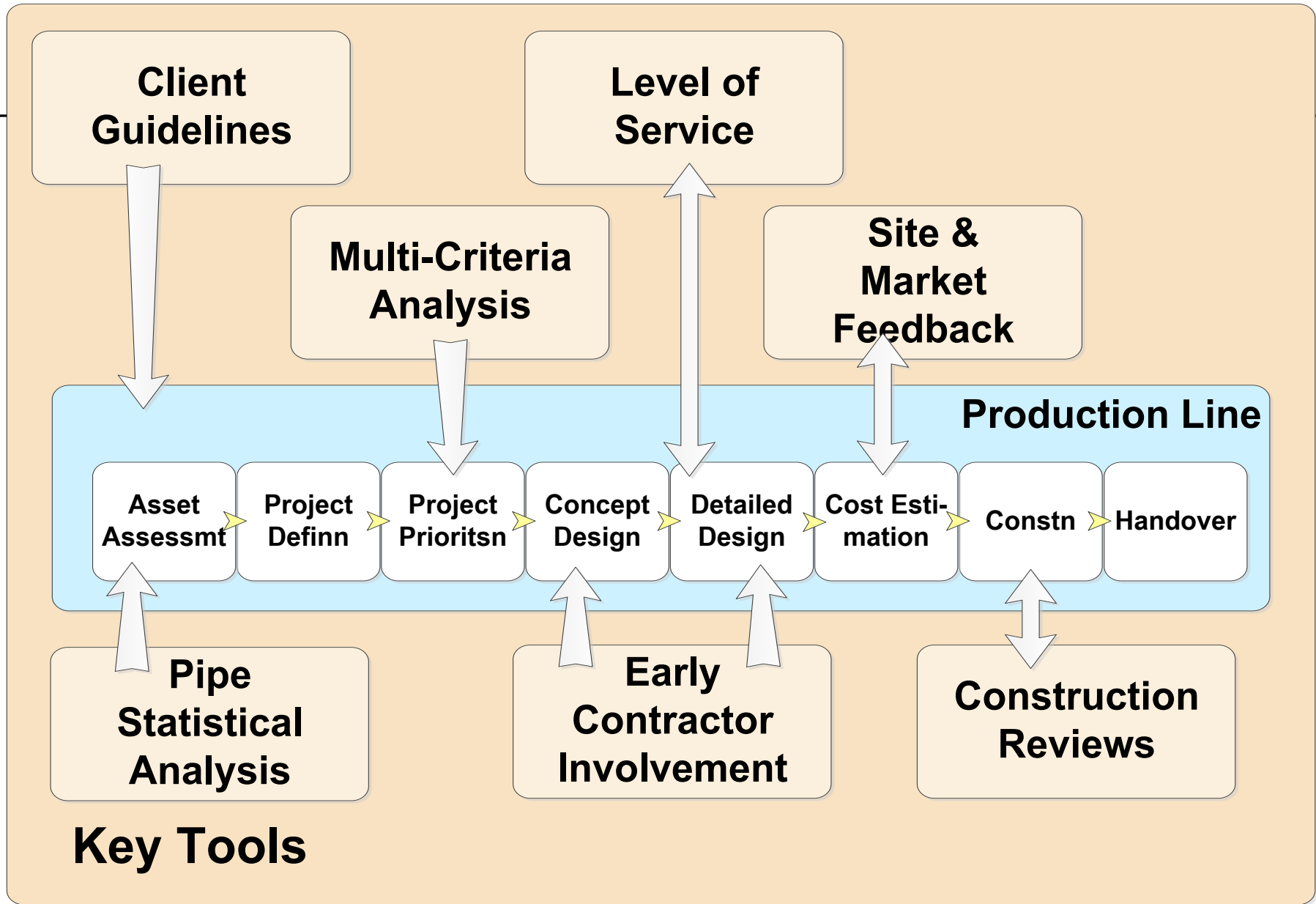
CHALLENGES – Team Building

- Differing Backgrounds
- Differing Experience
- Physical Environment
- Earthquake & Rebuild Environment
- Performance Pressure

