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Works WHS Risk Assessment

Guidance in the facilitation of the Works WHS Risk Assessment

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Introduction

The Works WHS Risk Assessment is a mandatory requirement of Specification 203 to form the Project WHS Risk Register and the Emergency Management Plan, which uses a qualitative risk based methodology in alignment with the Transport Portfolio's Risk Reference Tables. This Guide assists in the planning, development and facilitation of the risk assessment which is subject to suitability audit assessment. This presentation is broken down into three sections:

Part A - Planning and Preparation - Provides context to planning for the Works WHS Risk Assessment.

Part B -Completion of the Works WHS Risk Assessment - Provides instruction in the completion of the Works WHS Risk Assessment prior to the facilitated workshop.

Part C - Facilitation and Submission of the Works WHS Risk Assessment – Provides information and guidance to the Contractor on the requirements for the facilitation of the Works WHS Risk Assessment.

This guide walks the facilitator and participants through the qualitative risk assessment process and combines the assessment of safe design (phases of construction), emergency response and first aid/medical treatment mitigative controls based on the scenario impact(s) to achieve further consolidation. This eliminates the need for a stand alone emergency management and first aid risk assessment for the development of the Emergency Management Plan.

Part A: Planning for the Works WHS Risk Assessment Workshop

Scope of the Works WHS Risk Assessment

The Contractor, in consultation with the Principal (Main Roads), must determine and document the scope of the risk assessment. This may include, but is not be limited to:

- The scope and boundaries of the assessment (what's in / what's out);
- The phases of construction for delivery of works under the Contract;
- Identification of key stakeholders and participants and their associated roles and responsibilities;
- Identification and review of relevant information required; and
- Any legal and other requirements which needs to be considered.

The facilitation of the Works WHS Risk Assessment must also give specific consideration to:

- The strategic context of the Principal with consideration to the operational, political, cultural and stakeholder impacts (internal and external);
- The goals and objectives of the Principal and the Contractor in the delivery of works under the Contract;
- The risk assessment team's capabilities (i.e. skills, knowledge, experience and resources)

Review of Relevant Information in Association with the Works

Prior to and during the risk assessment facilitated by the Contractor, relevant information in relation to the scope of work and the risks associated with the construction plan must be available to the workshop attendees for reference. This may include, but may not be limited to:

- The Safe Design Report (to be included in the Works WHS Risk Assessment);
- The Construction Plan for delivery of the work;
- Existing project risk registers or previous risk assessments conducted for similar Works;
- Existing procedures, SWMS, JSAs, Safe Work Instructions or similar;
- Incident and hazard reports and their associated actions;
- Previous compliance audit findings, monitoring results (occupational hygiene), inspections and associated actions;
- Feedback from Main Roads and subcontractors on previous projects and Regulatory authorities (e.g. WorkSafe WA)
- New or modified activities, processes, products and services;
- Lessons learned from other projects and project close out reports; and
- Shared learnings from Main Roads and other Regulatory bodies (e.g. banner alert notification)

Part B: Populating the Works WHS Risk Assessment Template

Pre-population of the Works WHS Risk Assessment

Main Roads allows the Contractor to pre-populate the Works WHS Risk Assessment prior to the facilitation/review of the Works WHS Risk Assessment which forms the Project Risk Register as per specification requirements.

Pre-population Requirements

The pre-population of the Works WHS Risk Assessment must be done in accordance with **Part B** of this facilitation guide where all instructions must be followed. As the development of the hazard scenarios is a critical element in the risk assessment process, there have been a number of sample hazard types created to assist the facilitation and participants in the risk assessment. This is intended to be used as a guide for the Contractor which is located in the Example Hazard Type tab of the Works WHS Risk Assessment Template.

In addition, contained in the Example Hazard Scenarios tab of the Works WHS Risk Assessment Template is a sample of full scenario line items. This has been included to provide the Contractor with a sample of the expected quality for each hazard scenario developed.

Works WHS Risk Assessment Template (excel)

All risk assessments must use the Main Roads Works WHS Risk Assessment Template available on the Main Roads external web page: Works WHS Risk Assessment Template

Both green and red (tab) worksheets must be completed. Additional worksheets in blue provide supporting information to assist the risk assessment facilitator and participants.

