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.

Emergency Response Plan

Story: SCIRT Management Plans

Theme: The SCIRT Model

A plan which outlines the function, roles and responsibilities of SCIRT during an emergency event affecting SCIRT construction works.

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
This work is licensed under a Creative Commons Attribution 3.0 New Zealand License.

The authors, and Stronger Christchurch Infrastructure Rebuild Team (SCIIRT) have taken all reasonable care to ensure the accuracy of the information supplied in this legacy document. However, neither the authors nor SCIIRT, warrant that the information contained in this legacy document will be complete or free of errors or inaccuracies. By using this legacy document you accept all liability arising from your use of it. Neither the authors nor SCIIRT, will be liable for any loss or damage suffered by any person arising from the use of this legacy document, however caused.
**TABLE OF CONTENTS**

1.0 PURPOSE..............................................................................................................................................3

2.0 EMERGENCY RESPONSE INITIATION ..................................................................................................4
  2.1 Flowchart Information: Initiation and Roll out of Crisis .................................................................4
  2.2 Structure Information: Crisis Management Team (CMT) and Emergency Response Team (ERP) ........5

3.0 SCIRT FIXED OFFICE SITES .............................................................................................................6

4.0 EMERGENCY PLAN FOR CONSTRUCTION SITES UNDER SCIRT CONTROL .....................................7
  4.1 Site Specific Events .............................................................................................................................7
  4.2 Construction Site Requirements following a Major Emergency Event ............................................8
    4.2.1 Site Requirements following a Magnitude 5.0+ Earthquake ......................................................8
    4.2.2 Site requirements following other Natural Disaster Events declared to be an emergency by Government or Christchurch City Council ........................................8
    4.2.3 Site Requirements following other Major Emergency Events where emergency is not (yet) declared. .................................................................9

5.0 MAJOR EMERGENCY EVENT PROCEDURE .........................................................................................11
  5.1 SCIRT Requirements following a Magnitude 5.0+ Earthquake .........................................................11
  5.3 Resource Capabilities .........................................................................................................................11
    5.3.1 SCIRT Resource .......................................................................................................................11
    5.3.2 SCIRT Resource Register .........................................................................................................12
    5.3.3 Additional Resource Coordination ............................................................................................12
  5.4 Emergency Event Roster ....................................................................................................................13
    5.4.1 SCIRT Emergency Response Manager ....................................................................................13
    5.4.2 SCIRT Emergency Response Co-ordinators ..........................................................................13
    5.4.3 SCIRT Assessment Engineer ....................................................................................................13
    5.4.4 Delivery Team Representatives (from CC, FCC, FH, Downer, McDow) .........................14
  5.5 Commercial Management of an Emergency Event ............................................................................14

6.0 COMMUNICATION STRUCTURE FOR SCIRT DURING AN EMERGENCY EVENT .................................15
  6.1 Emergency Event Management Structure .........................................................................................15
  6.2 SCIRT Emergency Event Folder ......................................................................................................16
  6.3 Communication Devices ....................................................................................................................16
  6.4 Monthly Roster Handover Meetings .................................................................................................17
  6.5 Emergency Event Trials ....................................................................................................................17
  6.6 Christmas and New Year Period Shut Down Arrangements ............................................................17
  6.7 Defined Roles and Responsibilities ................................................................................................18

7.0 APPENDICES ........................................................................................................................................19
Stronger Christchurch
Infrastructure Rebuild Team
Emergency Response Plan (ERP)

1.0 Purpose

The purpose of this plan is to outline the function, roles and responsibilities of the Stronger Christchurch Infrastructure Rebuild Team (SCIRT), along with its associated resource during an emergency event or any other major incident affecting the construction works under the control of SCIRT. SCIRT’s Emergency Response Plan (ERP) has been developed to deal with a physical event, such as incident and emergency investigation and environmental incidents. The ERP may be used in conjunction with the Crisis Management Plan (CMP) and will supplement the Christchurch City Council’s Emergency Response Plans.

The Plan has been produced to cover any incident or emergency including but not limited to:

- Emergency Procedures for SCIRT Offices.
- Requirements for Emergency Procedures for Construction sites under SCIRT control.
- Requirements for Emergency Procedures following any incident or emergency affecting work sites or the SCIRT Office including:
  - A 5.0 magnitude earthquake or greater
  - Major traffic incident
  - Major flooding
  - Fire
  - Infrastructure failure
  - Refer to the ‘SCIRT Emergency Response Plan Processes’; Appendix F
- The wellbeing of SCIRT staff following any significant event.
2.0 Emergency Response Initiation

The Emergency Response Plan can be initiated independently by the SCIRT General Manager, Delivery Managers or Emergency Response Coordinator, or in conjunction with the CMP.