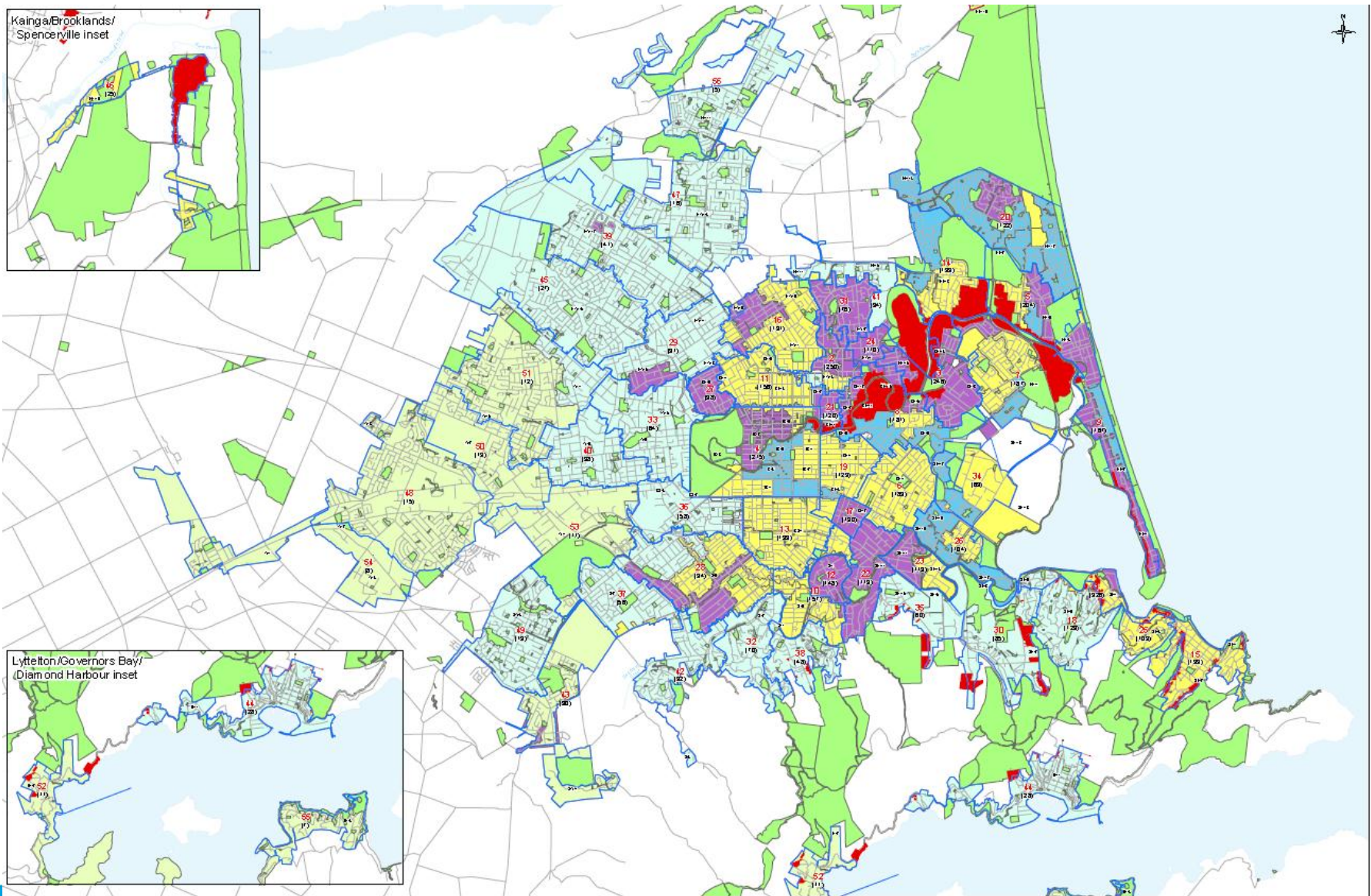
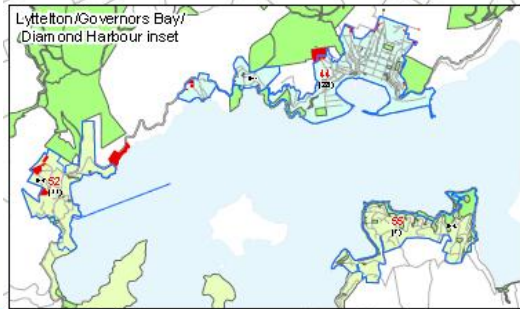
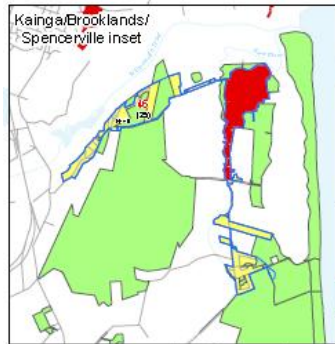
Programme of Projects