Contents: Table of contents page for the information contained within the spreadsheet.

Scope and Participants: Information regarding the context, scope of work and attendees participating in the risk assessment workshop.

Risk Assessment Worksheet: The Works WHS Risk Assessment worksheet which forms the project risk register for all health and safety risks associated with the Works.

Rating Tables: Transport Portfolio Risk Reference table with the consequence and likelihood descriptors for the qualitative assessment

Example Hazard Type: Identified hazard based on their type and sub type. Additional hazards can be added not identified by the Principal.

Example Hazard Scenario: Guidance in the construction of hazard scenarios based on the hazard types and sub-types

Example Controls Emergency: List of generic emergency response and first aid / medical treatment mitigative controls.

Works WHS Risk Assessment Worksheet

The primary worksheet to be completed is the "Risk Assessment Worksheet" and "Scope and Participants". A summary of the risk assessment worksheet columns is as follows:

Column A: Ref No. – Reference number for the hazard scenario

Column B: Risk Event/Hazard – Hazard type & description of what can happen

Column C: Cause of the Event – Scenario & description of how it can happen

Column D: Consequences – What is the impact if hazard not controlled

Column E: Consequence – Maximum reasonable consequence

Column F: Likelihood – Inherent likelihood

Column G: Risk rating - based on consequence x likelihood

Column H: Ranking – 1-25 based on the Transport Portfolio Risk Table

Column I: Risk Control Measures – Preventative controls

Column J: Emergency Response Controls – Mitigative control measures

Column K: First Aid and Medical Treatment Controls – Mitigative controls measures

Column L: Consequence – As specified in column H

Column M: Likelihood – Based on the implementation of control measures

Column N: Risk rating - Based on consequence x likelihood

Column O: Ranking – 1-25 based on the Transport Portfolio Risk Table

Column P: Recommended Action – Reduction of the residual risk

Column Q: By Whom – Responsible action implementer

Column R: By When – Date of action completion

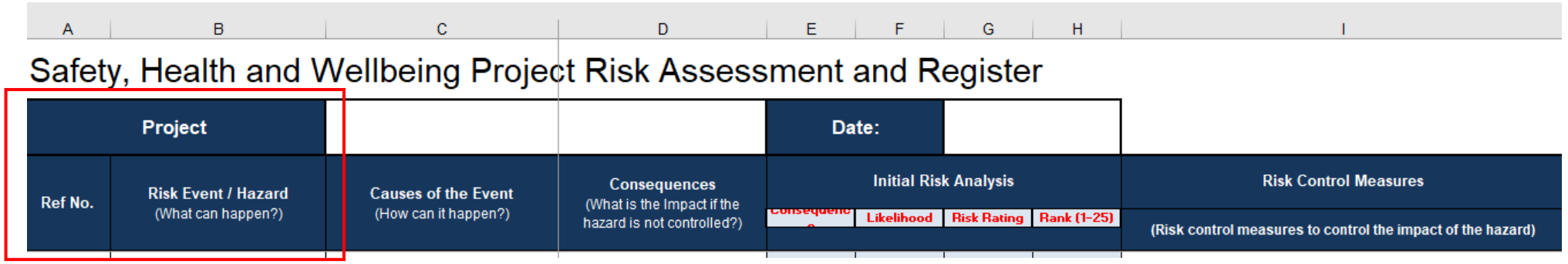
Column S: Consequence – As specified in column H

