

City Rail Link Limited

Construction Safety Management Plan

Document Ref: CRL-SYW-HSE-AT-PLN-002502

Revision: D

April 2017



COMMERCIAL IN CONFIDENCE

City Rail Link

Construction Safety Management Plan

CRLL-PRW-HSE-PLN-002502

Revision Status

Revision	Issue Date	Major Changes	Page No(s)
A	10/08/2015	First Issue	N/A
B	23/05/2016	New legislation, AT links, incident reporting requirements to include plant & utility infrastructure damage and staff changes	N/A
C	19/12/2016	CRLL update & general update	N/A
D	11/04/2017	General update specifically section 4.1, Safe Work Controls, include Appendix C, include comments from Simpson Grierson review	N/A

Approval Status







Revision	D	
Endorsement Date	11/04/2016	
Prepared by:	Mark Durham CRLL Project Construction Safety Manager,	
Review by:	Scott Elwarth CRLL Construction Manager C1 & C2	
Review by:	Doug Carter CRLL Delivery Manager C5 & C6	
Review by:	Steve Hawkins CRLL Delivery Manager C3	
Controlled By:	Peter Sansom CRLL Rail Systems & Safety Assurance Manager,	
Approved by:	Chris Meale CRLL Project Director	

Table of Contents

1	Introduction	5
1.1	Project Description	5
1.2	Introduction	5
1.3	Scope and Objective	6
1.4	Safety Document Relationship Map	6
1.5	Project Organisation Structure	7
1.6	Project Programme	7
2	Health and safety Management	7
2.1	Health & Safety Policy	7
2.2	CRLI Health and Safety Management System	8
2.3	Responsibilities and Accountabilities.....	8
2.4	Legal and Other Requirements.....	9
2.5	Selection and Management of Contractors	9
2.6	Minimum CRLI Contractor health and safety Requirements	9
3	Safety Leadership and Commitment	9
3.1	Leadership and Commitment	9
3.2	Just Culture	10
3.3	Environmental Sustainability Leadership	10
4	Consultation & Communication	11
4.1	CRLI Communication and Consultation	11
4.2	PCBU / Contractor coordination and consultation	11
4.3	External Communication	11
4.3	CRLI Worker Inductions & Construction Safety Management Plan (CSMP)	12
4.4	Pre-start Meetings/Task Briefing Meetings and Toolbox Meetings.....	12
4.4	Safety Alerts and Lessons Learnt.....	12
4.5	Project Health & Safety Committee.....	12
5	Hazard Identification and Risk Management	13
5.1	Health and Safety Risk and Hazard Management	13
6	Safe Work Controls	14
6.1	Visiting/Working on Project Construction Sites	14
6.2	Emergency Management	15
6.3	Working at Height	15

6.4	<i>Ladders</i>	15
6.5	<i>Excavations</i>	15
6.6	<i>Mobile Elevated Work Platforms</i>	15
6.7	<i>Scaffolding</i>	15
6.8	<i>Confined Space</i>	16
6.9	<i>Vehicles and Plant</i>	16
6.10	<i>Personal Protective Equipment</i>	16
6.11	<i>Drugs and Alcohol</i>	17
6.12	<i>Fatigue</i>	17
6.13	<i>Lone Working</i>	17
6.14	<i>Noise</i>	18
6.15	<i>Noise Management Plans</i>	18
6.16	<i>Utilities</i>	18
6.17	<i>Permit to Work</i>	18
6.18	<i>Electrical</i>	19
6.19	<i>Smoking</i>	19
6.20	<i>Training and Competence</i>	19
6.21	<i>Personal Hygiene & Health Surveillance</i>	19
6.22	<i>Britomart Transport Centre (BTC)</i>	20
6.23	<i>Working in or Adjacent to the Rail Corridor</i>	20
6.24	<i>Mining and Tunneling Operations</i>	21
6.25	<i>Environmental</i>	21
6.26	<i>Hazardous Substances</i>	21
6.27	<i>Chemical Management</i>	22
6.28	<i>Traffic Management</i>	22
6.29	<i>Asbestos</i>	22
6.30	<i>Demolition</i>	22
6.31	<i>Waste Management</i>	22
6.32	<i>Management of Temporary Works</i>	23
6.33	<i>Cranes including other types of plant used as cranes</i>	23
6.34	<i>Construction Site Security</i>	23
7	<i>Incident Management, Reporting and Investigation</i>	23
7.1	<i>Duty to Notify WorkSafe NZ</i>	23
7.2	<i>First Aid, Medical Treatment and Injury Management</i>	24
7.3	<i>Incident Reporting</i>	24
7.4	<i>CRL Incident Escalation Process</i>	26
7.5	<i>Incident and Investigation Management</i>	27

8	<i>Document Control Arrangements and Information Management</i>	27
8.1	<i>Fulcrum Electronic Document Management System</i>	27
9	<i>Measurement and Evaluation</i>	28
9.1	<i>Monitoring the health and safety performance of the Contractor</i>	28
9.2	<i>Monitoring CRLI health and safety Performance</i>	28
9.3	<i>Review Records.....</i>	29
10	<i>Health and Safety, Audit & Inspections</i>	29
10.1	<i>WorkSafe NZ Audits & Inspections</i>	29
10.2	<i>CRLI Safety Audit & Inspection Arrangements.....</i>	29
10.3	<i>CRLI Project Safety Management Auditors.....</i>	30
10.4	<i>Audit Finding Classification</i>	30
10.5	<i>Corrective Action/Improvements</i>	30

Appendix A List of Acronyms

Appendix B Safety Document Delivery Matrix

Appendix C CRLI Health & Safety Management Requirements

1 Introduction

1.1 Project Description

The City Rail Link Limited (CRL) will extend Auckland's passenger rail system past Britomart to connect to the existing regional rail network at Mt Eden. Britomart will become a through station with new stations near Aotea Square and Karangahape Road and a redeveloped station at Mount Eden. The main construction methods for the CRL are cut and cover, in which the tunnels are dug from the surface and tunneling using either a Tunnel Boring Machine (TBM) or mined methods. Much of the route travels at some depth below the ground to significantly reduce impacts.



City Rail Link Limited planned route.

For the purpose of this document City Rail Link Limited will be referred to as CRL. CRL is the Person Conducting a business or Undertaking (PCBU).

1.2 Introduction

This Construction Safety Management Plan (CSMP) defines the minimum standards acceptable on the project. As part of a committed safety culture every organisation and person working on the project is expected to strive to exceed minimum safety standards at all times. From a project perspective there is no excuse for breaching safety protocol at any time.

Zero Harm is the target for the project, and although extremely difficult to achieve, this target will remain in place for the life of the project. Accurate safety reporting, not only of incidents, but also of near misses/hits and unsafe practice is absolutely essential to the achievement of a safety realisation as close to our target as possible. Again, there is no excuse for not reporting safety matters accurately.

CRLI intends to follow a process of continuous improvement for safety management throughout the project lifecycle. As such this CSMP will be regularly updated to reflect the specific focus of the particular phases of the project.

Safety, and as such the implementation of this CSMP is everyone's responsibility - no excuses.

1.3 Scope and Objective

The scope of this CSMP covers all construction activities. A risk based approach shall be undertaken to high consequence construction activities are identified and controlled. Through managing these risks, including suitable changes to design and/or other management measures, CRLI will reduce the risks to an acceptable levels. CRLI will require evidence to be kept that risks have been reduced *So Far As Is Reasonably Practicable (SFAIRP)*, this is required to comply with the Health and safety at Work Act 2015 (HSWA). A safety risk register shall be established showing the residual risks of known hazards for handover to the construction contractors for management during the construction period.