The SCIRT Production Line





Schedule Map



Project Name: 0401140101 Rebuild Scheme 0401660_ScheduleMap
 Client Ref: 01010101
 Version: 2.00
 Date: 20/07/13
 Drawn by: J. Smith

SCIRT Infrastructure Rebuild Schedule - Approved 24th July 2013
 Construction Start dates are based on dates from ARB dated 2nd July 2013
 Rebuilding Walls and 3/4 Water Structures are not shown

DISCLAIMER: This map is for general information only and is not intended to be used for legal, planning, or engineering purposes. The user of this map is responsible for checking the accuracy of the information shown on this map. The user of this map is responsible for checking the accuracy of the information shown on this map. The user of this map is responsible for checking the accuracy of the information shown on this map.

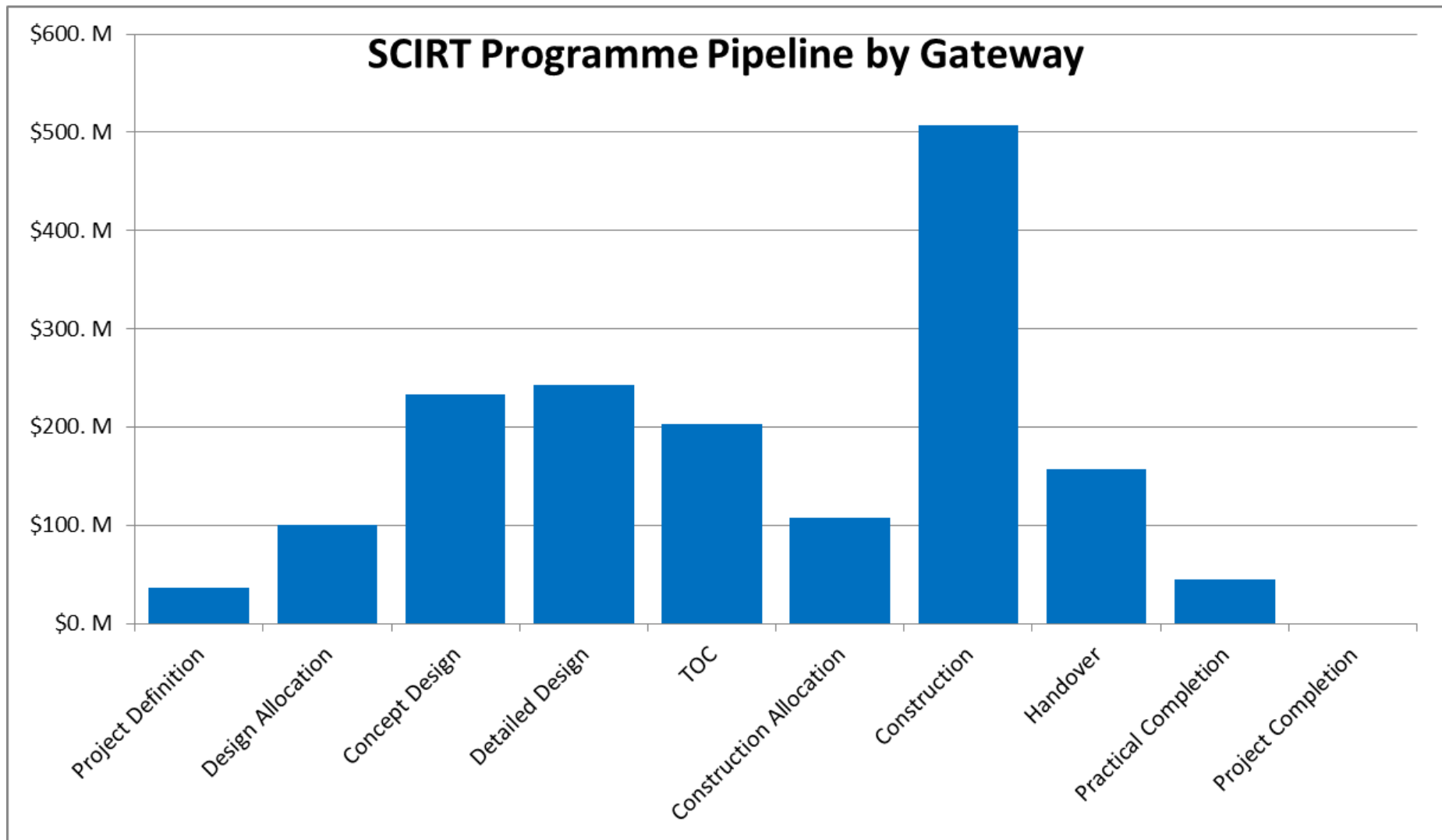
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SCIRT Rebuild Programme Construction Schedule