Column T: Likelihood – Based on the implementation of risk reduction action

Column U: Risk rating - Based on consequence x likelihood

Column V: Ranking – 1-25 based on the Transport Portfolio Risk Table

Step 1 – Hazard Identification



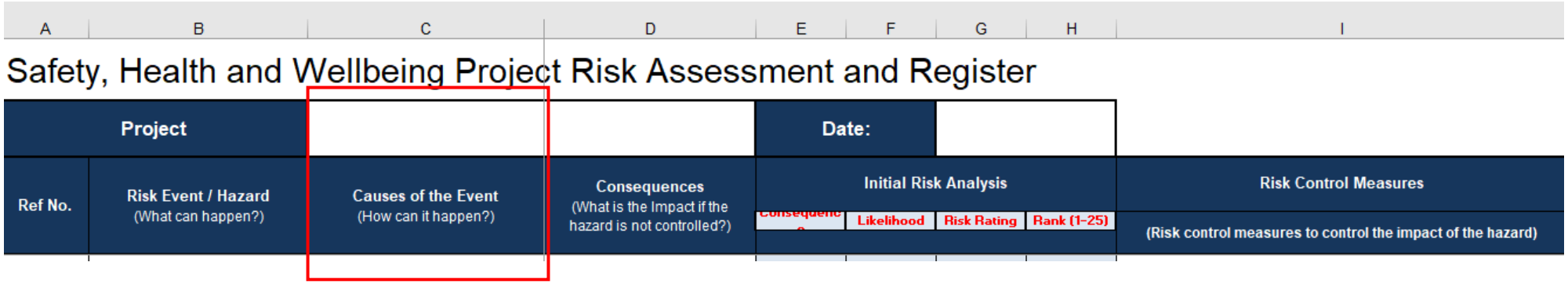
A	B	C	D	E	F	G	H	I
Safety, Health and Wellbeing Project Risk Assessment and Register								
Project				Date:				
Ref No.	Risk Event / Hazard (What can happen?)	Causes of the Event (How can it happen?)	Consequences (What is the Impact if the hazard is not controlled?)	Initial Risk Analysis				Risk Control Measures
				Consequence	Likelihood	Risk Rating	Rank (1-25)	(Risk control measures to control the impact of the hazard)

Step 1.1 – Define the hazard type and a brief description of what the risk is i.e. what can happen (column B);

Authors Note:

Example hazard types can be found in a separate blue tab of the Works WHS Risk Assessment template. This can be printed off to assist the facilitator and participants in the risk assessment workshop. The hazard identification process is based off a thorough understanding of work under the Contract.

Step 2 – Scenario Description



A	B	C	D	E	F	G	H	I

Safety, Health and Wellbeing Project Risk Assessment and Register

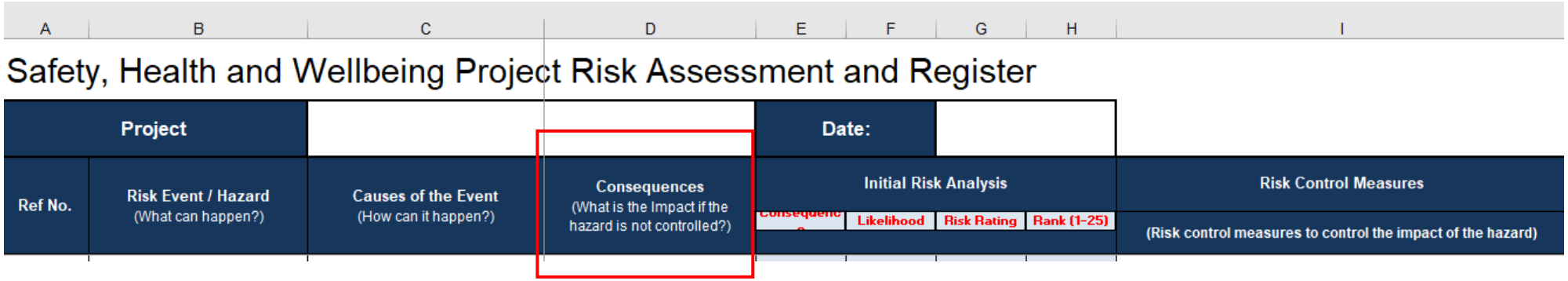
Project				Date:				
Ref No.	Risk Event / Hazard (What can happen?)	Causes of the Event (How can it happen?)	Consequences (What is the Impact if the hazard is not controlled?)	Initial Risk Analysis				Risk Control Measures
				Consequence	Likelihood	Risk Rating	Rank (1-25)	(Risk control measures to control the impact of the hazard)

Step 2.1 – Based on the hazard, add in the scenario description for the identified hazard (column C). The scenario description must be specific to the hazards and where grouping of similar scenarios can be applied (refer author's note) closed brackets must be used for the source of the hazard scenario e.g. Potential of worker falling from height (boom type elevated work platform >11m, boom type elevated work platform <11m, scissor lift and truck mounted cherry picker).