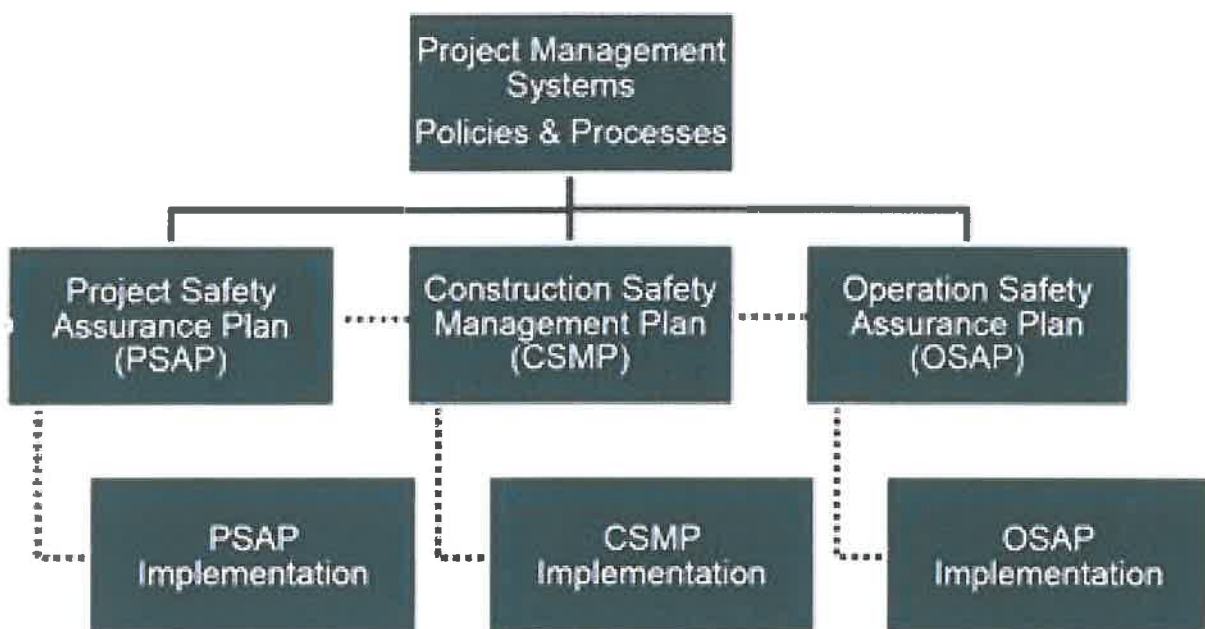
The objective of this plan is to work collaboratively with all key stakeholders and contractors to ensure we meet our legal and other compliance obligations. CRLI intent is for our staff, contractors, and consultants to work together to ensure no one is harmed through what we do.

1.4 Safety Document Relationship Map

As a PCBU CRLI has established a health and safety Policy and Health and safety Management plans. This CSMP is part of that framework and its purpose is to ensure the health and safety Policy and its intent is delivered through the construction of the City Rail Link.

Whilst this plan sits within the framework it also interfaces with the project safety assurance plan (PSAP) and the operations safety assurance plan (OSAP). Should any conflict of compliance occur between these plans this is to be brought to the attention of the Rail Systems and Safety Assurance Manager for guidance and resolution.

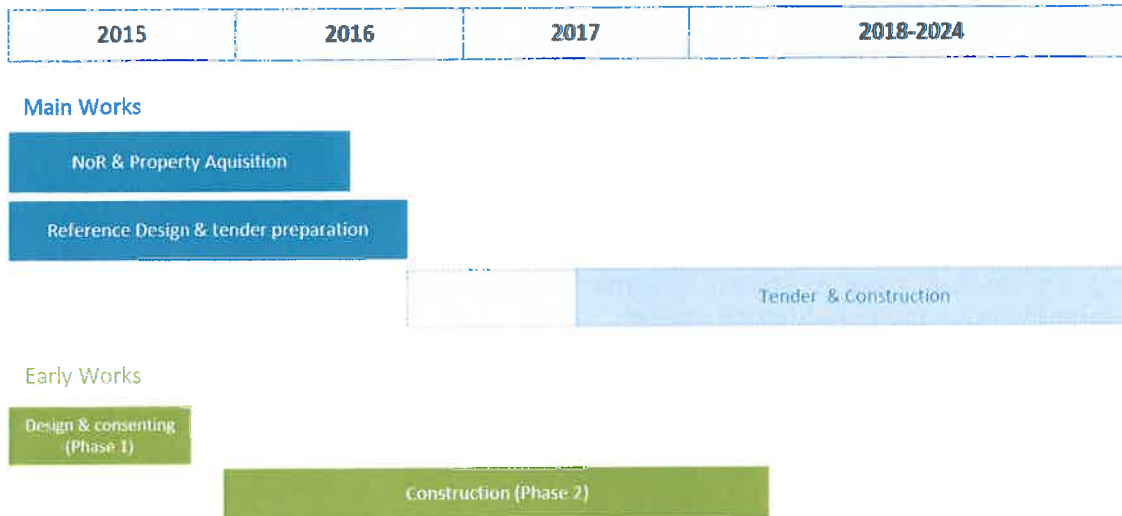
The safety document relationship map is shown below:



1.5 Project Organisation Structure

Reference Document: as per PMS on Fulcrum CRL-PRW-PRC-POL-000486

1.6 Project Programme



2 Health and safety Management

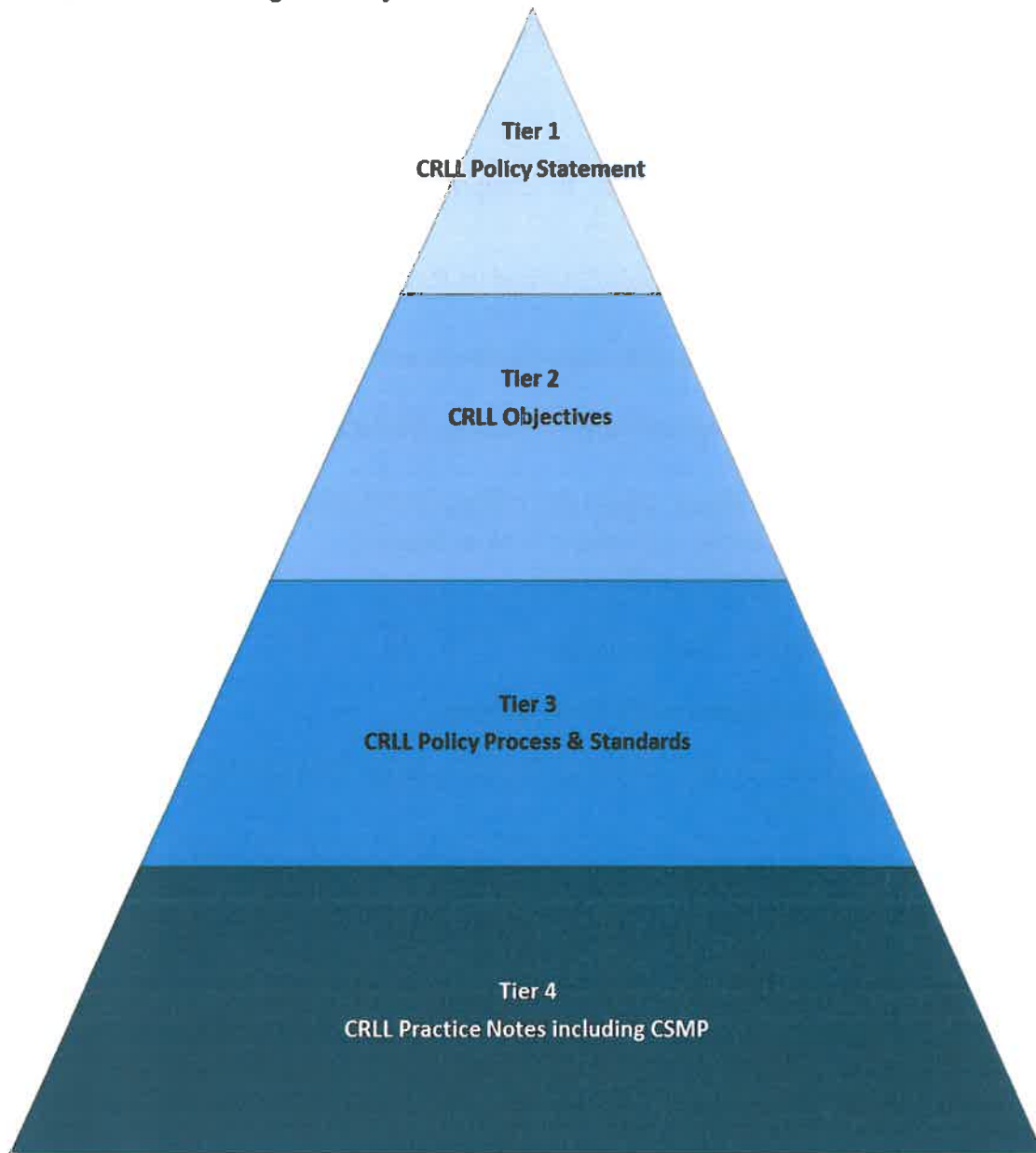
2.1 Health & Safety Policy

NEW POLICY TO BE PROVIDED – WORKING UNDER AUCKLAND TRANSPORT POLICY UNTIL REPLACED

AT Health and safety Policy Statement

2.2 CRLL Health and Safety Management System

The CRLL H&S management system is defined in four tiers:



2.3 Responsibilities and Accountabilities

The duties are set out in this CSMP for the accountabilities & responsibilities to support each role in meeting their legal obligations and supporting the implementation of CRLL's Health and Safety Policy.

Safety Responsibilities, Accountabilities and Authorities are defined for the CRLL project. Such Safety Responsibilities, Accountabilities and Authorities are to be documented in Safety Responsibility Statements and in the individual's position descriptions.

All Employees and contractors shall ensure they comply with CRLL's Health and safety Policy and procedures.

Accountabilities cannot be delegated, Responsibilities can be assigned to individuals and this should be documented in position descriptions, individual performance plans or procedures. Nothing supersedes accountability or responsibility under applicable laws. All accountable and responsible personnel will be required to sign Safety Accountability Statements which will be kept on file.