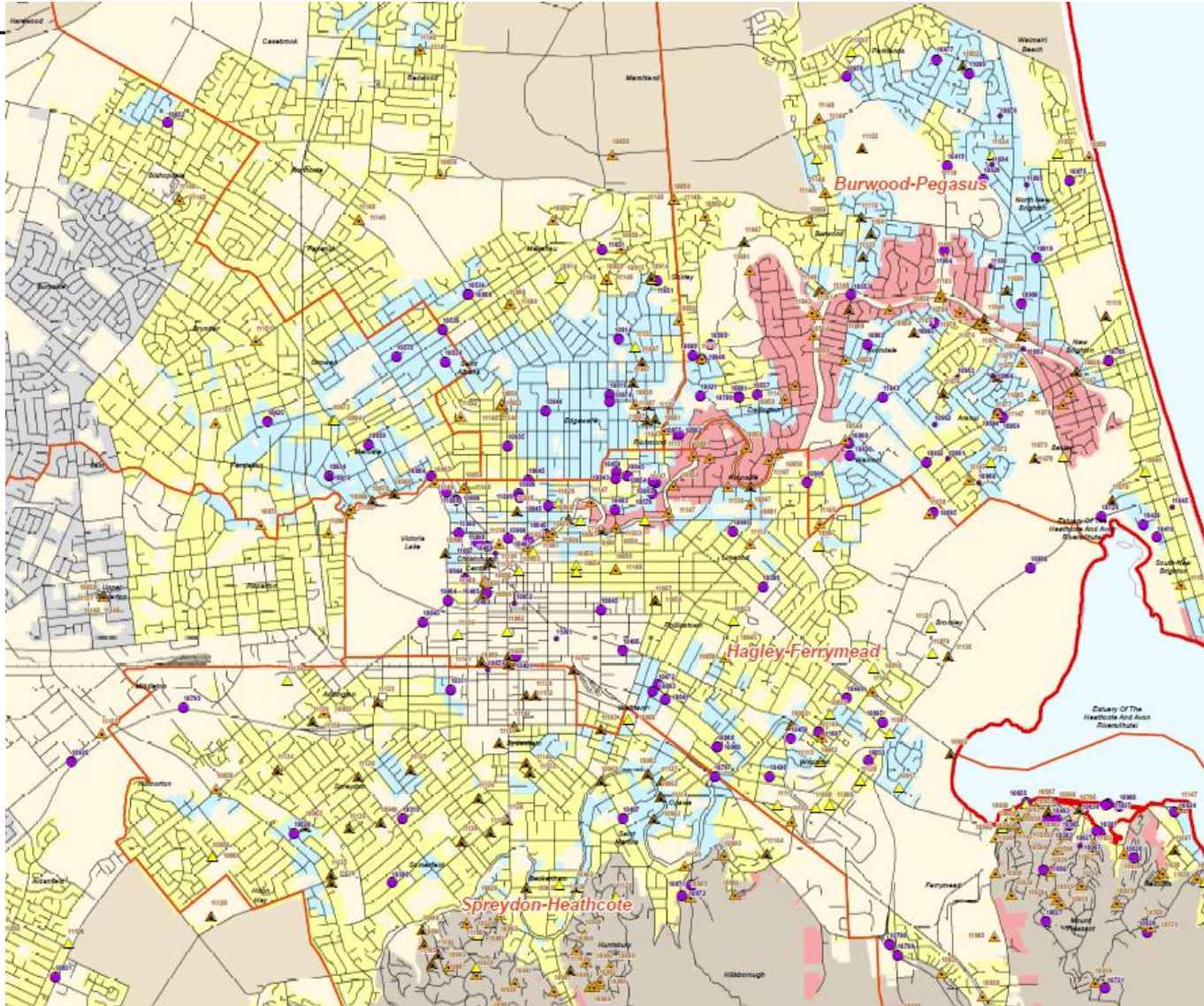
- Red: Critical
- Yellow: High
- Green: Medium
- Blue: Low
- Light Blue: Rebuild Priority Area
- Dark Red: Rebuild Priority Zone
- Green: Park