Authors Note:

The scenario description is the most critical element of the risk assessment process as it form the foundation for accurate assessment of the impact(s), consequence and applicable control measures (preventative / mitigative). To reduce the size of the risk assessment, hazard scenarios can be grouped into the same line item where the hazard scenario is similar in nature, has the same risk rating and is likely to have similar (not exact) controls to prevent the hazard scenario from occurring. All hazard scenarios must be rationalised to reduce the size of the risk assessment. Where grouping occurs and there are addition controls for hazard scenarios similar in nature, these can be separated out in the control column within the line item. This will be discussed in step 4 risk controls measures. The intention of the works risk assessment is to identify all potential hazard sources associated with the works and not creating a large number of line items for hazard scenarios similar in nature.

Step 3 – Hazard Scenario Impact



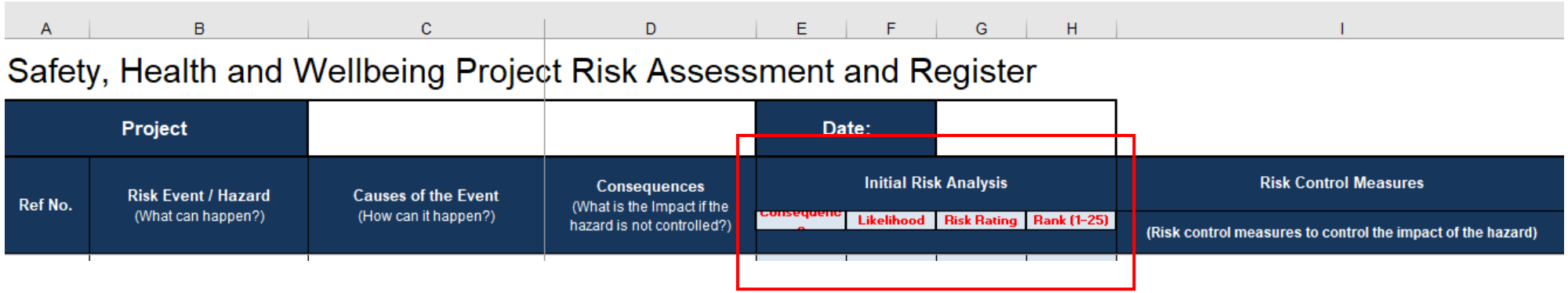
A	B	C	D	E	F	G	H	I

Safety, Health and Wellbeing Project Risk Assessment and Register

Project			Date:				
Ref No.	Risk Event / Hazard (What can happen?)	Causes of the Event (How can it happen?)	Consequences (What is the Impact if the hazard is not controlled?)	Initial Risk Analysis			Risk Control Measures
				Consequence	Likelihood	Risk Rating	Rank (1-25)	(Risk control measures to control the impact of the hazard)

Step 3.1 – Outline the Consequences with a brief description of the maximum reasonable impact if the hazard is not controlled (column D).

Step 4 – Ranking of Inherent Risk



A	B	C	D	E	F	G	H	I

Safety, Health and Wellbeing Project Risk Assessment and Register

Project				Date:				
Ref No.	Risk Event / Hazard (What can happen?)	Causes of the Event (How can it happen?)	Consequences (What is the Impact if the hazard is not controlled?)	Initial Risk Analysis				Risk Control Measures
				[illegible]	Likelihood	Risk Rating	Rank (1-25)	(Risk control measures to control the impact of the hazard)

Step 4.1 – Select the consequence, which is the "maximum reasonable" consequence of the impact based on the hazard scenario (column E).