2.4 Legal and Other Requirements

The City Rail Link Limited project needs to comply with the specific legislation and other requirements including:

- Health and safety at Work Act 2015 and its Regulations
- The Railways Act 2005
- Health and safety at Work (Mining Operations and Quarrying Operations) Regulations 2016
- Hazardous Substances and New Organisms (HSNO) Act 1996
- Building Act 2004
- All applicable Standards, Approved Codes of Practice, Best Practice Guidance for construction and mining operations in New Zealand
- CRL Contract Works Specifications

Reference Link: WorkSafe NZ - The New Law

2.5 Selection and Management of Contractors

The selection and management of contractors is a key aspect to ensuring the health and safety of all workers in construction.

There are a number of differing delivery models being utilised across the CRL work package contracts. These include Traditional, Design & Construct, Early Contractor Involvement and Alliance type contracts. The procurement team is responsible for ensuring the H&S requirements are appropriately captured in the process.

2.6 Minimum CRL Contractor health and safety Requirements

The minimum CRL contractor requirements are located in appendix C of this CSMP.

3 Safety Leadership and Commitment

3.1 Leadership and Commitment

CRL demands and expects a full and unwavering commitment to safety from all PCBUs and their workers who are working on the CRL project. Lack of safety commitment is unacceptable to CRL and all PCBU's and their workers are expected to demonstrate this commitment.

While we commitment to the health and safety of workers through our written Policy true safety commitment is measured by actions. Action is what keeps workers safe, including actions to prevent safety incidents, actions to implement corrective actions and actions to lead others through following safe behaviours.

A "No Blame" policy is not being employed on this project.

The Project will apply a policy of "Just Culture" for safety matters, which is explained below at section 3.3. This means that near miss/hits, unsafe behaviours, breaches, incidents, failures to report and so on will be investigated, justly evaluated and appropriate corrective and preventative actions identified.

With commitment the CRLI health and safety target of Zero Harm is achievable.

CRLI Management in conjunction with Contractors will, as a minimum:

- Promote health, safety and wellbeing awareness within the project.
- Actively promote the project vision, mission and values.
- Encourage all workers to actively participate in health and safety within the project.
- Participate in the review of the health and safety performance.
- Undertake monthly reviews of non-conformance inspections/audit trends including a review of new and current hazards and risks.
- Support and participate in health and safety committees (where appropriate).
- Participate in leadership walk and talk site inspections during construction.

Establish a H&S Project Committee to review incidents with actual or potential significant harm as they arise on the project sites, the associated safety incident investigations, and any other safety issues.

The SRT will be made up from key CRLI managers. It will be chaired by the Project Director and membership will be determined by the Project Director and the Construction Safety Manger.

3.2 Just Culture

For the application of CRLI safety project a "Just Culture" approach consistent with the philosophy laid down by James Reason in "A Road Map to Just Culture – Enhancing the Safety Environment".¹ This approach is adopted to support an open approach to safety improvement and incident management and is a well proven and internationally adopted approach.

The key principles to be applied will include:

1. Root Cause Analysis of incident issues;
2. Learning from unsafe acts;
3. Identifying and classifying unsafe behaviours, and;
4. Determining culpability.

3.3 Environmental Sustainability Leadership

While the CSMP does not determine the environmental or sustainability outcome for CRLI, it is noted here that CRLI aims to set the benchmark for designing, building and operating sustainable infrastructure in New Zealand. The CRLI cares about the environment and intends to limit the impact on the environment and stakeholders wherever possible during construction activities. Sustainability expectations from Contractors are dealt with in the Sustainability Management Plan.

¹ James Reason: A roadmap to Just Culture: Enhancing the Safety Environment: First Edition September 2004. GAIN Working Group, Printed by Airbus.

Construction environmental management is covered in this document at section 6.23.

4 Consultation & Communication

4.1 CROLL Communication and Consultation

CROLL wants to ensure that a culture of health and safety consciousness is created and believes the communication and consultation between management and employees is paramount to achieving this.

All health and safety instructions, critical safety messages or calls to action will be communicated through the issue of Safety Alerts. The Safety Alerts will be disseminated through the Consultative Teams and distributed to contractors via CROLL Project Managers.

CROLL shall maintain structures to ensure that effective health and safety consultation occurs between CROLL and contractor leadership and their workers. H&S is the first of the agenda items in all contractor weekly construction meetings.

4.2 PCBU / Contractor coordination and consultation

The HSWA places obligations on PCBU's within the contracting chain (including CROLL), this obligation is to consult, coordinate and cooperate with all other PCBU's along the contracting chain.

All PCBU's working for, and including CROLL, will consult, co-operate and co-ordinate with other PCBU's, to fulfill their duty of care to workers.

To achieve this a strong focus on controlling the risks associated with the activity each is undertaking is required, Each PCBU must control any risks that are appropriate for them to control. This can be accomplished through planning ahead, considering each stage of the work, and recognising how the work could affect all workers or others (including the public).

The sharing of this information between the PCBU's and the workers affected creates the opportunity to recognise where work party's may conflict or put each other at risk and how this can be controlled.

The nature of that control will reflect how much influence and control each PCBU has, and what is reasonably practicable in the circumstances.

Where PCBU's are working in shared construction sites and interfacing activities they are to consult and agree how to control each identified risk, this can be managed through joint planning and joint safety committees.

Throughout the project all CROLL and its contractors are to continue to communicate, co-operate, and co-ordinate with each other, and carry out reasonable and proportionate monitoring.

4.3 External Communication

All external communication from the CROLL project will be provided through the Project Communications Manager or through the Project Director. No CROLL Staff member or contractors are to discuss health and safety incidents outside of the CROLL without authorisation from the Project Director, unless required by law

4.3 CRL Worker Inductions & Construction Safety Management Plan (CSMP)

All workers based at the CRL project office (either as CRL employees or contractors) will complete a safety induction when invited to attend. This will provide them information specially for being part of the CRL project office, it is not an induction allowing access to construction sites. This will be provided by a health and safety representative or a member of the Safety Team.

In addition to the project office induction, a more detailed induction covering this CSMP may be provided.

Contractors will be supplied a copy of this CSMP and, if requested/required, a CSMP induction will be completed by CRL.

Reference Document: CRL Site Specific Health and safety Induction Checklist (located in Fulcrum)

4.4 Pre-start Meetings/Task Briefing Meetings and Toolbox Meetings

Pre-start/task briefing or toolbox meetings will be conducted by construction contractors supervisory staff to inform all involved of the site activities, hazards, risks & controls and any other relevant information such as safety alerts, incidents etc.

These meetings should be considered as part of any necessary arrangements for the overlapping duties of PCBU's. This process shall be documented within the Contractors HSMP.

CRL workers involved directly with managing or interacting with contractors are encouraged to attend and participate in these meetings.

4.4 Safety Alerts and Lessons Learnt

When an incident occurs Safety Alerts, or Lessons Learnt notifications from investigations, shall be used to communicate across key findings, aspects, or instructions across the CRL project.

These Safety Alerts will be disseminated through the CRL Project Management Team.

4.5 Project Health & Safety Committee

A CRL health and safety Committee will be established that allows CRL employees and contractors an open forum for issues to be raised, accessed and communicated to senior management.

Contractors must include health and safety Committee & health and safety meetings procedure in their HSMP.

The Committee will support the consultative structure with the responsibility to:

- promote an active interest in employees towards health and safety in the workplace,
- adopt a cooperative and collaborative approach to the management of health and safety issues, instructions, training and supervision,
- disseminate incident, inspection and audit results, standards and other health and safety performance data for review,
- make recommendations regarding potential changes to the workplace resulting from reviews; and,
- provide an avenue for the resolution of health and safety issues.

5 Hazard Identification and Risk Management

5.1 Health and Safety Risk and Hazard Management

CRLI recognises that the systematic identification of health and safety risk and hazards, and that the controlling of, and ongoing management of these risks is vital to the health and safety of workers and others. The process for effective management of health and safety risk and hazards is in alignment with HSWA.

CRLI requires that health and safety risk management is undertaken such that all risks are managed (eliminated or minimised) to 'So Far As Is Reasonably Practicable' (SFAIRP) as defined within the HSWA.

Hazard identification involves finding situations and things that could potentially cause harm to workers, plant and equipment, or the environment. They generally arise from one of the following aspects of work and their interaction:

- Physical work environment.
- Equipment, materials and substances used.
- Work tasks and how they are performed, including conflicting priorities of different workers
- Work design and management.

A strong focus must be placed on the known health and safety risks within construction environments most likely to cause a significant event with potential for fatal or serious health or injury risk.

Tasks involving workers being at height, under suspended or support leads, or directly interacting with heavy machinery account for a significant number of serious events with construction environments. CRLI and its contractors will have significant focus on reducing the exposure to these risk throughout its project life and contractors are expected to describe their control processes for these risks within their own HSMP.