2.1 Flowchart Information: Initiation and Roll out of Crisis

The following flowchart shows the position of the Emergency Response Plan when an incident occurs. The General Manager or alternate will use the flowchart to initiate and roll out the Emergency Response Plan and/or Crisis Management Plan.

```
Incident occurs

Emergency?
- Yes: Refer ERP
- No: Crisis?

Crisis?
- No: Schedule review of decision
- Yes: Is it now a crisis?

Initiate Crisis Management Plan

Manage crisis as per this plan

Crisis over?
- No: Close out crisis
- Yes:

```
2.2 Structure Information: Crisis Management Team (CMT) and Emergency Response Team (ERP)

The following chart shows the position of the Emergency Response Team as part of the Crisis Management Team (CMT). The General Manager will determine the composition of the CMT and this will depend on the nature of the crisis.
3.0 SCIRT Fixed Office Sites

An evacuation plan approved by the NZ Fire Service is in place for the SCIRT offices at 1 Magdala Place, Middleton as it is a permanent building with 10 or more occupants. [Copy of Approval of Evacuation Scheme – Appendix J].

This must include:

- Emergency evacuation procedures are developed for 1 Magdala Place, Middleton, including:
  - Evacuation Procedures.
  - Emergency Wardens (Note: Wardens must be trained).
  - Assembly Points.
  - Certified First Aiders on site.
  - Responsibilities/Notifications.
  - Contact Names and Numbers of emergency services (e.g., police, fire, ambulance, National Poison Centre, Electrical Authority, Gas Authority, Regional Council etc).
  - Specific procedures in the case of Fire, Accidents, Earthquakes, Floods, Spills etc.

- Procedures for evacuation are displayed in prominent places, i.e. kitchen areas, Reception etc.

- Once implemented, the evacuation plan / procedures are to be communicated to all employees and contract staff.

- Designated employees must be appointed as wardens to take control in an emergency. Wardens must be trained to the identified potential emergencies (and any specific training required). The names of appointed wardens must be communicated to all employees.

- Periodic testing of emergency evacuation procedures must be carried out at no greater than 6 monthly intervals. The NZ Fire Service are required to be notified 10 days before a trial evacuation and a report completed and sent to the NZ Fire Service within 10 days of completing a trial evacuation.

- A consultative review of evacuation procedures is carried after any practice drill and after any actual emergency event. A Structural Assessment form (Appendix G) should be used to assist the review process. Any changes are to be communicated to employees and plans updated immediately. Minutes must be kept of all review meetings.

- It is essential that if a crisis occurs, all personnel within the vicinity are accounted for, including the status of all staff (injury, non-injury). A roll call should occur as part of the activation of the evacuation plan and Emergency Response Plan. This will be carried out by the SQE Manager or SQE Team.
4.0 Emergency Plan for Construction Sites under SCIRT Control

For each and every Project allocated to a Delivery Team, a site specific emergency plan will be developed. This will include two main areas for emergency planning:

1. Site specific emergencies (such as fire, traffic accidents, Health and Safety incidents, confined spaces, service strikes, environmental spills and other risk areas to the project).

2. Emergency procedures for major events such as earthquake, flooding and significant weather events. We need to carry out an audit.

4.1 Site Specific Events

As a minimum, each mobile work site must have a site specific emergency plan in place covering the following:

- 24hr Emergency Number.
- Contact Details of responsible staff with defined roles and responsibilities.
- Updated live list of all relevant available plant and equipment, passed to the SCIRT Resource Register (Appendix E) monthly which is an accumulation of all resources from all Delivery Teams. To be resurrected in Project Centre.
- Details of reporting procedures (SCIRT and Individual Delivery Team requirements).
- Who to call, what to do and possible questions that may be asked in the event of an emergency e.g. fire, bitumen burn, spills, serious injury etc.
- First Aid / Burns kit / Spill kit / Fire Extinguisher locations.
- Names of Certified First Aid staff on site.
- Nearest telephone.
- Site specific emergency contact numbers e.g. power company, gas company, local Regional Council.
- Assembly points/roll calls.
- Detail the site emergency signal e.g. horn sounding continuously or 3 x air horn blasts, etc.
- Who will give the “All Clear” to return to work?
- Media Protocol.