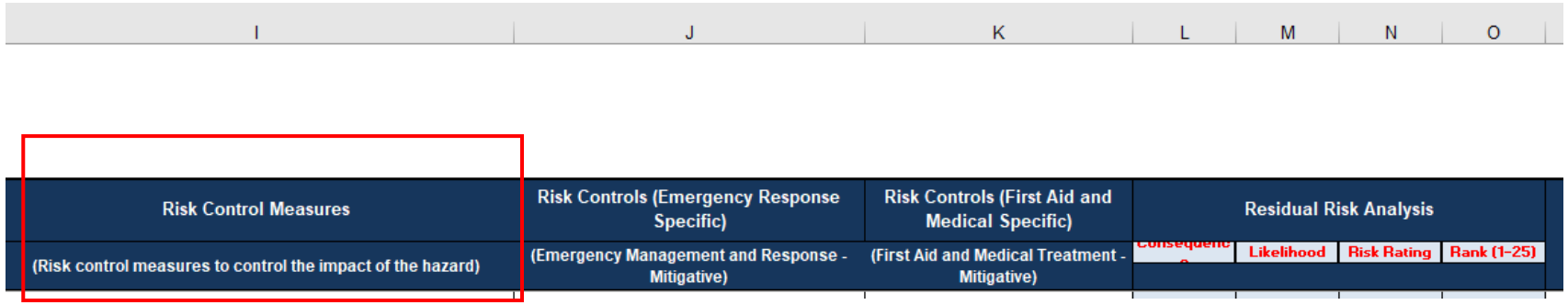
Step 4.2 – Select the likelihood of the hazard scenario occurring (column F)

When columns E and F are populated columns G and H will automatically populate with the risk rating based on the Transport Portfolio Risk Reference Table.

Authors Note:

To aid in the evaluation process, refer to the Transport Portfolio Risk Reference Table in the Rating Tables tab of the risk assessment template. The inherent risk is an assessment of the consequence of the impact(s) and likelihood without controls being implemented. This level of assessment may consider existing controls which are innate or permanent attributes such as the controls inherent in equipment design. The consequence established for the inherent risk must be maintained for further assessment, "residual risk" and "revised residual risk", meaning, the consequence remains fixed. Only the likelihood based on controls can be changed to provide variability to the final risk rating. Fixing consequence allows for credible failure of controls. Consequence can only be changed where the identified hazard is substituted or eliminated.

Step 5 – Risk Control Measures



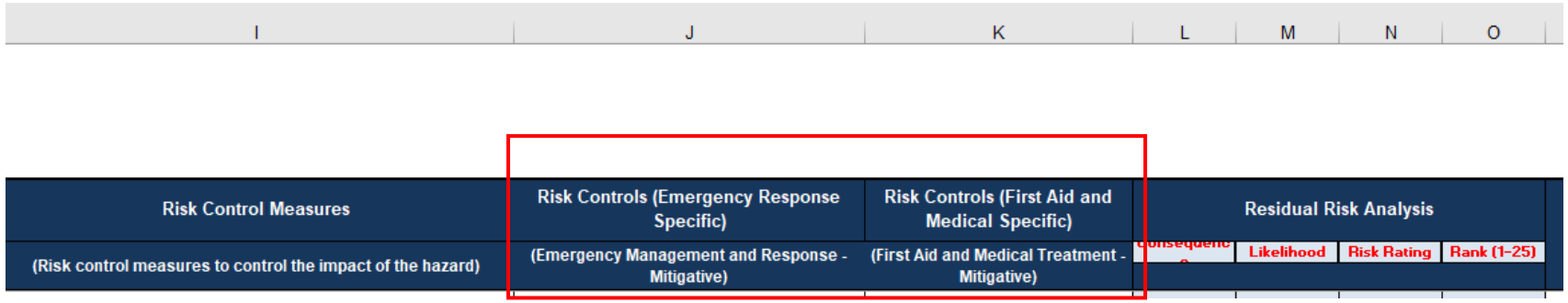
I	J	K	L	M	N	O
Risk Control Measures	Risk Controls (Emergency Response Specific)	Risk Controls (First Aid and Medical Specific)	Residual Risk Analysis			
(Risk control measures to control the impact of the hazard)	(Emergency Management and Response - Mitigative)	(First Aid and Medical Treatment - Mitigative)	Consequence	Likelihood	Risk Rating	Rank (1-25)

Step 5.1 - In alignment with the operational procedures from your certified management system, list the preventative risk control measures which you will use to prevent the impact(s) from the hazard scenario occurring. In addition, where the hazard scenario is a high risk work activity or principal identified hazard, detail in the control column the Principal's Minimum WHS Control Standard which applies (e.g. MCS 1 – Working at Height).