General hazards fit into one of the categories below and these can be used to consider all the hazards in the workplace or when designing/planning work.

- **Physical:** vibration, noise, temperature, lighting, radiation, mechanical, electrical.
- **Chemical:** fumes, vapours, gases, explosives, acids, flammable substances, oxidising agents.
- **Biological:** viruses, bacteria, fungi, pollen, insect, contaminated body fluids, contaminated air.
- **Psychosocial:** workload, stress, harassment, discrimination, shift work, inappropriate work assignments.
- **Ergonomic:** poor design of tools, equipment, task, and environment.

The interaction between people, tasks, and the work environment also needs to be kept in mind when considering hazards and their associated risk

The first step in analysing hazards is assessing the risk. The risk assessment will determine what level of risk a hazard has and determine what priority it should take when determining management controls.

Formal Hazard Identification HAZID workshops will be held for each design phase from the Reference design and will involve a systematic process of hazard identification. HAZID shall be undertaken (at the project level) both formally and informally. The formal HAZID workshops shall be conducted in accordance with the Project Safety Assurance Plan.

CRL Hazard Registers will be issued by Rail Systems and Safety Assurance Manager to the CRL Construction Manager who will issue to the Contractor for that specific Contract. The Contractors shall include details of the significant health, safety and environmental hazards and risks for all persons likely to be affected by the construction works in the Health & Safety Management Plan for the construction works. The hazard analysis and risk assessments shall be in accordance with HSWA and its Regulations.

Contractors shall submit Construction Health & Safety Management Plans for review and acceptance by CRL before works can commence on the project site. Other safety documentation such as Construction Execution Plans/Methodologies/Job Safety Environment Analyses are required to be submitted to CRL for review and comment before a 'no objection to proceed' can be issued by a CRL Engineer to contract. The timeframes and responsibilities for contractors & CRL are detailed in Appendix B: Safety Document Delivery Matrix. Failure to provide the documentation by the contractor within the required timeframe could result in delays for the contractor.

6 Safe Work Controls

6.1 Visiting/Working on Project Construction Sites

Any visitor to a project site managed by a Contractor shall complete the Contractors inductions requirements. As a minimum CRL expects that all visitors shall be accompanied and under the control of a fully inducted person at all times.

CRL requires that any worker of any PCBU attending a project site managed by a Contractor for the purposes of working must complete an induction that covers all project site health and safety requirements,

When attending the project construction site all CRL and contractors workers shall comply with the safety requirements provided by the contractor at the Induction. The induction will cover as a minimum all site safety rules, known hazards and controls, facilities, emergency procedures & incident reporting for the site. The only exception for not following an instruction is if a person believes that instruction would put that person or others safety at risk.

Any person unable to comply with any aspects of the health and safety requirements covered in the visitor or worker inductions are not to enter site.

Any CRL worker who will need to undertake any physical works at a contractor construction site shall consult with the CRL Health and Safety Team prior to (physical works) commencing. This does not include visiting the site for the purposes of communication and discussion with contractors.

If any CRL workers are required to conduct works not under the control of a contractor's site then they shall submit a safe work method statement for review and acceptance by CRL Safety Team/Construction Manager.

6.2 Emergency Management

All emergencies such as fire, explosion, earthquake, chemical, environmental spillage and proposals for controlling them shall also be included in the contractors HSMP or a specific Emergency Management Plan. The names and telephone numbers for liaison with CRLI Project staff & Emergency services shall be included in these plans.

Information associated with emergency management and planning will be covered off in all inductions for visitors and workers.

6.3 Working at Height

All work at height shall comply with the Best Practice Guidelines for Working at Height in New Zealand.

Adequate edge protection shall be provided in all situations where there is a risk of a fall from any height. If it is not practicable to install edge protection and, as a result, workers are required to wear and use a harness as the primary means of fall protection then a documented approval process must be provided with the Contractor HSMP. Any worker required to wear a harness will have the appropriate training in its safe use.

Reference Document: Best Practice Guidelines for Working at Height in New Zealand

6.4 Ladders

Ladders and step ladders do not offer any fall protection and therefore should be the last form of work access equipment to be considered. If ladders are to be used then they shall be fit for purpose and used for access only for low risk short duration tasks. Industrial-use ladders are only to be used in compliance with AS/NZS 1892 standard.

Reference Document: Best Practice Guidelines for Working at Height in New Zealand

6.5 Excavations

All excavation works will be conducted in accordance with HSWA and its regulations, any other applicable approved codes of practice.

Reference Document: Excavation Safety

6.6 Mobile Elevated Work Platforms

All Mobile Elevated Work Platforms (MEWP) shall comply with the Best Practice Guidelines for Mobile Elevated Work Platforms. Operators shall hold the relevant NZQA unit standards, be competent and authorised to operate a MEWP.

Reference: Best Practice Guidelines for Mobile Elevating Work Platforms in New Zealand

Reference: New Zealand Elevating Work Platform Association

6.7 Scaffolding

All scaffolding shall be designed and erected in accordance with the Best Practice Guidelines for New Zealand and AS/NZ standards. Scaffolding shall be erected, maintained and dismantled by competent persons who have been trained and have suitable experience with the type of scaffolding being used.

When required to use scaffolding review scaffold tags to ensure the scaffold has been erected and signed off for use within the last 7 days. If you believe for any reason a scaffold is unsafe for use do not use it, pull the scaffold tag and report it immediately to the site supervision.

Reference Document: Scaffolding in New-Zealand

6.8 Confined Space

All confined space works shall be conducted in accordance with AS 2865.

Anyone required to plan, enter or be the standby person for a confined space entry shall hold the relevant NZQA unit standard, be competent and authorised. An authorisation to work/permit to work shall be completed for all confined space entries.

It should be noted that for all underground places of work there is an increase in the risk of leptospirosis disease. Refer also to: 6.15 Personal Hygiene & Health Surveillance

Reference Document: AS 2865 – 2009 Confined Space

6.9 Vehicles and Plant

The use of CRL project vehicles shall comply with the New Zealand road code.

Each Contractor construction HSMP shall have a vehicle management procedure. As a minimum this will ensure vehicle operators shall hold the appropriate licence, be trained, competent and be authorised to use the vehicle or plant.

When on a construction site everyone shall comply with site instructions such as Pedestrian Management Plans, Traffic Management Plans and instructions from the nominated Site Traffic Management Supervisor (STMS).

No entry to exclusion zones or restricted access zones can occur without the correct authorisation.

Reference: WorkSafe NZ - Keeping Safe around moving Plant Factsheet

Reference: New Zealand Road Code

6.10 Personal Protective Equipment

The minimum PPE requirements for CRL construction zones are:

- ankle to wrist cover,
- hard hat
- high visibility vests (COPTTM compliant),
- ankle high lace up safety boots,
- eye protection, and;
- gloves (gloves to be carried by everyone on site and worn when undertaking a manual task).
- Hearing protection to be available and worn as required

The Contractor HSMP will cover this requirements and must provide, maintain and enforce the appropriate use of personal protective equipment (PPE). Any reduction or change to the minimum requirements will need the approval of the CRL Contract Principle in consultation with the CRL Construction Safety Manager

Additional PPE/requirements maybe required depending on the risks associated with activity being undertaken, or the site or area being visiting.

All PPE shall meet or exceed NZ standards.

6.11 Drugs and Alcohol

All CRLL construction sites are drug & alcohol free at all times. Failure to comply may result in disciplinary action for CRLL employees, up to and including termination of employment. Non-CRLL workers will be banned from all CRLL controlled project sites.

All workers and visitors are required to comply with all contractors' safety requirements such as drug and alcohol testing requirements. Persons may be tested for compliance with these requirements at any time.

For CRLL or Contractor controlled construction sites drug and alcohol test screening can be carried out:

- following an incident,
- as part of a random testing program; or,
- as directed with reasonable cause.

As part of visitor arrangements or worker inductions it should be made clear that any persons unable to complying with the drug and alcohol testing requirements shall declared this to their manager immediately, and are not to enter any CRLL site.

Contractors are to comply with the CRLL requirements and confirm their drug & alcohol procedures within their own Contractor HSMP.

6.12 Fatigue

All Contractors will manage fatigue in accordance with WorkSafe NZ Fatigue in Construction factsheet, reference link below. Contractors are to develop a fatigue procedure or policy as part of their Contractor HSMP.

CRLL management also identify and manage any potential fatigue issues with its own workers, and ensure this is managed.

This includes:

- Limit on maximum working hours
- Requirement to take work breaks and vacations

Reference Link: Fatigue in Construction Fact Sheet

6.13 Lone Working

Generally, CRLL staff will be discouraged from working alone on construction sites, this excludes visits or work when contractors are onsite. CRLL workers will ensure a key contact person within the project office is advised when they are attending a constructions site. It is the responsibility of all CRLL staff to inform your manager or safety team if for any reason you feel unsafe visiting a project site.