Any incident requiring implementation of the Emergency plan will be immediately reported to the appropriate SCIRT Delivery Manager.
4.2 Construction Site Requirements following a Major Emergency Event

4.2.1 Site Requirements following a Magnitude 5.0+ Earthquake

With reference to the SCIRT Emergency Response Plan Process following a Magnitude 5.0+ Earthquake - Appendix F[i], the responsibility of each Delivery Team is to make safe, for both the public and workers, their Projects currently under construction.

A major emergency event in this category is expected to be a magnitude 5.0 plus earthquake.

Due to difficulties which may be experienced with communication immediately following a 5.0 plus earthquake, Priority 1 activity will be self-initiated by each Delivery Team (i.e. Delivery Teams should not wait for an instruction from the SCIRT Emergency Response Coordinator).

Delivery Teams need to confirm the status of their sites following a 5.0 magnitude earthquake. Delivery Teams are expected to use judgement in the first instance to determine the significance/ size of the event.

The SCIRT rostered Emergency Response Coordinator will confirm the status of the Emergency Event once communication is possible.

There will be 3 levels of priority for site specific resources during a major event:

- **Priority 1**: Secure the construction site for safety and capacity. Implement emergency TTM setup where necessary to assist traffic flow. Provide temporary connections to sewers/ water supply pipework. Backfill trenches, upon request by the SCIRT Emergency Response Coordinator, where necessary if on a critical route or to provide access. Erect Barrier fencing where necessary for an unattended site set up. These measures will be predefined at Delivery phase.

- **Priority 2**: Utilise resource for the wider emergency response directed by the SCIRT Emergency Response Coordinator operating within the CCC Emergency Operations Centre.

- **Priority 3**: Business Continuity. It may be that the process of rebuilding the asset must continue in response to the new major event to secure the immediate and short term needs of the network. This will be instructed by the SCIRT Emergency Response Coordinator at the time of the response.

The Construction Site Emergency Plan prepared by the Delivery Team for each Project under their control will refer to the process for implementing all Priority 1 emergency work and will be self-approved under their Quality systems.

Priority 2 and Priority 3 work will be directed by the SCIRT rostered Emergency Response Coordinator at the time of the event.
4.2.2 Site requirements following other Natural Disaster Events declared to be an emergency by Government or Christchurch City Council

With reference to the SCIRT Emergency Response Plan Process for Other Natural Disaster Events - Appendix F [ii], the responsibility of each Delivery Team is to make safe, for both the public and workers, the Project or Projects affected by the event currently under construction.

A major natural disaster event in this category is expected to be a major fire, severe flooding or any other emergencies called by the Civil Defence or the CCC Emergency Operations Centre (CCC EOC).

Due to difficulties which may be experienced with communication immediately following a natural disaster event, Priority 1 activity will be self-initiated by each Delivery Team (i.e. Delivery Teams should not wait for an instruction from the SCIRT Emergency Response Coordinator).

Delivery Teams need to confirm the status of their site/s following a natural disaster. Delivery Teams are expected to use judgement in the first instance to determine the significance/size of the event.

The SCIRT rostered Emergency Response Coordinator will confirm the status of the Emergency Event once communication is made with the Delivery Team Emergency Response Representative.

There will be 3 levels of priority for site specific resources during a major event:

- **Priority 1**: Secure the construction site for safety and capacity. Implement emergency TTM setup where necessary to assist traffic flow. Contact the necessary authorities (Police, Fire, Ambulance) or utilities provider. Provide temporary connections to sewers/water supply pipework. Backfill trenches, upon request by the SCIRT Emergency Response Coordinator, where necessary if on a critical route or to provide access. Erect Barrier fencing where necessary for an unattended site set up. These measures will be predefined at Delivery phase.

- **Priority 2**: Utilise resource for the wider emergency response directed by the SCIRT Emergency Response Coordinator who may require to operate within the CCC EOC Operations.

- **Priority 3**: Business Continuity. It may be that the process of rebuilding the asset must continue in response to the new major event to secure the immediate and short term needs of the network. This will be instructed by the SCIRT Emergency Response Coordinator at the time of the response.

The Construction Site Emergency Plan prepared by the Delivery Team for each Project under their control will refer to the process for implementing all Priority 1 emergency work and will be self-approved under their Quality systems.

Priority 2 and Priority 3 work will be directed by the SCIRT Emergency Response Coordinator at the time of the event.
4.2.3 Site Requirements following other Major Emergency Events where emergency is not (yet) declared.

With reference to the SCIRT Emergency Response Plan Process for other Major Emergency Events – Appendix F(ii), the responsibility of each Delivery Team is to make safe, for both the public and workers, their Projects currently under construction.