Programme Snapshot

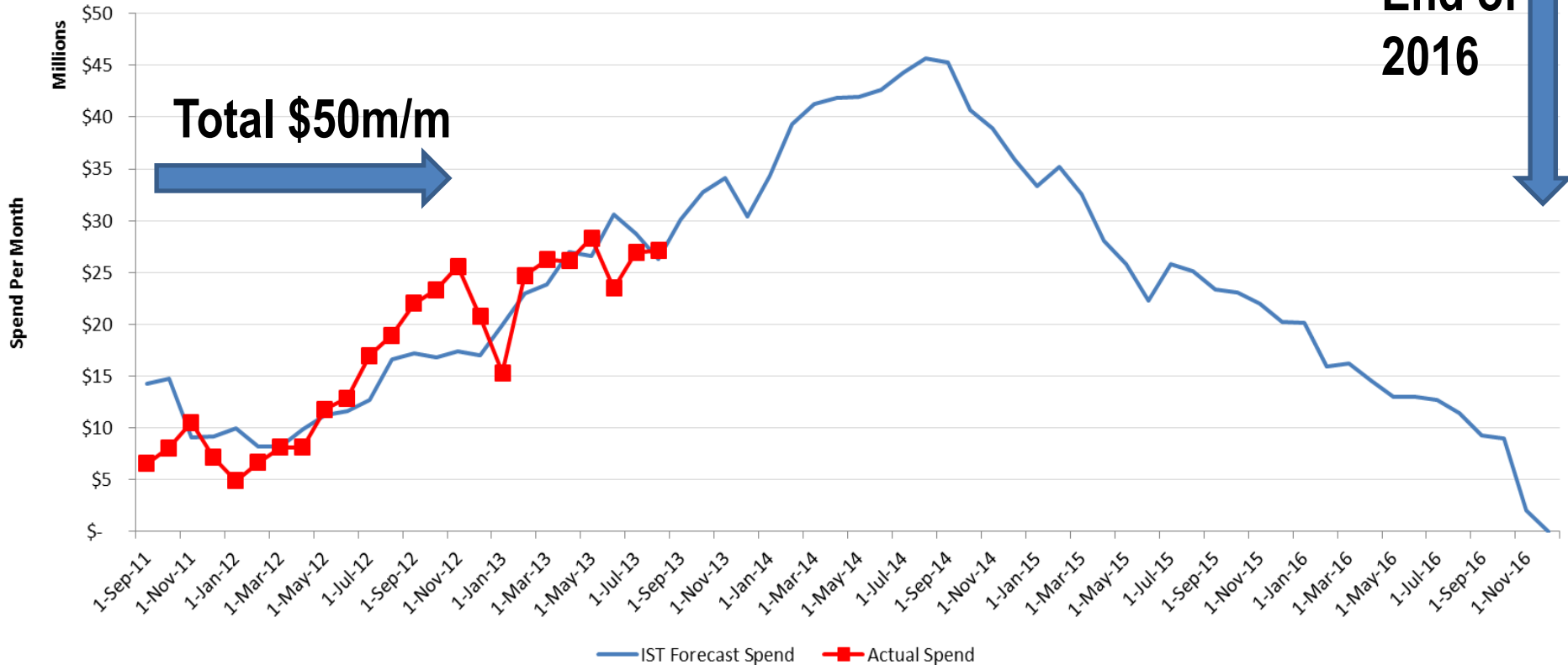


Current Sites



Programme Construction Spend