Authors Note:

As detailed in step 2, where a hazard scenarios are of a similar nature, document all relevant controls. Where specific controls apply over and above the other hazard sources e.g. high risk work license for boom type elevated work platform > 11m, these can be contained within the same control box (column I) for the hazard scenario. The intention is to rationalize and consolidate the risk scenarios and focus on all potential hazard sources for the work being undertaken.

Step 6 – Risk Control Measures (Mitigative Emergency and First Aid)



I	J	K	L	M	N	O
Risk Control Measures	Risk Controls (Emergency Response Specific)	Risk Controls (First Aid and Medical Specific)	Residual Risk Analysis			
(Risk control measures to control the impact of the hazard)	(Emergency Management and Response - Mitigative)	(First Aid and Medical Treatment - Mitigative)	Consequence	Likelihood	Risk Rating	Rank (1-25)

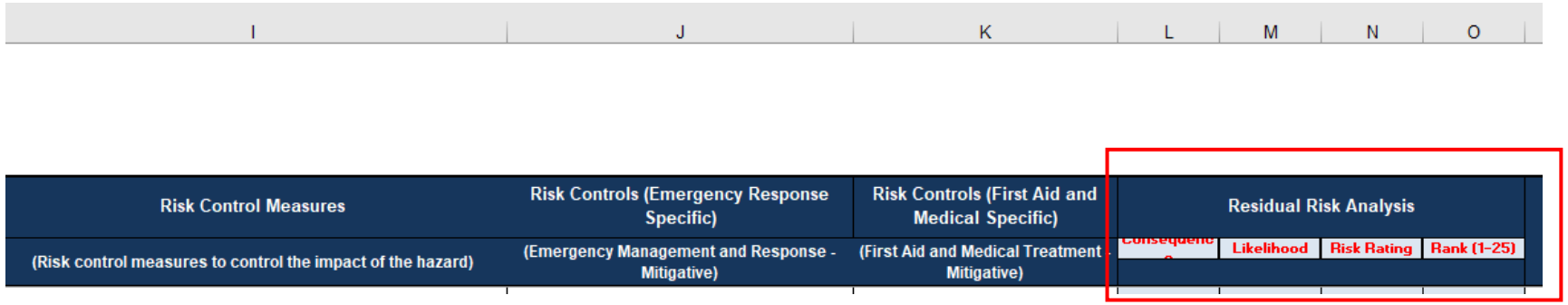
Step 6.1 – Select the emergency response risk controls based on the maximum reasonable impact of the hazard scenario description (column J).

Step 6.2 – Select the first aid and medical treatment risk controls (mitigative) based on the maximum reasonable impact of the hazard scenario description (column K).

Authors Note:

The Example Controls Emergency tab (blue tab) has a quick reference guide for workshop attendees of the emergency response and first aid / medical treatment mitigative controls. The emergency response and first aid / medical treatment controls based on the impact(s) from the hazard scenario will provide the foundation of the Emergency Management Plan. The controls selected in these columns must have trained and competent workers where these mitigative controls are required for use.

Step 7 – Rank Residual Risk



I	J	K	L	M	N	O
Risk Control Measures	Risk Controls (Emergency Response Specific)	Risk Controls (First Aid and Medical Specific)	Residual Risk Analysis			
(Risk control measures to control the impact of the hazard)	(Emergency Management and Response - Mitigative)	(First Aid and Medical Treatment - Mitigative)	Consequence	Likelihood	Risk Rating	Rank (1-25)

Step 7.1 – Select the consequence, which is the "maximum reasonable" consequence which is the same consequence in column E (consequence of inherent risk)