If required to visit a site alone, when contractors will not be present, than the CRLL worker must have the consent of their manager.

Contractor's construction safety management plan will ensure access controls are in place to avoid lone working to control the situation of lone workers.

6.14 Noise

CRL and contractors shall control noise in accordance with legislation and the Hierarchy of Control:

Eliminate – Is the noise necessary in the first place? Is there an alternative way to achieve the same outcome? For example, through different process, using different machinery or adapting existing machinery (including using different parts)

Isolate – If noise cannot be eliminated, can the machinery be enclosed to reduce the noise? Can it be placed in another area away from people?

Minimise – If not possible to eliminate or isolate the noise, how can it be minimised? For example, can people be moved around the plant to reduce their exposure?

If required to enter an area of site where the noise levels exceed 85db(a) for any period of time or where signs indicate hearing protection shall be worn, ensure the correct classes of hearing protection devices being worn.

Class	$L_{aeq,8h}$ dB(A)
One	Less than 90
Two	90 to less than 95
Three	95 to less than 100
Four	100 to less than 105
Five	105 to less than 110

The table above represents the classes of hearing protection and the maximum noise levels relate dot each class.

CRL and contractors will ensure that staff are trained in the correct use of hearing protection.

6.15 Noise Management Plans

Specific noise management plans are to be created and approved by Auckland Council for noisy day & night shift works.

Reference Link: ACOP for the Management of Noise in the Workplace

Reference Link: Classified Hearing Protectors March 2013

6.16 Utilities

Contractors are to detail in their contractor HSMP how they will manage risks associated with working with utilities. (Electrical, gas, telecommunications etc.)

6.17 Permit to Work

Contractors to detail in their contractor HSMP how they will manage and control a permit to work system for critical risk activities.

6.18 Electrical

As a minimum all electrical works must comply with AS/NZS 3000 & AS/NZS 3012.

6.19 Smoking

All project sites, offices and CRLL construction sites will be no-smoking areas.

A dedicated smoking area within the site boundary may be agreed to if there is no impact on other non-smoking workers and does not impact the public.

Construction contractors in control of sites will establish if it is appropriate for a smoking location to be established and will include this in its site rules and induction processes.

Reference: Smoke Free Environment Act 1990

6.20 Training and Competence

CRLL and contractors shall ensure that all workers have the necessary skills and ability to perform work in a safe and competent manner by assessing the training needs, and ensuring that appropriate training and instruction is provided.

Training needs (and inconsistencies between the skills required and level of skill currently available) shall be determined by way of Training Needs Analysis, and the development of a health and safety Training Matrix, this will be documented as part of a contractor HSMP.

6.21 Personal Hygiene & Health Surveillance

To avoid the spread of illness and disease a good standard of personal hygiene is required. All kitchen, toilets, eating areas & rooms areas are to be kept clean and tidy at all times. Dispose of food scraps in the bins provided, do not throw food scraps on the ground as this encourages vermin and insects into the workplace.

Health surveillance for workers will be identified during the initial hazard identification & risk management workshops (section 5). Any required health surveillance to be detailed in the hazard register. Contractors must ensure that the required health monitoring for any health risks identified is completed for their workers.

It should be noted that for all underground places of work there is an increase in the risk of leptospirosis disease.

To prevent contracting this disease always ensure that you wash your hands before eating or smoking and follow any specific hygiene requirements when visiting or working on site.

Keep any cuts or abrasions covered to prevent infections.

An item of particular note that has been brought to the attention of the CRLL team is the presence of *Leptospira* bacteria within the existing ground material around the Britomart Station. This bacterium causes Leptospirosis. The previous work undertaken to construct Britomart Station required comprehensive sterilisation processes to clean anything that had come into contact with this material.

6.22 Britomart Transport Centre (BTC)

If required to work or conduct inspections at BTC everyone will report & sign in with the Main Control Room (MCR). Any works adjacent to BTC must be discussed and agreed to prior to works commencing to ensure works do not affect the operations of the station. All workers new to BTC will have a contractor's induction by the BTC Manager on duty. A Site Specific Safety Plan/Safe Work Method Statement/Job Safety Environment Analysis shall be submitted and a no objection to proceed issued by CRLI before physical works commence on site.

This will include any applicable permits to complete the works.

Reference Link: KiwiRail - Accessing the Rail Corridor

6.23 Working in or Adjacent to the Rail Corridor

All works within or adjacent to the rail corridor will comply with KiwiRail & CRLI requirements.

This includes any applicable permits to work on Rail Facilities, KiwiRail Permit to Enter, and KiwiRail EF201 Permit to Work near Railway Power Lines plus any training requirements.

To assist contractors CRLI has compiled KiwiRail requirements and processes for when tendering and developing methodologies for working within or adjacent to rail corridor. Refer to the CSMP Part B, Kiwi Rail Parameters for this information.

A Construction Safety Rail Interface Committee may be required to be set up to oversee large rail projects such as C5. This will involve CRLI, KiwiRail, Transdev management representatives & relevant contractors.

Purpose of the committee should be: To provide guidance on rail safety interface.

Scope of the committee should be: a) Interface with existing infrastructure b) interface with current rail operations, both passenger and freight.

Below is the minimum training requirements to work on KiwiRail:

1. A new worker, intending to work within KRG's network, needs to undertake the following mandatory KRG courses:
 - a. KiwiRail HSE Induction – note this is usually part of other courses below.
 - b. Track Protection Basic (TPB)
2. A worker, intending to work within KRG's electrified networks, needs to undertake the following mandatory KRG course:
 - a. Electrical Awareness Basic (EAB)
 - i. Applies to those working on station platforms, or on trains at station platforms.
 - b. Electrical Awareness Intermediate (EAI)
 - i. Applies to all other work on or under the electrified sections of the network.
 - ii. Applies to those supervising work on or under the electrified sections of the network and/or applying for or in receipt of Electrical Permits to Work

3. A worker, intending to work in a rail tunnel, needs to undertake the following mandatory KRG course:
 - a. Tunnel Operations Basic (TOB)
4. The above are the bare minimum when working on the rails in Auckland and does not necessarily need to be in that order.

Reference Link: KiwiRail - Accessing the Rail Corridor

6.24 Mining and Tunneling Operations

All tunneling works deemed to be mining operations, shall comply with the Health & Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016.

Contractors are to supply safety documentation in accordance with appendix B of this plan.

Reference Link: WorkSafe NZ Notification of Mining Operation including Reporting Form

Reference Link: ACOP - Fire or Explosion in Underground Mines and Tunnels

Reference Link: health and safety at Work (mining Operations and Quarrying Operations) Regulations 2016

6.25 Environmental

When nominate control of a construction site, Contractors are required to prepare and submit an Environmental Management Plan (EMP). Any such EMP, which covers more than one PCBU, must detail the responsibilities of each PCBU.

The EMP shall define the approach to address all environmental issues. It shall be reviewed regularly or as required by the CRLL Project Director and updated as necessary during the execution of the work.

Reference Link: New Zealand Environmental Protection Agency

Reference Link: Hazardous Substances and New organisms Act 1996

6.26 Hazardous Substances

Hazardous substances in the workplace must be managed in accordance with the Health and safety at Work Act 2015 and the Hazardous Substances and New Organisms Act 1996, and any new legislation introduced that deals with hazardous substances.

Chemicals, compressed gasses, glues, lubricants and fuels are just some of the potentially hazardous materials which may exist in the workplace. Materials can have a number of different or combined characteristics- which may make them hazardous. Some materials may be corrosive, toxic, flammable or explosive. Other materials may not react unless they are exposed to air or water, or mixed with an additional substance.

Reference Link: Hazardous Substances and New organisms Act 1996

Reference Link: WorkSafe NZ - Hazardous Substances in Construction

6.27 Chemical Management

All chemicals are to be transported, handled, used and stored in accordance with the Safety Data Sheet information for that chemical. Workers required to use any chemicals will be informed/trained in the safe use of any chemicals before first use.

Contractors shall have procedures and controls to manage Hazardous Substances on project sites.

Reference Link: Hazardous Substances and New organisms Act 1996

Reference Link: WorkSafe NZ - Hazardous Substances in Construction

Reference Link: Best Practice Guidelines for Demolition in New Zealand

6.28 Traffic Management

All temporary traffic management shall be in accordance with the Code of Practice for Temporary Traffic Management. Temporary traffic management plans, Vehicle Management Plans and Pedestrian Management Plans shall be available on the project site at all times.

Reference Link: NZTA - Code of Practice for Temporary Traffic Management

6.29 Asbestos

Asbestos shall be managed in accordance with the Health and Safety at Work (Asbestos) Regulations 2016. An asbestos survey shall be completed by CRLI or the contractor and an asbestos register created. Asbestos management plan to be created before works commence.