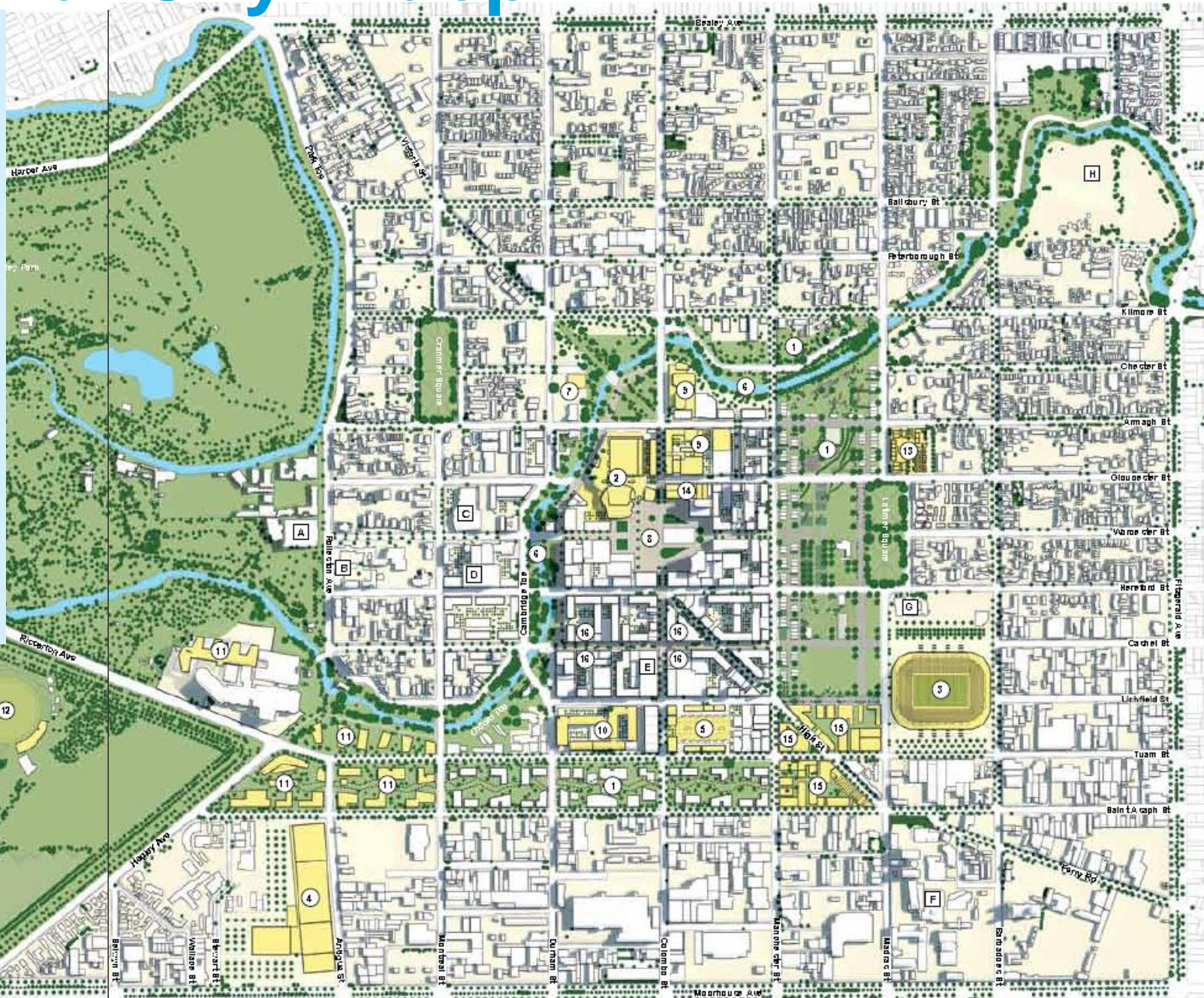
SCIRT Programme Only (excludes CCC BAU projects)