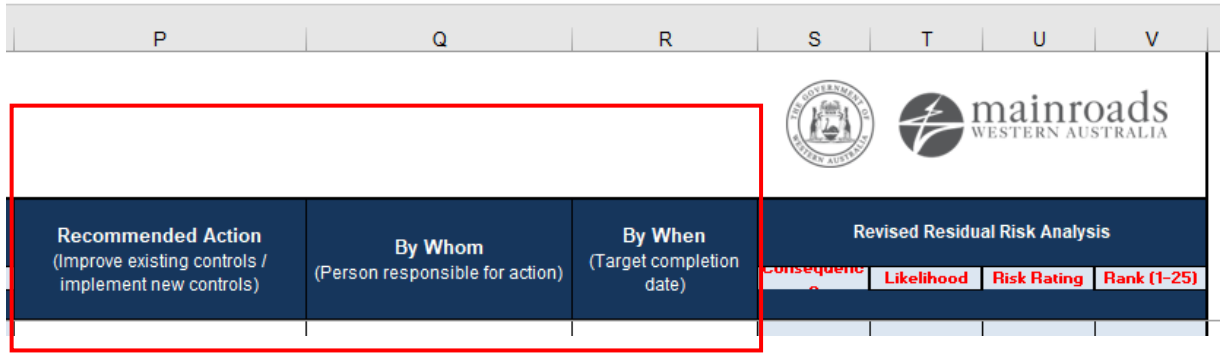
Step 7.2 – Select the likelihood of the hazard scenario occurring based on the implementation of control measures listed.

When columns L and M are populated columns N and O will automatically populate with the risk rating based on the Transport Portfolio Risk Reference Table.

Authors Note:

The residual risk ranking is the assessment of the likelihood of the hazard scenario impact occurring based on the application of control measures. The consequence of the inherent risk must be maintained (the same) for each hazard scenario. As previously mentioned consequence is fixed, to allow for the realistic and credible failure of controls, unless the identified hazard is substituted or eliminated from the scenario.

Step 8 – Risk Reduction Action



Step 8.1 – Add in risk reduction actions to reduce the residual risk (column P).

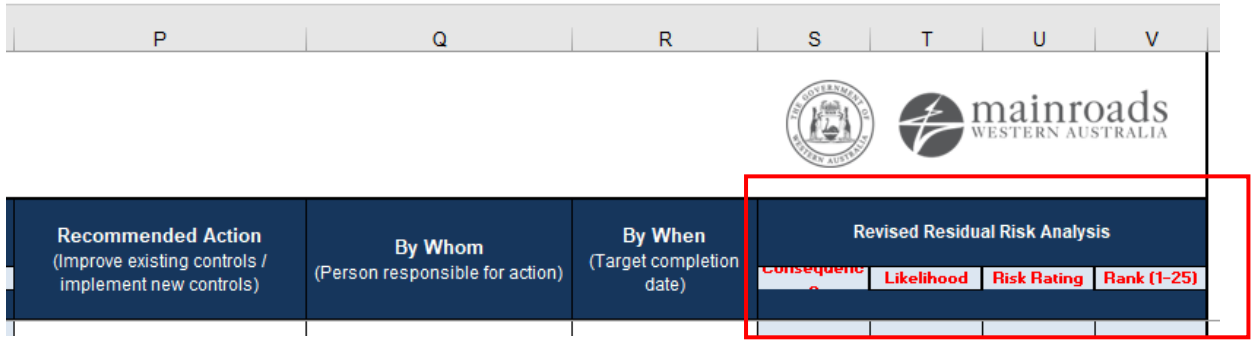
Step 8.2 – Select the responsible person to complete the risk reduction action (column Q); and

Step 8.3 – The date for completion (column R).

Authors Note:

Where the risk assessment team has identified controls which are not currently part of their safe system of work, these control measures, systems or processes can be added as a risk reduction action and once implemented will reduce the risk ranking "revised residual risk". An example may be a risk assessment participant recommending a control put in place by another organisation which has a proven level of risk reduction for a specific risk scenario.

Step 9 – Revise Ranking of Residual Risk



P	Q	R	S	T	U	V
Recommended Action (Improve existing controls / implement new controls)	By Whom (Person responsible for action)	By When (Target completion date)	Revised Residual Risk Analysis			
			Consequence	Likelihood	Risk Rating	Rank (1-25)

Step 9.1 – Select the consequence (column S), which is the "maximum reasonable" consequence selected in column E (consequence of inherent risk)

Step 9.2 – Select the likelihood which can be revised from the residual risk ranking (column T).

When columns S and T are populated columns U and V will automatically populate with the risk rating based on the Transport Portfolio Risk Reference Table.