A major emergency event in this category is expected to be a serious traffic accident, gas pipe rupture requiring evacuation of the area or other emergencies called by the Civil Defence or the CCC Emergency Operations Centre (CCC EOC).

Priority 1 activity will be self-initiated by the Delivery Team/s (i.e. Delivery Teams should not wait for an instruction from the SCIRT Emergency Response Coordinator).

Delivery Teams need to confirm the status of their sites following a major emergency event. Delivery Teams are expected to use judgement in the first instance to determine the significance/size of the event.

The SCIRT Emergency Response Coordinator will confirm the status of the Emergency Event once communication is made with the Delivery Team Emergency Response Representative.

There will be 3 levels of priority for site specific resources during a major event:

- **Priority 1**: Secure the construction site for safety and capacity. Contact the necessary authorities [Police, Fire, Ambulance] or utilities provider. Implement emergency TTM setup where necessary to assist traffic flow. Provide temporary connections to sewers/ water supply pipework. Backfill trenches, upon request by the SCIRT Emergency Response Coordinator, where necessary if on a critical route or to provide access. Erect Barrier fencing where necessary for an unattended site set up. These measures will be predefined at Delivery phase.

- **Priority 2**: Utilise resource for the wider emergency response directed by the SCIRT Emergency Response Coordinator.

- **Priority 3**: Business Continuity. It may be that the process of rebuilding the asset must continue in response to the new major event to secure the immediate and short term needs of the network. This will be instructed by the SCIRT Emergency Response Coordinator at the time of the response.

The Construction Site Emergency Plan prepared by the Delivery Team for each Project under their control will refer to the process for implementing all Priority 1 emergency work and will be self-approved under their Quality systems.

Priority 2 and Priority 3 work will be directed by the SCIRT Emergency Response Coordinator at the time of the event.
5.0 Major Emergency Event Procedure

It is intended that SCIRT takes ownership of the infrastructure damage response and on-site physical resource in the event of a major emergency. This will be done through the Alliance commercial framework and supported by both CCC and NZTA Operational teams and their existing contract arrangements.

It is fundamentally important that the Christchurch and wider contracting industry is fully utilised for any level of response required and based on a ‘best for Christchurch City’ basis.

5.1 SCIRT Requirements following a Magnitude 5.0+ Earthquake

Where initiated by the CCC EOC operations, SCIRT’s role following a 5+ Earthquake is a supporting function. As such SCIRT will provide a central coordinator for SCIRT resources (SCIRT Emergency Response Coordinator), suitably qualified engineers (led by the rostered Assessment Engineer) and additional contracting resource upon request (provided by the respective rostered Delivery Team Reps).

SCIRT’s main role in such an event is to make safe the SCIRT Project Site/s under our control, inspect structure/s under construction by SCIRT and provide additional supporting resources upon request.

5.2 SCIRT Requirements following other Emergency Events

Where the event is initiated by SCIRT (not through the CCC EOC), SCIRT will take the lead role in coordinating the response. SCIRT’s main role in such an event will be to ensure the safety of the site and immediate community, plus keep all key stakeholders informed of the status. The Executive General Manager will determine if the CMP will be initiated as part of this event.

5.3 Resource Capabilities

5.3.1 SCIRT Resource

The SCIRT resource available for emergency response will be provided by the Delivery Teams with the plant and people they have engaged on SCIRT active projects.

- McConnell Dowell
- Fletcher Construction
- Downer Construction
- Fulton Hogan
- City Care

Each of the Delivery Teams will also engage subcontractors to work on SCIRT Projects. The resources from these subcontractors will also be available upon request.

A full list of available resource on SCIRT Projects is maintained by the SCIRT Delivery Management Team Administrator and is held on the Resource Register (Appendix E). This information will be updated monthly and kept in the SCIRT EMERGENCY RESPONSE FOLDER.
5.3.2 SCIRT Resource Register

The SCIRT Resources Register is a database which contains a list of the main equipment that each Delivery Team currently has engaged on SCIRT projects under construction.

In the event of an emergency, from this database we will be able to identify available plant available for deployment.

The information for the Resource Register will be updated monthly by the Delivery Management Team Administrator. This register will be informed by monthly Plant Reports supplied by each Delivery Team.

Subcontractors currently engaged on a SCIRT project will be managed through the respective Delivery Teams they are working for. Any request for Subcontractor resource will be made through the SCIRT Emergency Response Coordinator through to the relevant rostered Delivery Team Representative.