If anyone finds or suspects that they may have found asbestos in the workplace than work is to stop and report to the works Manager or Supervisor. Sample and testing of suspected asbestos to be carried out in accordance with the Health and Safety at Work (Asbestos) Regulations 2016.

Reference Link: WorkSafe NZ - HSWA Asbestos Regulation

Reference Link: WorkSafe NZ - Asbestos Factsheets

6.30 Demolition

All demolition/deconstruction works shall comply with the Best Practice Guidelines for Demolition in New Zealand. A demolition plan (method statement/step by step plan) shall be developed for the demolition of a building or structure. The demolition plan shall be submitted to CRLI by the contractor for review prior to demolition/deconstruction works being undertaken.

Reference Link: Best Practice Guidelines for Demolition in New Zealand

6.31 Waste Management

A waste management plan for construction waste and recycling demolition waste shall be developed by contractors. The project is supporting Auckland Council's adoption of an aspirational goal of Zero Waste with CRLI striving for the achievement of zero waste to landfill through construction. The contractors Waste Management Plan should share this goal. If undertaken correctly, between 90 to 95% of a building can be recycled. A waste management plan should:

- Identify the types and quantities of wastes to be generated from the job and when within the programme they will arise;

- Include strategies for implementing the waste management hierarchy: avoid – reduce – reuse – recycle – recover – treat – dispose;
- Identify how each waste will be managed and marketed;
- Provide an overall estimate of the total recyclability of the job and;
- Include tracking and reporting to confirm recycling types, quantities and ultimate end uses.

Reference Link: Best Practice Guidelines for Demolition in New Zealand

Reference Link: Reducing Building Materials Waste, REBRI, BRANZ

Reference Link: Waste Minimisation Act, MfE

6.32 Management of Temporary Works

Temporary works is an engineered solution used to support or protect an existing structure or the permanent works during construction/deconstruction, support an item of plant or equipment, support an excavation or provide access.

All temporary works shall be in accordance with all applicable legislation & standards and to be detailed in the relevant Contractors plans.

No one is to tamper with/alter temporary works unless trained, competent and authorised to do so. Failure to comply will result in disciplinary action including removal from the CRLL project.

6.33 Cranes including other types of plant used as cranes

All crane activities are to be conducted in accordance with the ACOP for cranes NZ and all applicable AS & NZS standards.

Reference: New Zealand ACOP for Cranes

6.34 Construction Site Security

Contractors are to include in their plans the security measures that will be implemented to prevent unauthorised access to the construction sites. This will include when the sites are active or inactive.

7 Incident Management, Reporting and Investigation

7.1 Duty to Notify WorkSafe NZ

Under HSWA there is a duty to notify WorkSafe NZ when certain work-related events these are classified as notifiable events.

If a notifiable events occurs there is a required to notify WorkSafe NZ as soon as possible. In the situation of a notifiable event the site requires preservation until a WorkSafe Inspector arrives, or you are otherwise directed. Keep records of all notifiable events.

A notifiable event is a death, notifiable illness or injury, or notifiable incident occurring as a result of work. When unsure if the incident would be deemed notifiable, ensure guidance is sort from the CRLL Construction Safety Manager, or seek guidance from WorkSafe themselves

Reference Link: WorkSafe Notifications-forms/notifiable-events

7.2 First Aid, Medical Treatment and Injury Management

First aid or medical treatment shall be provided as soon as possible to ensure the best recovery from an injury or illness. CROLL offices and CROLL project sites will have nominated First Aiders and first aid kits. First Aiders and the location of first aid kits/stations will be identified in the project and office inductions and by signage/posters displayed around the office and sites.

If a worker has sustained an injury then a first aider shall treat the injured person immediately. If medical treatment is required then the injured person is to be taken to the nearest medical facility for treatment accompanied at all times by a member of CROLL/contractor staff.

If the injury is serious and the injured person cannot be moved then the first aider is to remain with the injured patient until the emergency services arrive. Injured person to be accompanied at all times by a member of CROLL or contractor's staff.

All injuries, including minor injuries, must be reported to your manager. All incidents are to be reported in accordance with 7.2 Incident reporting

7.3 Incident Reporting

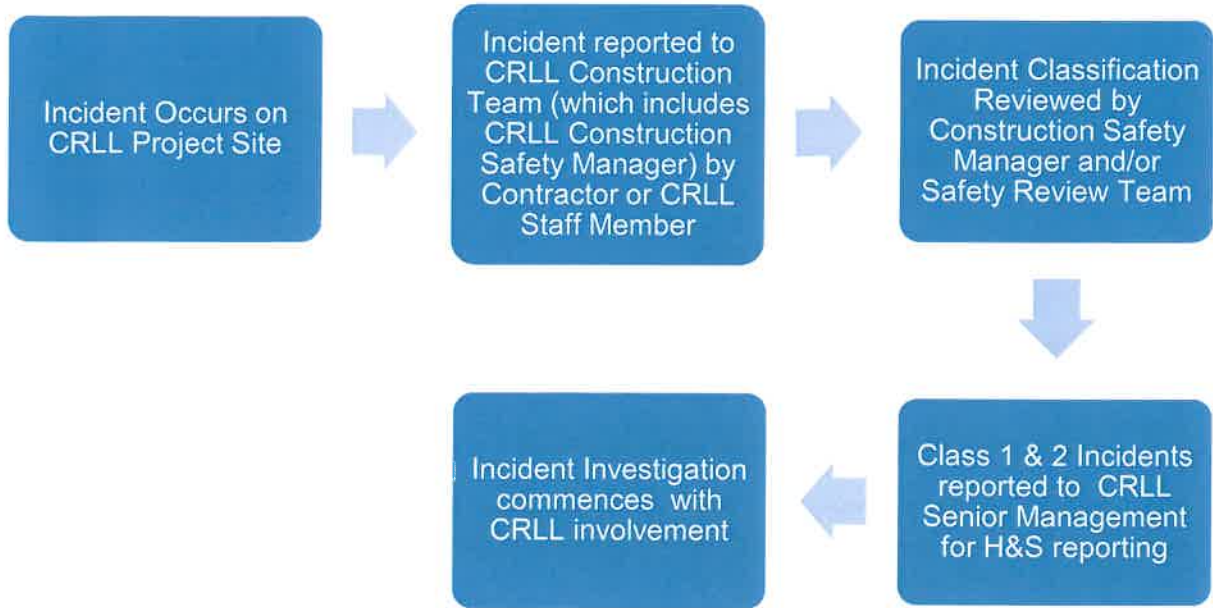
Incident notification shall be made to CROLL construction team / construction safety manager by phone or in person and followed up by email notification in accordance with the table below.

Incident reporting also includes construction plant and infrastructure damage even if it appears not to have a safety risk associated with it. The following tables set out the minimum reporting and investigation timeframe requirements by contractors and CROLL.

Severity Level	Incident Classification	Notification Requirement to CROLL Construction Management	Incident Report Form to CROLL Construction Management	Investigation Team	Investigation Report to be supplied to CROLL SLT
Class 1 (or potential class 1)	Fatality/Death	Immediately upon identification	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
	Notifiable Event (including environmental)	Immediately upon identification	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
	Serious Near Hit and/or Unsafe Event	Immediately upon identification but within 1 hour	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
Class 2	Lost Time Injury	As soon as practicable but within 1 hours	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days

(or potential class 2)	Medical Treatment/ Assessment	As soon as practicable and prior to attendance at medical practitioner, where practicable (within 2 hours)	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
	Near Hit or Unsafe Event				
Class 3 (or potential class 3)	1st Aid Injury	Within 12 hours	Within 24 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
	Pain and Discomfort				
	Near Hit or Unsafe Event				
All Construction Plant, Equipment & Utility Infrastructure Damage	Serious Plant, Equipment & Utility Infrastructure Damage	Immediately upon identification but within 1 hour	As soon as practicable but within 2 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days
	Plant, Equipment & Utility Infrastructure Damage	As soon as practicable but within 2 hours	As soon as practicable but within 4 hours	CROLL & Supplier Management to allocate resources as appropriate	Within 10 Working days

7.4 CRL Incident Escalation Process



CRL Incident Escalation Process contacts

CRL Management	
Position	
	Project Director
	Rail Systems & Safety Assurance Manager
	CRL H&S Construction Safety Manager
CRL Construction Team	
Position	

Construction Team Leaders / Managers
Project Construction Safety Manager
Project Construction Safety Advisors
Engineers Representatives
Assistant Engineers Representatives
Others to be added as positions are created.

7.5 Incident and Investigation Management

All incidents will be reported to CRL in accordance with sections 7.2 & 7.3. Environmental reporting will be in accordance with the Contractors Construction Environmental management Plan that has been approved by CRL.

Serious or notifiable events (including environmental) and their details shall be promptly reported to the CRL Construction Safety Manager.