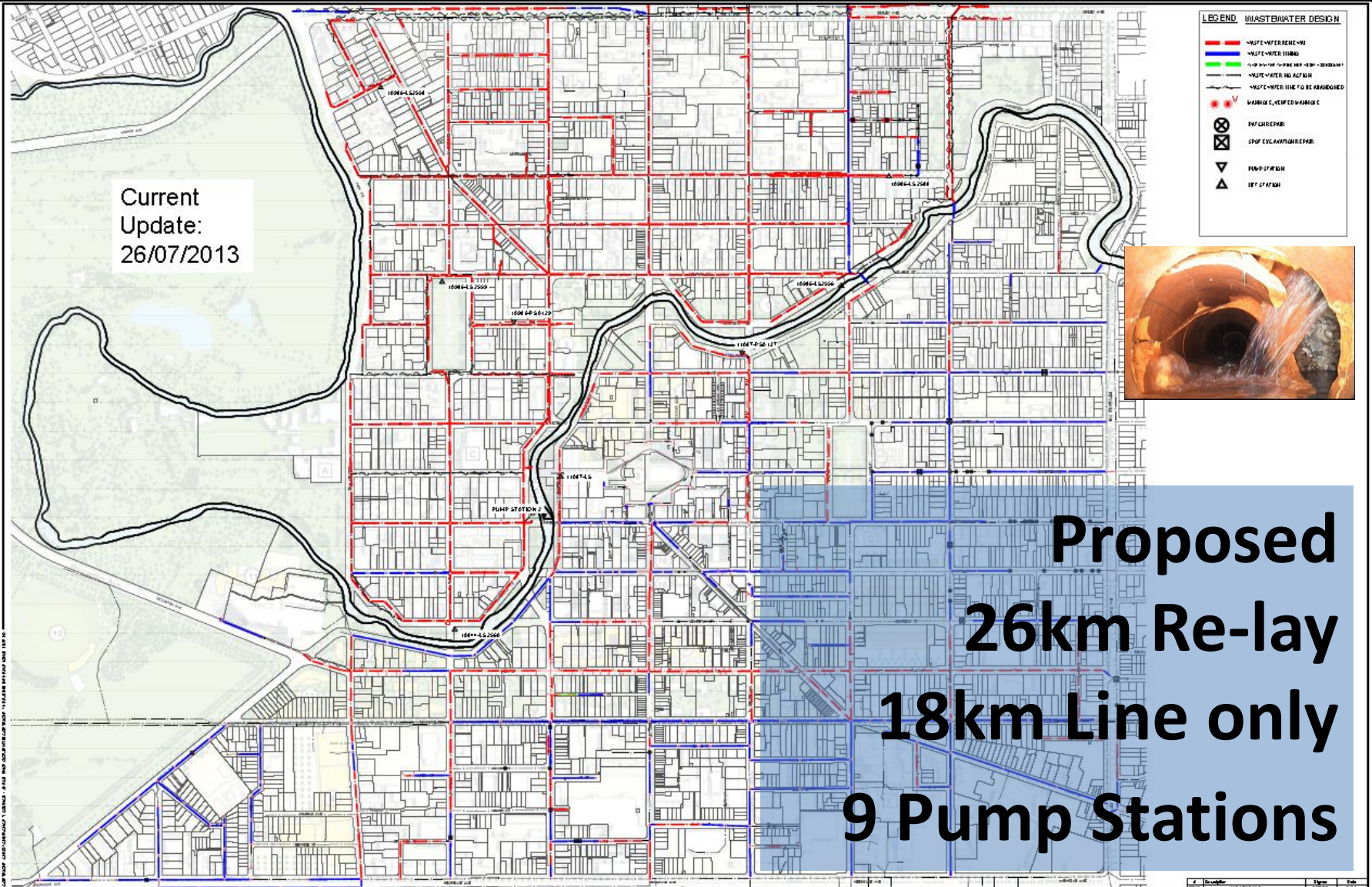
Central City Blueprint

Blueprint Plan Key

- 1 The Frame
- 2 Convention Centre Precinct
- 3 Stadium
- 4 Metro Sports Facility
- 5 Bus Interchange
- 6 Papa ō Ōtākaro/Avon River Precinct
- 7 Te Puna Ahurea Cultural Centre (indicative site)
- 8 The Square
- 9 Performing Arts Precinct
- 10 Justice and Emergency Services Precinct
- 11 Health Precinct
- 12 Cricket Oval
- 13 Residential Demonstration
- 14 Central Library
- 15 Innovation Precinct
- 16 Retail Precinct
- A Canterbury Museum
- B Arts Centre
- C Christchurch Art Gallery
- D CCC Civic Offices
- E Ballantynes
- F CPIT Campus
- G Temporary Cathedral
- H Possible Future Park



Central City – Proposals (WW)