5.3.3 Additional Resource Coordination

In addition to the SCIRT Resource, Christchurch City Council currently have contracts with contractors for a variety of maintenance services. Currently these are:

**CityCare** for:
- Road maintenance (Northern),
- Greenspace maintenance (Citywide),
- Clean water supply (Citywide),
- Sewerage maintenance (Citywide)
- Land drainage maintenance (Citywide)

**Downer** for:
- Road maintenance (Eastern, Southern and Central areas)

**Fulton Hogan** for:
- Road Maintenance Banks Peninsula

Each of these contracts has separate management and operational resource to deliver defined levels of service to maintain the associated infrastructure, outside of the Delivery Teams. These contracts also include defined responsibilities for emergency response work through the maintenance contracts.

Central coordination of all resource requirements within the CCC EOC Operations team is provided by the CCC EOC Operations Manager, utilising existing experienced staff from the SCIRT, Maintenance contract suppliers, Christchurch City Council operational management staff and NZTA management staff.

SCIRT will play a supporting role through the SCIRT Emergency Response Coordinator. The SCIRT Emergency Response Coordinator will provide resource from the Resource Register upon instruction from the CCC EOC Operations Manager.
5.4 Emergency Event Roster

A monthly Emergency Event Roster - Appendix A will be maintained by the SCIRT Delivery Management Team Administrator. The Roster will nominate suitably qualified and experienced personnel for each month. There are 4 categories required with relevant assigned responsibilities for supplying personnel as follows:

1. SCIRT Emergency Response Manager – one of the SCIRT Delivery Managers.
3. SCIRT Assessment Engineer - Responsibility of the Professional Services and Design Manager.

The Roster is supplied and updated to the SCIRT CCC Client Liaison Manager Ross Herrett and the CDEM Operational Readiness Coordinator, CCC EOC, as changes occur.

5.4.1 SCIRT Emergency Response Manager

The SCIRT Delivery Managers will be appointed as Emergency Response Manager.

This position will be staffed 24 hours per day during an event where the EOC has been established. The SCIRT Emergency Response Manager position will rotate on an 8 hour shift basis. Personnel required for this level of support will be supplied by the Delivery Management Team.

5.4.2 SCIRT Emergency Response Co-ordinators

The SCIRT Emergency Response Co-ordinators are members of the Delivery Team at IST who are on a monthly roster and at each monthly changeover are equipped with a charged radio, current projects for each delivery team, current map of all projects in Christchurch, current resources available for each delivery team and the Emergency Response Plan.

This person will establish in the CCC EOC if necessary and make their identity known to the CCC EOC Operations Manager. This person will communicate asset status updates on active SCIRT project sites and pass on instructions for resource requirements from the CCC EOC Operations Manager.

It is the responsibility of each named person on the monthly SCIRT Personnel Roster to be fit for duty in the case of an Event. Should that person be unavailable for duty, it is the individual’s responsibility to secure a suitable alternative person for that period and report this through to the Delivery Management Team Administrator one week in advance of the planned substitution.

5.4.3 SCIRT Assessment Engineer

Names will be provided for this position by the Professional Services and Design Manager. This person will mobilise a structural inspection team if necessary who will inspect all structures currently under the SCIRT control and in the construction phase. Status update on each structure as it becomes available will be communicated through to the SCIRT Emergency Response Manager.

If the initial inspection identifies major structural issues, the asset will be isolated and closed with a full structural assessment arranged.
Structures to consider will be Bridges, Retaining Walls, Pump Stations, Reservoirs and associated temporary works. **N.B. Only SCIRT structural Projects under construction or in handover phase are to be inspected. The CCC will be responsible for all other structures and assets within the City.**

The inspections should not consider minor work packages under SCIRT control as these are of a non-structural nature. Any Structures in the minor works category will be inspected by the CCC Structural assessment team.

The current list of structures to be inspected by SCIRT can be found on the Projects in Construction Register - Appendix D. This Register will be available in the Emergency Event Folder and will be updated monthly by the Delivery Management Team Administrator.

Temporary works belonging to non-structural assets under construction, generally 3 waters trenching works, will be the responsibility of each Delivery Team.

### 5.4.4 Delivery Team Representatives (from CC, FCC, FH, Downer, McDow)

Names will be provided for this position on a monthly basis by the Delivery Team Leaders.

Immediately following an Emergency Event, this person will organise the inspection of the SCIRT Project Sites currently in construction and assigned to their Delivery Team. The list of sites in this category can be found in the Projects in Construction Register - Appendix D.