All Class 1 and 2 health and safety incidents shall be investigated using an appropriate incident causation model approved by CRL. If the incident involved a Contract worker on a site under control of a contractor the Contractor may have to undertake its own investigation. However CRL will obtain the appropriate legal advice before determining how this a Class 1 and 2 investigation will be completed and CRL may also determine to complete its own investigation

The person assigned to completing the investigation will have the necessary experience and training in the investigation of significant safety incidents and CRL management shall agree to their appointment.

8 Document Control Arrangements and Information Management

8.1 Fulcrum Electronic Document Management System

CRL uses an Auckland Transport bespoke Electronic Document Management System (EDMS) for all Document, Project and Construction Management. Auckland Transport's EDMS, Fulcrum, is a SharePoint-based platform combining internal document control processes with external publishing capabilities. This platform ensures all documents are singularly controlled for one source of truth.

The CRL Fulcrum site is the hub of all communication. Each CRL contractor will have their own Fulcrum satellite site linking into the hub. The CRL contractor will be able to manage their documentation, create workflows and transmit documentation to CRL.

The document management of the CRL Contractor satellite sites will be managed by said contractor. CRL will provide all staff with user guides and training on how to use Fulcrum.

9 Measurement and Evaluation

9.1 Monitoring the health and safety performance of the Contractor

CRLI shall undertake periodic audits & inspections of the contractor health and safety performance throughout the duration of the CRLI works. (Refer to Audit and Inspections section).

Contractors shall complete and submit the CRLI Health and safety monthly reporting form by the 5th of each month.

The minimum reporting requirements will include:

Numbers and hours worked by project staff, contractors & workers, recent incidents & incident investigation updates, lead & lag indicators, safety training completed and upcoming, safety priorities for the upcoming month, project inductions, D&A results, toolbox talks completed including subjects discussed, number of safety inspections & audits completed.

9.2 Monitoring CRLI health and safety Performance

The health and safety management performance of the CRLI project shall be measured using Key Performance Indicators (KPI). Targets will be specific, measurable, attainable, relevant & time bound (SMART)

Achievements against objectives and targets shall be reported and monitored on a monthly basis.

KPI objectives and targets below:

KPI Lead Indicators	Objective	Target
Audit compliance	Contractors maintain a minimum level of compliance	85% compliance in all safety and health audits.
Non-conformances	All serious/high risk non conformances are remedied or responded to at the time of the audit to the satisfaction of CRLI. Other non-conformances recorded are remedied to the satisfaction of within 2 weeks of audit completion.	100% compliance
CRLI Management to have visible leadership on construction sites	CRLI Management to complete a site leadership walk on a monthly basis	95% Compliance
KPI Lag Indicators	Objective	Target

Incident investigations	All incident investigations to be completed within 1 month	95%
Fatalities	No fatalities to occur	0
Lost Time Injuries	Control the number of LTIS to target	Target = 0 Acceptable <1.0 per 1E6 hours
Total Recordable Injury Frequency Rate	Control the number of TRIs to target	Target = 0 Acceptable <10 per 1E6 hours

9.3 Review Records

Health and safety incident / issues records will be reviewed periodically by CRL Management. These reviews will be completed at the project level normally monthly.

10 Health and Safety, Audit & Inspections

10.1 WorkSafe NZ Audits & Inspections

HSWA allows WorkSafe NZ to undertake audits and safety inspections on any Construction project.

Therefore WorkSafe NZ has the right to Audit & inspect the CRL project at any time.

10.2 CRL Safety Audit & Inspection Arrangements

The Contractor will allow the CRL project management to conduct a site inspection at any time. During this time the Contractor will provide unrestricted access to any documentation or personnel.

Contractors will complete safety inspections of their sites to ensure safety compliance / standards are maintained.

To ensure construction activities are being conducted as stated in the contractor's management plans and applicable legislation a schedule of Safety and Health audits will be conducted throughout the duration of the project.

These safety audits will be managed by the CRL Health and Safety Team.

If a serious incident or a major non-conformance is identified then CRL project management may decide to undertake a full audit with only 48hrs notice provided to the contractor.

10.3 CRLI Project Safety Management Auditors

CRLI will implement safety audits using internal or CRLI appointed personnel. Prior to audit implementation, Auditors will be assessed for competency against the following requirements:

- 1) Audit training and qualification;
- 2) Previous audit experience;
- 3) Construction safety experience/knowledge;
- 4) Knowledge of the CRLI project and associated management plans; and
- 5) Confirmation of no conflict of interest.

10.4 Audit Finding Classification

Audit findings and evidence shall be recorded on audit checklists or equivalent. Audit findings are to be categorised as:

- Major Non Conformance (MC) – High risk and likelihood of an error occurring that may contribute to non-achievement of a control objective. Immediate management action needs to be taken to address the control deficiencies noted.
- Minor Non Conformance (NC) – Moderate risk and likelihood of an error occurring that may contribute to non-achievement of a control objective. Management action is required to ensure a sound control environment.
- Recommendation (RC) – Improvement in control that strengthens the compliance process and represents a best practice or efficiency gain.
- Good Practice (GP) – activities carried out that represent good practices.

10.5 Corrective Action/Improvements

Corrective actions/improvements shall be agreed with the auditee and recorded in a format that clearly details the findings, actions, responsibilities and timescales for improvement implementation.

Appendix A

The following acronyms and abbreviations are found in the Construction Safety Management Plan

Acronym	Meaning
ACOP	Approved Code of Practice
AT	Auckland Transport
CRL	City Rail Link Limited
BTC	Britomart Transport Centre
COPTTM	Code Of Practice Temporary Traffic Management
Contractor HSMP	Construction Safety Management Plan
DB(A)	DB(A) means A-weighted decibel
EAB	Electrical Awareness Basic
EAI	Electrical Awareness Intermediate
EAP	Employee Assistance Program
EDMS	Electronic Document Management System
EMP	Emergency Management Plan
HAZ	Hazard
HAZID	Hazard Identification
HHU	(WorkSafe) High Hazard Unit
H&S	Health and safety

Acronym	Meaning
HSMP	Health & Safety Management Plan
HSWA	Health & Safety at Work Act 2015
ID	Identification
KRG	KiwiRail Group
KPI	Key Performance Indicator
MCR	Main Control Room
MEWP	Mobile Elevated Work Platform
NZ	New Zealand
NZTA	New Zealand Transport Authority
PCP	Principle Control Plan
PHMP	Principle Hazard Management Plan
PMS	Project Management System
PPE	Personal Protective Equipment
PSAP	Project Safety Assurance Plan
SFAIRP	So Far As Is Reasonably Practicable
SMART	Specific, Measureable, Attainable, Relevant, Time bound
SRT	Safety Review Team

Acronym	Meaning
TBM	Tunnel Boring Machine
TOB	Tunnel Operations Basic
TPB	Track Protection Basic

Appendix B: Safety Document Delivery Matrix

Safety Document Delivery Matrix	Contractors				City Rail Link Limited			Timeline
	Contractors	Responsible for delivery	Submitted	Response Time	CRL Acceptance	Responsible for Response	Timeline	
Health and Safety Management Plan	Create plan submit to CRL for approval	H&S Manager	To CRL Engineer rep 10 days prior to start	5 working days after receipt	Formal Acceptance	Engineers rep	Before start date	
Construction Execution Plan	Create plan submit to CRL for approval	Responsible Engineer	To CRL Engineer rep 10 days prior to start	5 working days after receipt	Formal Acceptance	Engineers rep	Before start date	
PHMP	Create plan submit to HHU for approval	Site Senior Executive	submit to CRL before HHU	5 working days after receipt	No Objection	Engineers rep	2 Months Before start date	
PCP	Create plan submit to HHU for approval	Site Senior Executive	submit to CRL before HHU	5 working days after receipt	No Objection	Engineers rep	2 Months Before start date	
Risk Workshops (minimum attendance PE, H&S Rep, Construction Reps, Enviro, invite CRL rep)	Arrange workshops	Responsible Engineer	N/A	As requested	N/A	Engineers rep	Invites 3 working days prior	
Update HSE Risk Register	Keep register up to date	Responsible Engineer to update and inform H&S and Enviro Manager	Joint review every 6 months or after a significant incident	As requested	Joint review every 6 months or after a significant incident	Construction H&S Manager	5 working days	
Create Specific Work Method Statements	Allocate responsible Engineer	Responsible Engineer	To CRL Engineer rep 10 days prior to starting activity	5 working days after receipt	No Objection	Engineers rep	Before start date	
Inspection and Test Plans	Allocate responsible Engineer	Responsible Engineer	To CRL Engineer rep 10 days prior to starting activity	5 working days after receipt	No Objection	Engineers rep	Before start date	
Job Safety and Environmental Analysis	Allocate responsible Engineer	Responsible Engineer	To CRL Engineer rep 10 days prior to starting activity	5 working days after receipt	No Objection	Engineers rep / Construction H&S Manager	Before start date	
Management of Significant change	Stand down review	Responsible Engineer / Supervisor	Reviewed by H&S Manager or delegate	ASAP	No Objection	Reviewed by Construction H&S Manager or delegate	N/A	
Construction delivery pack	Monitoring	Responsible Engineer / Supervisor	prior to start	N/A	Monitoring	N/A	N/A	
Construction execution	Engineer support, Construction Supervision & Monitoring	Superintendent / Supervisor & Engineers	N/A	N/A	Monitoring Sign off Hold Points	N/A Engineers Rep or Delegate	N/A	

Note: Monitoring of onsite activities will be undertaken by Contractors and CRL safety & project management staff to ensure safety compliance.