Authors Note:

If implementation of a corrective action can reduce the residual risk even further and the improvement action will be implemented, the residual risk rating can be revised. The risk reduction action must be tracked to verify implementation.

Part C: Facilitating the Works WHS Risk Assessment Workshop

Purpose and intent of the Facilitated Works WHS Risk Assessment

In relation to Section 14 and 272 of the WHS Act 2020, Main Roads understands the obligations in relation to works or services procured under a contract. As such, Main Roads will consult and communicate with the Contractor and do what is "reasonably practicable" within our capacity, to inform the Contractor of the hazards and risk associated with the works or services under the contract.

The intent of the Works WHS Risk Assessment is to collaborate with Main Roads to provide any information, learned knowledge or subject matter expertise on the hazards and risks in relation to the scope of work the Contractor may encounter for the prevention of injury or illness to all workers engaged to perform work under the contract.

Mandatory Requirements in the Facilitated Review of the Works WHS Risk Assessment

As an aid, Main Roads allows the Contractor to pre-populate the Works WHS Risk Assessment Template prior to the Contractor facilitated workshop (Part B). This allows for a more focused review in the risk assessment workshop to have a more discussion-based approach to the hazard and risk associated with the works.

The following mandatory requirements **must** be completed in the facilitated workshop conducted by the Contractor:

- All consequences with a rating of **Major** or **Catastrophic**; and
- Any hazard scenarios Main Roads wishes to review based off recent incidents or specific hazards in relation to the works; and
- There must be cross-sectional attendance in the Works WHS Risk Assessment detailed on the following page.

In addition, the Contractor must review the hazard list with the workshop attendees, to identify and facilitate discussion of any additional hazard scenarios identified by the workshop attendees. Where additional hazard scenarios have been identified the Contractor **must** complete the whole line item in the Works WHS Risk Assessment Template with workshop attendees where the consequence rating is **Major** or **Catastrophic.**

Note: Upon submission of the Works WHS Risk Assessment (HOLD POINT) any addition hazard scenarios below a major or catastrophic consequence will be reviewed during the suitability audit assessment.

Participation in the Works WHS Risk Assessment

As the Works WHS Risk Assessment is the principal document for the safe delivery of the works, the participants required in the Works WHS Risk Assessment must include, but is not limited to:

- A Safety Professional experienced in the facilitation of qualitative risk assessments;
- A scribe to support the Safety Professional in documenting the risk assessment into the Principal's Works WHS Risk Assessment template;
- The Principal's Project Manager, a member of the Regional SHW team and optional attendance of the Principal's project management team;
- Representative of the Contractor, including the Project Manager, Works Manager and optional attendance of supervisory personnel;
- Key sub-contractors who will be appointed by the Contractor in delivery of the works (where applicable); and
- Any additional stakeholders who can contribute and provide value to the risk assessment.

Roles and Responsibilities

The Works WHS Risk Assessment is a formal, team-based qualitative risk assessment process which provides an efficient and effective method in identifying and analysing health and safety risks. The roles and responsibilities of the risk assessment team are as follows:

Facilitator

- Define the scope and boundaries in consultation with the Principal and Contractor;
- Establish the ground rules of the risk assessment workshop;
- Facilitate the workshop by controlling time management;
- Provide print outs to aid the risk assessment attendees (e.g. risk reference tables, health and safety impacts and hazard type and sub-type list).

Participants

- The risk assessment participants must be representative and knowledgeable in the Works delivered under the contract;
- The participants must familiarise themselves with the scope of work, construction plan and associated materials in advance of the risk workshop
- Commit to the time or duration required; and
- Follow the instructions of the risk assessment facilitator.

Submission of the Works WHS Risk Assessment

The Works WHS Risk Assessment is a scheduled **HOLD POINT** and identifiable record under Specification 203. The submission of this document is subject to suitability audit assessment in conjunction with the other identifiable records for work under the Contract, which includes:

- WHS Management Plan;
- Emergency Management Plan;
- Asbestos Management Plan (where applicable); and
- Safe Design Report (where applicable).

If any further information or guidance is required in the development of the Works WHS Risk Assessment, please contact the Main Roads Safety Manager within your Region or the Main Roads Corporate Safety Health and Wellbeing Team.