The sites will be inspected for any damage requiring emergency repair, site security, road safety, traffic management and any other information that may present itself which is deemed to be relevant. Status update on each site as it becomes available will be communicated through to the SCIRT Emergency Response Manager via the Rostered SCIRT personnel handling radio operations.

It is the responsibility of each Delivery Team to certify that any associated temporary works or scaffolding associated with their sites receives a full engineering assessment and are confirmed to be in satisfactory order.

### 5.5 Commercial Management of an Emergency Event

All works undertaken as part of an emergency event will be reimbursable on a cost plus basis. An event will not form part of a TOC process. All hours of plant and personnel must be captured on a daily basis and submitted to the Commercial Manager for approval. Failure to make returns on a daily basis will result in a non-payment.

The Commercial Manager will liaise with the SCIRT Emergency Response Manager for verification of instruction.
6.0 Communication Structure for SCIRT during an Emergency Event

During an event clear reporting lines of communication, reliable information and means of communication are critical.

The SCIRT Emergency Response Manager must inform the SCIRT Executive General Manager and SCIRT Communications Manager if the Emergency Response Plan is initiated and status reports will be communicated during the course of the event.

6.1 Emergency Event Management Structure

Below are the reporting lines following an Emergency Event:

Details on individual names and contacts assigned to these positions for the relevant month can be found in Emergency Contacts (Appendix B).
6.2 SCIRT Emergency Event Folder

There will be triplicate copies of the Emergency Event Folder; one held in the SCIRT office (next to the Delivery Team); one held by the SCIRT rostered personnel on duty for the month and the other will be held by the CCC EOC Operations manager.

The Emergency Event Folder will contain the following information:

- Emergency Response Plan
- Emergency Event Roster (Appendix A)
- Emergency Contacts (Appendix B)
- Christchurch City Council Emergency Centre Location & ECO Duty Roster (Appendix C)
- Project Construction Register (Appendix D)
- Resources Register (Appendix E)
- Emergency Response Plan Process (Appendix F)
- Forms/Template – (Appendix G)
  - Radio Check
  - Emergency Response Structural Assessment Check Sheet
  - Structural Assessment form
- GIS SCIRT Site Location Map (Projects under construction) (Appendix H).

The Emergency Event Folders will be maintained by the Delivery Team Administrator and updated on the first working day of each month.

(Please note that the appendices contained within this plan may show blank registers for demonstration purposes only. The Emergency Event Folders will contain the updated and complete data).

6.3 Communication Devices

Experience has shown that radio has been the most reliable form of communication following a significant event. All rostered emergency response representatives are provided with a mobile radio set during the month of their roster.

SCIRT also has also been allocated a CCC EOC radio which enables direct contact with CCC EOC.

It will be the responsibility of the SCIRT member on roster to maintain the radio charge and to pass on the radio to the next person on the roster when there is a period change.

The following personnel are allocated a radio:

- SCIRT Emergency Rostered Co-ordinators.
- SCIRT rostered Assessment Engineer.
- Rostered Delivery Team Representatives (2 for each Delivery Team – Primary & Backup).

When telecommunication services are restored, text messaging and mobile calls will also be used as alternative means of communication.

Training in the handheld radios will be given to staff on roster and a radio check will be held once a month.
6.4 Monthly Roster Handover Meetings

On the first working day of each month the Delivery Management Team Administrator transfers the radio and information pack with updated project summaries, map and resource register to the next rostered member, and ensures they are familiar with the plan and any changes that may have been made.

6.5 Emergency Event Trials

Periodically and without notice the CCC Representative will orchestrate a trial emergency event to test the preparedness of the plan and the team. Any shortcomings from these trials will be captured on a SCIRT Non Conformance Report, NCR and the necessary amendment will be made to the Emergency Event Plan and training given to all concerned.

6.6 Christmas and New Year Period Shut Down Arrangements

The SCIRT office and its team members will close over the Christmas and New Year Period. This is normally for an approximate 2 week period.

It has been agreed with the Christchurch City Council that their after-hours service and 24/7 are better resourced to provide cover during this period.

During the December Handover Meeting attendees will be extended to include the following people:

- SCIRT Emergency Response personnel responsible for the plan as identified in 6.1.5 above
- Roster SCIRT personnel for both December and January.