Appendix C

1. CRL Health & Safety Management Requirements

1.1 CONSTRUCTION HEALTH AND SAFETY

The Construction Safety Management Plan defines the minimum standards acceptable for CRL. As part of a committed safety culture every organisation and person working on the project is expected to strive to exceed minimum safety standards at all times. From a project perspective there is no excuse for breaching safety protocol at any time.

Zero Harm is the target for the project, and although extremely difficult to achieve, this target will remain in place for the life of the project. Accurate safety reporting, not only of incidents, but also of near miss's/hits and unsafe practice is absolutely essential to the achievement of a safety realisation as close to our target as possible. Again, there is no excuse for not reporting safety matters accurately.

CRL intends to follow a process of continuous improvement for safety management throughout the project lifecycle. As such the Contractor Health and Safety Management Plan (HSMP) will be regularly updated to reflect the specific focus of the particular phases of the project.

Safety is everyone's responsibility - no excuses.

1.1.1 General

- a) Health & Safety Legal & other requirements that the Contractor must comply with
 - i) Health and safety at Work Act 2015 & Regulations
 - ii) The Railways Act 2005
 - iii) Health and safety in Employment (Mining Operations and Quarrying Operations) Regulations 2016
 - iv) Hazardous Substances and New Organisms (HSNO) Act 1996
 - v) Building Act 2004
 - vi) All applicable Standards, Approved Codes of Practice, Best Practice Guidance for construction and mining operations in New Zealand
 - vii) CRL Contract Works Specifications
- b) Other contractor health and safety responsibilities
 - i) The Contractor must comply with all health and safety requirements of the City Rail Link Limited Project (CRL), and any relevant asset owner. Meeting these requirements will not relieve the Contractor of any of its accountabilities & responsibilities to comply with Health and safety relevant legislation and specific Kiwi Rail requirements for working within the rail corridor.

1.1.2 Contractor Health & Safety management

- a) The Contractors shall include details of the significant health, safety and environmental hazards and risks for all persons likely to be affected by the construction works in their Health & Safety Management Plan for the construction works. The hazard analysis and risk assessments shall be in accordance with New Zealand legislation and applicable standards.
- b) Contractors shall submit Construction Health & Safety Management Plans for review and acceptance by CRL before works can commence on the project site. Other safety documentation such as Construction Execution Plans/Methodologies/Job Safety Environment Analyses are required to be submitted to CRL for review and comment before a no objection to proceed can be issued by a CRL Engineer to the Contractor.
- c) The timeframes and responsibilities for Contractors & CRL are detailed in Contractor HSMP Appendix B: Safety Document Delivery Matrix. Failure to provide the documentation by the contractor within the required timeframe could result in delays for the contractor.
- d) The Contractor's Senior Management contract team must complete the IOSH Managing Safety course within six months of the commencement of the contract.
- e) All contractor employees and sub-contractors are to complete the ConstructSafe competency assessment. Contractors to implement a procedure around managing workers who are not yet deemed competent.

1.1.3 Contractor monthly health and safety reporting

Contractor shall complete health and safety reporting to CRL by 5th each calendar month. Template for contractor reporting to be provided.

The minimum reporting requirements will include:

Numbers and hours worked by project staff, contractors & workers, recent incidents & incident investigation updates, lead & lag indicators, safety training completed and upcoming, safety priorities for the upcoming month, project inductions, D&A results, toolbox talks completed including subjects discussed, number of safety inspections & audits completed.

1.1.4 CRL Personal Protective Equipment

The Contractor must provide, maintain and enforce the appropriate use of personal protective equipment (PPE). PPE to meet or exceed NZ standards. Minimum PPE requirements for CRL are hard hat, eye protection, ankle to wrist cover, high visibility vests (COPTTM compliant), gloves to be carried by everyone on site and worn when undertaking a manual task. If any PPE is deemed as not applicable to a section of works then after consultation with CRL, an exception will be approved by the CRL Health and Safety Team.

1.1.5 Contractor Health & Safety Manager

The Contractor must nominate and provide the CV of a qualified and experienced health and safety professional with a minimum of five years' experience in the applicable construction / tunnelling industry as the Health & Safety Manager for the project.

1.1.6 Hazard identification and risk management

- a) CRL recognises that the systematic identification of hazards and the management of related risks arising from our operations and contractors' operations is vital to the health and safety of our personnel, contractors and the public. The process for effective management of hazards, associated risks identification & management is in accordance with current legislation.

- b) CRLI requires that risk management is undertaken such that all risks are justified So Far As Is Reasonably Practicable (SFAIRP).
- c) Contractor to submit a construction risk register along with their HSMP.

1.1.7 health and safety Audits & Inspections

- a) The Contractor will allow the CRLI project management to conduct a site inspection at any time. During this time the Contractor will provide unrestricted access to any documentation or personnel.
- b) Contractors will complete safety inspections of their sites to ensure safety standards are maintained.
- c) If a serious incident or a major non-conformance is identified, then the CRLI project management may decide to undertake a full audit with only 48hrs notice provided to the contractor.
- d) To ensure construction activities are being conducted as stated in the contractor's management plans and applicable legislation a schedule of contractor safety and health audits will be conducted throughout the duration of the project.
- e) Contractors are to detail their internal audit arrangements in their HSMP's.

1.1.8 Incident management, reporting and investigation

- a) Incident notification shall be made to CRLI management team as soon as practicable to do so. Incident reporting also includes construction plant and infrastructure damage even if it appears not to have a safety risk associated with it. The minimum reporting and investigation timeframe requirements by contractors and CRLI staff is included in the Contractor HSMP.
- b) Serious incidents or notifiable events (including environmental) and their details shall be promptly reported to the CRLI Construction Safety Manager / CRLI Engineers Rep.
- c) All Health and safety incidents shall be investigated using an appropriate incident causation model approved by CRLI. The model shall include a process for identifying all the essential factors or root causes of the incident.
- d) Incident investigators involved in investigating serious and/or notifiable events must be trained in investigation skills and techniques to ensure that a competent investigation is carried out and robust and effective recommendations made. CRLI to be invited by contractors to participate in all significant incident investigations. Participation to be at CRLI discretion.
- e) All emergencies such as fire, explosion, earthquake, chemical, environmental spillage and proposals for controlling them shall be included in the contractors Health & Safety Management Plan and/or a specific Emergency Management Plan. The names and telephone numbers for liaison with CRLI Project staff & Emergency services shall be included in these plans.

1.1.9 Contractor / PCBU coordination with interfacing contracts

- a) CRLI Contractors (PCBU's) must consult, co-operate and co-ordinate with other contractors, including their arrangements to control risks.
- b) CRLI contractors must control any overlap and risks that are appropriate for them to control. CRLI contractors must plan ahead, by thinking through every stage of the work, and recognising how the work could affect each other and the public. The nature of that

control will reflect how much influence and control each contractor has, and what is reasonably practicable in the circumstances.

- c) Where contractors have use of shared construction sites and interfacing activities they are to consult to agree how to control each identified risk, this can be managed through joint planning and joint safety committees.
- d) Throughout the project all CROLL contractors are to continue to communicate, co-operate, and co-ordinate with each other, and carry out reasonable and proportionate monitoring.

1.2 CONTRACTOR HEALTH & SAFETY MANAGEMENT PLAN

1.2.1 The HSMP must include but not be limited to the following:

- a) Health and safety Policy
- b) Scope and specific objectives
- c) Legal and other requirements
- d) Project Organisation Structure
- e) Contract specific roles, accountabilities and responsibilities
- f) Communication and Consultation including coordination with interfacing contracts
- g) health and safety Notifications and Registrations
- h) Project Hazard Identification and Risk Management (attach a project risk register and proposed control measures)
- i) Proposed method statement including risk assessment format to demonstrate a safe system of work. (Contractor HSMP document delivery matrix to be incorporated)
- j) Safe Work Controls
- k) Provisions & planning for emergency response & management
- l) Proposed training and competency requirements
- m) Project induction procedures
- n) Drug and alcohol testing procedures
- o) Selection and management of contractors
- p) Incident notification and reporting, recording, investigation, analysis and lessons learnt
- q) Safety Audits and Inspections
- r) health and safety Committee & health and safety meetings
- s) Traffic Management, Pedestrian Management & Site Vehicle Management
- t) Site Security
- u) Safety in the design

v) Temporary Works