Current Update:
26/07/2013

**Proposed
26km Re-lay
18km Line only
9 Pump Stations**

Roading Proposals



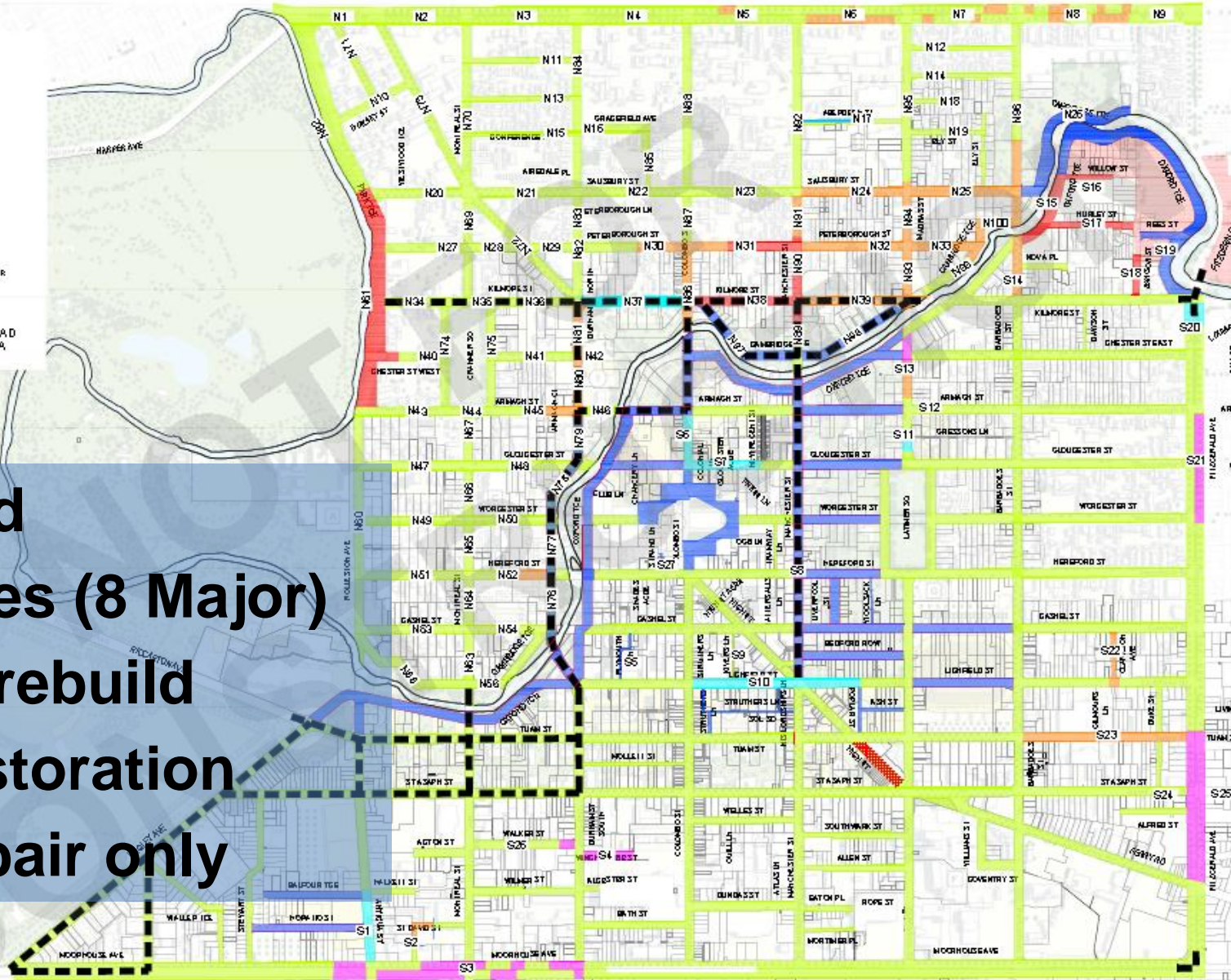
LEGEND

- FULL REBUILD
- RESTORATION - GRAVEL W/
- RESTORATION - SURFACE
- REPAIRS
- NOT ASSESSIBLE
- DETERMINED
- DELAYED
- DEFERRAL
- DESIGN CONSIDERATION FOR TRANSPORT PLAN

NOTES:

ASSESSMENT MADE ON ROAD INSPECTION ONLY (NO DATA AVAILABLE AT THIS TIME).

Proposed
15 Bridges (8 Major)
5km full rebuild
14km restoration
43km repair only



CHALLENGES – When Under Way

- **Separate Clients**
- **Unusual Relationships**
- **Production Line**
- **Design Teams**
- **Delivery Teams**
- **Information Flow**

CHALLENGES – Getting Better

- High volume delivery
- Traffic management
- Community engagement
- Continuous improvement
- Delivering value
- Recognition Brunel Medal
 Champion Canterbury

Challenges Ahead

- Achieving the Target Estimate
- Demonstrating value
- Focus on ‘critical resources’
- Containing escalation
- Maintaining operational networks
- Integration with other rebuild programmes

Transpose Elsewhere?

- Relationship Contract ✓
- Commercial Model ✓
- Procedures and Systems ✓
- Team Building ✓
- Learning Legacy ✓

Definitely Transpose-able

SCIRT

*'Update on Christchurch Horizontal Infrastructure
Rebuild'*

Any Questions?



New Zealand Government