During this meeting the following will be confirmed/ transferred:

- The dates of the SCIRT shut down period
- Contact details for Delivery Team on call personnel

Following the recommencement of the SCIRT operation early in the New Year the responsibilities for inspection of Structures under construction and making the SCIRT Construction Sites Safe will revert back to SCIRT.
6.7 Defined Roles and Responsibilities

**SCIRT Alliance Executive General Manager**
- Overall responsibility for the development and implementation of the Plan

**SCIRT Delivery Manager**
- Provision of physical resource
- Utilisation of plant and equipment
- Liaison with Delivery Teams
- Delivery of the response work
- Coordination with the CCC EOC Operations Manager

**SCIRT Professional Services**
- Asset Inspection

**SCIRT Assessment Engineer Leader**
- Organisation of Structural inspections

**SCIRT Commercial Manager**
- Cost tracking and claim payment
- Sub Contract agreements for additional resource
- Financial reporting to Council

**SCIRT Business Systems**
- Restoration and maintenance of business systems
- Data management

**CCC Interface**
- Integration of SCIRT Team into CCC EOC Operations Team
- Liaison with CCC and NZTA

**SCIRT Communications and Stakeholder Manager**
- Manages communications to the media, elected representatives and key stakeholders.
- Integration with the Crisis Management Plan.

**SCIRT Administration**
- Organise the monthly handover meetings
- Manage radio communication training and radio checks
- Update monthly the Emergency Events Folders (within SCIRT and CCC EOC)

**Delivery Team Leaders**:
- City Care
- Downer
- Fletcher
- Fulton Hogan
- McConnell Dowell
7.0 Appendices

A. Emergency Event Roster (Appendix A)
B. Emergency Contacts (Appendix B)
C. Christchurch City Council Emergency Centre Location & Roster (Appendix C)
D. Project Construction Register (Appendix D)
E. Resources Register (Appendix E)
F. Emergency Response Plan Process (Appendix F)
G. Forms (Appendix G)
H. GIS SCIRT Site Location Map (Projects under construction) (Appendix H)
I. Copy of NZ Fire Service approval of the SCIRT Evacuation Scheme (Appendix J)
Appendix A

Emergency Event Roster

Maintained by Delivery Management Team Administrator
Appendix C

(i) Christchurch City Council Emergency Operations Centre Location

**Primary:**
CCC Function Room  
Level 1  
53 Hereford Street  
Phone (03) 941 8999

**Alternate:**
Fendalton Service Centre  
4 Jeffreys Rd, Fendalton  
(Cnr Jeffreys & Clyde Rds)  
Phone (03) 941 8999
Appendix D

Project Construction Register

See separate Summaries for each Delivery Team and Appendix H SCIRT Project Location Map in Red Folder at Radio Station.
Appendix E

Resources Register

Delivery Team Plant Reports provided monthly on Project Centre (Correspondence).

See Current Reports in Red Folder at Radio Station.
Appendix F (i)

Emergency Response Plan Process in the event of a Magnitude 5+ Earthquake

SCIRT Emergency Response Plan Process in the Event of an Earthquake

Version 1.0 - 12/12/2014

Author: lawn kin
Contributors / Reviewers: Greg Slaughter, Ian Campbell, Ross Herrett

- Process Owner: Executive General Manager
- Frequency: As required
- Purpose: In the event of a significant aftershock, SCIRT is responsible for ensuring that sites under construction are made safer, inspecting SCIRT assets under construction and providing support to CCC as requested.

Assumptions:
In order for this process to take place in an emergency, the following needs to be in place:
- Add SCIRT Coordinator to the EOC
- Management duty roster
- Assign SCIRT Coordinators and rostered engineers for Assessment of Bridges, Retaining walls, Storage Reservoirs and Pump Stations
- A map of projects in construction phase is kept updated monthly and in hard copy at the EOC centre
- List of Bridges, Retaining walls, Storage Reservoirs and Pump Stations which are in the construction phase are kept updated monthly and in hard copy at the EOC centre
- List of SCIRT resources, their area of skill and their contact information is kept updated and in hard copy at the EOC
- The above will be created into a ‘emergency pack’ which can be easily available to rostered individuals as required.
Appendix F (ii)

Emergency Response Plan Process for Other Natural Disaster or Major Emergency Events

SCIRT Emergency Response Plan Process for Other Natural Disaster or Major Emergency Events

Process Owner: SCIRT Executive General Manager
Frequency: As required
Purpose: To respond to an event of a major nature or a major event other than an earthquake

Assumptions:
- In order for this process to take place in an emergency, the following needs to be in place:
  - Add SCIRT Coordinator to the EOC Management duty roster
  - Assign SCIRT Coordinators and rostered engineers for Assessment of Bridges, Retaining walls, Storage Reservoirs, and Pump Stations
  - A map of projects in construction phase is kept updated monthly and in hard copy at the EOC centre
  - List of Bridges, Retaining walls, Storage Reservoirs, and Pump Stations which are in the construction phase are kept updated monthly and in hard copy at the EOC centre
  - List of SCIRT resources, their area of skill and their contact information is kept updated and in hard copy at the EOC
  - The above will be created into an ‘emergency pack’ which can be easily available to rostered individuals as required
Appendix F (iii)

Emergency Response Plan Process for Other Major Emergency Events (with non CCC EOC Involvement)

SCIRT Emergency Response Plan Process for Other Major Emergency Events (non CCC EOC Involvement) Version 1.0 - 12/12/2014

Author: Maree Pycroft
Contributors / Reviewers: Greg Slaughter, Phil Wilkin, Ross Herrett

- Process Owner: SCIRT Executive General Manager
- Frequency: As required
- Purpose: In the event of a major event not involving CCC EOC.

There is one rostered delivery team representative for each Delivery team

A nominated, rostered structural engineer will co-ordinate assessments for each of the following structures which are currently in the construction phase under SCIRT:
- Bridges
- Retaining Walls
- Storage Reservoirs
- Pump stations

- A nominated, rostered inspection engineer

- Priority required assessments

- Carry out or co-ordinate site visits

- Is asset currently safe to use / occupy?

- Communicate status of assets

- Request close public access to asset (if not already)

- Communicate status and damage detail

- Co-ordinate communication between SCIRT & Delivery Teams – Confirm sites meet safety requirements, Co-ordinate SCIRT resources as requested, Co-ordinate inspections of structural assets under SCIRT construction, request asset closure if required etc.

- Request close public access to asset (if not already)

Assumptions
In order for this process to take place in an emergency, the following needs to be in place:
- Add SCIRT Co-ordinator to the EOC Management duty roster
- Assign SCIRT Co-ordinators and rostered engineers for Assessment of Bridges, Retaining walls, Storage Reservoirs and Pump Stations
- A map of projects in construction phase is kept updated monthly and in hard copy at the EOC centre
- List of Bridges, Retaining walls, Storage Reservoirs and Pump Stations which are in the construction phase are kept updated monthly and in hard copy at the EOC centre
- List of SCIRT resources, their area of skill and their contact information is kept updated and in hard copy at the EOC
- The above will be created into a ‘Emergency pack’ which can be easily available to rostered individuals as required
# Appendix G

## Forms

### RAPID STRUCTURAL ASSET ASSESSMENT FORM

<table>
<thead>
<tr>
<th>Final Posting:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. safe/unsafe, close/open etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project No:</th>
<th>Project Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location/address:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By:</th>
<th>Date:</th>
<th>Time:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General description of damage:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional comments/observations and recommendations:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

GIS SCIRT Site Location Map

Produced by the GIS Team monthly:

See Current Map in Red Folder at Radio Station.
Appendix J

Copy of NZ Fire Service Approval of SCIRT Emergency Evacuation Plan

Supplied by SCIRT Health and Safety Coordinator

Christchurch Fire Area Office
New Zealand Fire Service Region 4
200 Kilmore Street, Christchurch 8011
PO Box 13-747
Christchurch 8141
New Zealand
Phone +64 3 3728-501, Fax +64 3 3776-466

17 May 2012

Stronger Christchurch Infrastructure Rebuild Team
PO Box 8341
Christchurch

Dear

Approval of Evacuation Scheme –
Stronger Christchurch Infrastructure Rebuild Team, 9 Magdala Place

I wish to advise you that in accordance with section 21C of the Fire Service Act 1975 your evacuation scheme for the above named building was approved on 17 May 2012.

Maintenance
The owner of the building must ensure the evacuation scheme is maintained so as to enable evacuation from the scene of a fire safely and within a reasonable time. You have chosen to maintain your scheme by conducting trial evacuations. You must notify this office at least 10 working days prior to the date of the trial and also the result of the trial within 10 working days using the prescribed forms available from www.fire.org.nz.

Part 1 Responsibility
You are reminded about your obligations with respect to Part 1 of the Fire Safety and Evacuation of Buildings Regulations 2006.

If you have any questions, please contact Fire Risk Management Officer at the Christchurch Area Office

Yours sincerely

Jog Graham
Area Manager
Christchurch Fire Area

Encl.
Helpful Contacts:

(CCC – Looks after the EOC roster for CCC)
Capability Development & Training Co-ordinator
Civil Defence Emergency Management & Rural Fire

Duty Officer email / phone:
cdem.dutyofficer@ccc.govt.nz   03 941 8999

----------------------------------------------------------------------------------------------------------------

CTOC contact: Mainly for Christmas/New Year roster: