



**Australian Government**

**Department of Jobs and Small Business**  
Office of the Federal Safety Commissioner

# 2

## **The planning stage**

The model client: Promoting safe construction

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# Glossary

## Client

A person or organisational entity who commissions the design and construction of a construction project. It includes any agent appointed to manage the works on behalf of the client, in which case the client is not relieved of any of their obligations in respect of safer construction practices.

## Construction

For the purposes of this document construction covers all work carried out on a work site. It includes:

- the construction, alteration, extension, restoration, repair, demolition or dismantling of buildings, structures or works that form, or are to form, part of land, whether or not the buildings, structures or works are permanent
- the construction, alteration, extension, restoration, repair, demolition or dismantling of railways (not including rolling stock) or docks
- the installation in any building, structure or works of fittings forming, or to form, part of land, including heating, lighting, air-conditioning, ventilation, power supply, drainage, sanitation, water supply, fire protection, security and communications systems
- any operation that is part of, is preparatory to, or is for rendering complete, work covered by the activities above, for example:
  - site clearance, earth-moving, excavation, tunnelling and boring
  - the laying of foundations
  - the erection, maintenance or dismantling of scaffolding
  - the prefabrication of made-to-order components to form part of any building, structure or works, whether carried out onsite or offsite
  - site restoration, landscaping and the provision of roadways and other access works.

## Hazard

Any potential exposure to danger or harm, or adverse effect on an employee's health. Anything which may cause injury or ill health to anyone at or near a workplace is a hazard.

## Need

The need for a construction project is defined as the extent to which the facility to be constructed is necessary in order to meet the client's business objectives. Assessment of this need should be made in reference to the client's strategic and operational objectives, the adequacy of existing facilities and alternative ways to provide facilities, other than through the procurement of construction work.

## Qualitative risk Analysis

An approach using word descriptors to describe the magnitude of potential consequences of a harmful event and the likelihood that these consequences will occur. It can be used as an initial screening process to identify where more in-depth analysis is required, where reliable risk data precludes the use of quantitative methods of analysis or where qualitative analysis is appropriate to the nature of risk and type of decision to be made.

## **Quantitative risk Analysis**

An approach using numerical values to represent the potential consequences of a harmful event and likelihood (or probability) that these consequences will occur. It should be based upon reliable data or robust modelling methods.

## **Risk**

Is an exposure to an event which may cause death, injury, illness or other harm. Safety risk is measured in terms of the combination of the likelihood of a harmful event and the consequence of the harm should it occur. The level of risk increases with the severity of the hazard and the duration and frequency of exposure.

## **Semi-quantitative risk analysis**

An approach using word descriptors to describe the potential consequences of a harmful event and the likelihood that this event will occur. These descriptors are assigned numerical values to enable risks to be ranked. Unlike quantitative risk analysis, these values may not be an accurate reflection of the actual risk.

## **Stage review**

A 'gateway' separating project stages that reviews preceding tasks to ensure that they have been satisfactorily undertaken before moving on to the next stage of a project. It also provides the opportunity to improve processes in future construction projects.

# Introduction

The latest available data shows that the incidence of workplace fatalities in Australia's building and construction industry is nearly three times higher than the national average for all industries. Furthermore, the incidence of compensated claims for the industry is almost twice the national average for all industries. While there is evidence that industry performance is improving, it is clear that the Australian building and construction industry is still a long way short of best practice.

As the clients of construction projects, Australian Government agencies are ideally placed to drive OHS improvements on the projects they procure. The model client initiative is designed to provide Australian Government agencies with guidance and resources to help them to manage OHS in construction projects.

## The planning stage

This booklet, *The planning stage*, is the second in a series of five booklets explaining what it means to be a Model Client. The first booklet, *The Model Client Framework*, introduced the Model Client Framework, articulated some key principles for the management of OHS and established an agency-level OHS management process. Booklet one also provided a project process map establishing key management actions (KMAs) for promoting OHS throughout the lifecycle of a construction project, from the planning stage to completion.

The remaining three booklets in the series provide more detail about these KMAs, as well as providing resources and tools that can be used in the implementation of the model client KMAs.

The complete series is:

1. The Model Client Framework
2. The planning stage
3. The design and procurement stage
4. The construction stage
5. The completion stage

While this series has been prepared specifically for the Australian Government as a client of building and construction services, the principles and materials prepared and contained in each of these booklets are equally applicable to any client of these services.



## How to use this booklet

This booklet provides an explanation of what happens in the planning stage of a project and explains the KMAs that a model client could implement during this stage.

The KMAs are documented using a standard tabular layout as explained in booklet one. Each KMA is identified by a number and a descriptor. The terminology used in defining each KMA is as follows:

- **Action** describes what has to be done
- **Phases** indicate the development phases during which the action has to be taken
- **Description** provides a short narrative of the rationale of the action covering aspects such as who is responsible, its importance and some suggested strategies for consideration
- **Key benefits** provide the reasons why the action is effective
- **Desirable outcomes** describe the behavioural and procedural changes resulting from the implementation of the action
- **Performance measure** describes the outputs that can be measured and recorded as evidence that the action has been successfully implemented
- **Documents outline** the suggested approach to assist in the effective implementation of the KMA.

Documents relevant to each KMA are numbered for easy reference and can be found in the Appendix to this booklet.

## What is the planning stage?

The planning stage of a construction project identifies and articulates the client's need for a particular construction project. The requirements of the construction project are articulated in order to examine the variety of options that could address the identified need. During the planning stage, the alternative options for the project are narrowed until a best solution is agreed. The project brief, with associated provisional approvals, is usually produced in this stage.

As Figure 1 shows, the planning stage is further divided into four phases. These are:

- **Phase 0** - Demonstrating the need (for the construction project)
- **Phase 1** - Conception of the need (for the construction project)
- **Phase 2** - Outline feasibility
- **Phase 3** - Substantive feasibility and outline approval.

In each phase the Model Client Framework suggests a number of KMAs. The framework does not prescribe in which phase each KMA must be implemented. In fact, some KMAs span more than one project phase, indicating that they could occur in any or even all of these phases. However, by the end of the planning stage, a model client would have implemented all of the KMAs described in this booklet.

A stage review is conducted to ensure that this has occurred before moving to the next project stage: design and procurement.



# Project OHS Process Map

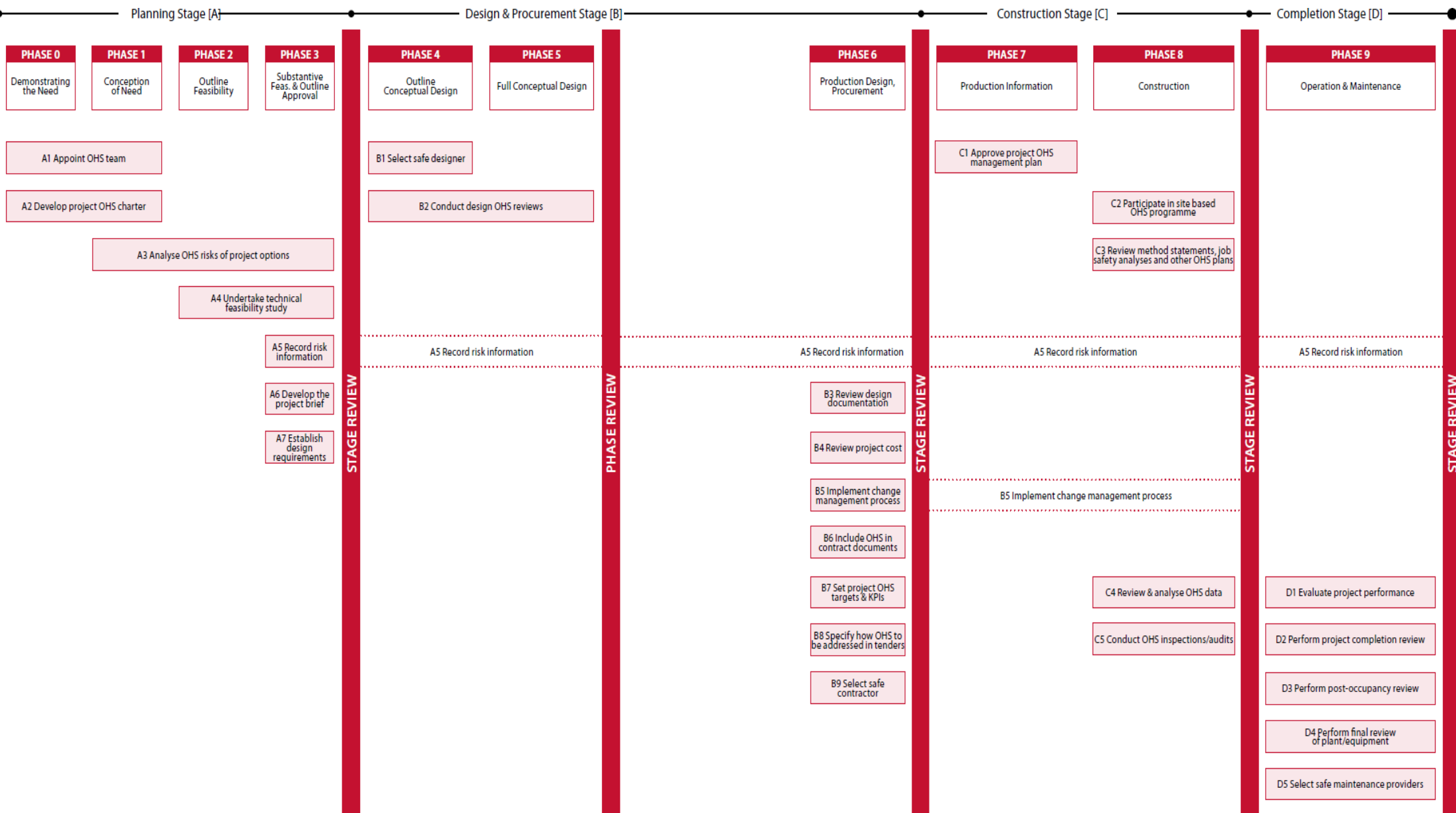


Figure 1: Project OHS process map  
Adapted from *A Generic Guide to the Design and Construction Process Protocol* (Kagioglou et al., 1998) [www.processprotocol.com]

## Phase 0—Demonstrating the need

### ‘What is the problem?’

It is important to establish and demonstrate the client’s business needs and ensure problems are defined in detail. Identifying the key stakeholders and their requirements will enable the development of the business case as part of the client’s overall business objectives.

*Kagioglou et al. (1998)*

Australian Government agencies should recognise that construction work inevitably gives rise to some degree of OHS risk. Consequently, the need for a construction project should be carefully assessed. Wherever possible, alternatives to construction work should be considered. Alternatively, where the alteration to existing buildings/structures would satisfy an identified need and present a lower risk than new construction work, this option should be considered. Designs that allow for a high degree of subsequent re-use can also reduce the need for construction work in the future, further enhancing safety outcomes.

### KMA A1 Appoint OHS team

Where construction work is deemed to be necessary, agencies should appoint senior team members from the agency, whose responsibility it will be to oversee OHS through the project lifecycle. Members of the project OHS team should have the necessary level of awareness and competence in OHS relevant to the management of the design and construction processes and the eventual operation of a facility. There should be at least one senior management representative from the agency in the team.

KMA A1	Appoint OHS team
Action	At the outset of a project, agencies should appoint senior team members from within the agency, who have appropriate OHS skills, and whose responsibility it will be to oversee OHS through the project lifecycle.
Phases	<ul style="list-style-type: none"> <li>Phase 0—Demonstrating the need</li> <li>Phase 1—Conception of the need</li> </ul>
Description	<p>A project OHS team should be formally appointed and a senior agency employee named as representing the agency throughout the project lifecycle. This person should have a keen interest in OHS and be fully committed to OHS processes and performance. Initially, the leader of the OHS team will be a senior-level representative from the agency although, as the project progresses, the position may rotate to a senior officer of one of the other major stakeholders (for example designer, construction contractor) as their contribution to the project increases.</p> <p>Members of the project OHS team should have the necessary level of awareness and competence in OHS relevant to the management of the design and construction processes as well as the eventual operation of a facility.</p> <p>Team composition may change during the various stages of the project. However, the agency will always have representation on the OHS team and members will be representative of a vertical slice of the project’s organisational structure, that is, from senior management through middle management to workforce and operational levels.</p>
Key benefits	<ul style="list-style-type: none"> <li>Single point of contact</li> <li>Clear responsibilities for OHS</li> <li>Project OHS champion</li> </ul>
Desirable outcomes	<ul style="list-style-type: none"> <li>A client OHS champion for the project, who will provide OHS leadership and oversight throughout the life of the project.</li> </ul>



	<ul style="list-style-type: none"> <li>▪ A client OHS team for the project that will provide OHS direction and oversight throughout the life of the project.</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>▪ Appointment of appropriate people to form the OHS team</li> <li>▪ Appointment of a senior agency representative with responsibility for OHS on the project</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>▪ A1.1 OHS team effectiveness checklist</li> <li>▪ A1.2 Desired behaviours of OHS team members</li> <li>▪ A1.3 Training requirements/competencies for OHS team members</li> </ul>

## KMA A2 Develop project OHS charter

The agency's OHS expectations for the project should be clearly stated in a project OHS charter. This charter will articulate project OHS expectations and requirements, and how they will be implemented. In identifying the role OHS will play in the project, the project OHS charter should provide a clear vision for OHS on the project. The charter will provide the basis for a shared understanding of OHS expectations and is a key tool to ensure commitment to OHS among project participants. Initially the project OHS charter would be developed by the client agency but as the project progresses, the charter may be revised with input from the designers and construction contractors.

<b>KMA A2</b>	<b>Develop project OHS charter</b>
<b>Action</b>	The client agency should develop a project-specific charter that clearly states the OHS aims and objectives of the project.
<b>Phases</b>	<ul style="list-style-type: none"> <li>▪ Phase 0—Demonstrating the need</li> <li>▪ Phase 1—Conception of the need</li> </ul>
<b>Description</b>	<p>The project OHS charter will be a project-specific statement of intent indicating the commitment of the client agency to provide proactive management and oversight of OHS through the lifecycle of the construction project. It includes:</p> <ul style="list-style-type: none"> <li>▪ a policy statement including broad OHS roles and responsibilities of all stakeholders on the project—including those not yet engaged, such as the designer and construction contractors—and will include the safety and health of the public</li> <li>▪ a statement of commitment that all stakeholders will strive for high standards of OHS performance and will actively participate in the pursuit of the project's OHS goals</li> <li>▪ a statement of intent to comply with all relevant statutory obligations.</li> </ul>
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>▪ A clear OHS 'vision' for the project is articulated</li> <li>▪ Project stakeholders reach consensus on the importance of OHS</li> <li>▪ There is shared understanding of the OHS responsibilities of all project stakeholders</li> <li>▪ There is communication to field staff that the agency is serious about OHS and is prepared to invest in OHS on the project.</li> </ul>

<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>Project participants' shared commitment to achieving project OHS goals</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>Publicly available project OHS charter containing clear OHS vision, which has been signed by the agency's most senior manager/director.</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>A2.1 Example project charter document</li> </ul>

## Phase 1—Conception of need

### 'What are the options and how will they be addressed?'

The initial statement of need becomes increasingly defined and developed into a structured brief. To this end, all the project stakeholders need to be identified and their requirements captured.

*Kagioglou et al. (1998)*

As the project concept is being developed, the agency's project OHS team should begin to identify OHS issues or risks inherent in the project. These issues/risks should be considered in project policy documents and the strategic planning process. When identifying project risks, thought should be given to the type of risk identification/assessment process being employed.

The nature of the project should be the determining factor in the selection of a risk identification/assessment approach. The more complex and high-risk the project, the more sophisticated the risk assessment process should be.

Once a risk identification/assessment methodology has been determined, the agency should establish their risk tolerance levels. Risk tolerance levels may vary from project to project. Risk tolerance should not be viewed as the maximum loss the agency can afford, but should reflect the agency's OHS goals for the project. For example, a goal of 'zero harm' reflects a very low tolerance for OHS risk.

## KMA A3 Analyse OHS risks of project options

When considering options for achievement of project objectives, consideration should be given to the impact of these options on OHS risk. Where options present a level of risk that exceeds agency levels of tolerance, alternative options should be considered.

<b>KMA A3</b>	<b>Analyse OHS risks of project options</b>
<b>Action</b>	As the project concept is being developed, the client agency's project OHS team should begin to identify OHS issues or risks inherent in the options to address the identified need.
<b>Phases</b>	<ul style="list-style-type: none"> <li>Phase 1 - Conception of the need</li> <li>Phase 2 - Outline feasibility</li> <li>Phase 3 - Substantive feasibility and outline approval</li> </ul>
<b>Description</b>	OHS risks should be subject to a rigorous risk identification/assessment process. The methodology to be deployed can be qualitative, semi-quantitative or quantitative (see glossary for an explanation of these terms). The choice of methodology should be based on the complexity and the availability of relevant data. Whatever method is chosen, risk identification/assessment should be undertaken by people with the requisite skills and experience.
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>The main OHS risks/issues inherent in project concept options are identified and assessed.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ The risk identification/assessment enables a comparison of project concept options based on OHS risks/issues.</li> <li>▪ Project concept decisions can be based on a systematic assessment of the magnitude of inherent OHS risks.</li> </ul>
<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>▪ OHS risks for all project concept options are identified and assessed.</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>▪ Documented OHS risk identification/assessment for project concept options</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>▪ A3.1 Project concept OHS risk identification/assessment tool</li> </ul>

## Phase 2—Outline feasibility

### ‘Which options should we consider further?’

Many options could be presented as possible solutions to the identified problem. The purpose of this phase is to examine the feasibility of the project and narrow down the solutions that should be considered further. These solutions should offer the best match with the client’s objectives and business needs.

*Kagioglou et al. (1998)*

### KMA A4 Undertake technical feasibility study

Once a concept has been agreed on, a technical feasibility study needs to be undertaken. The technical feasibility study should be undertaken by a team of people from the client agency (generally the project OHS team), with the requisite skills to assess and evaluate the potential OHS impacts arising in the project. Where specialist skills are required, external consultants should be engaged to provide advice and input into the technical feasibility study. Any unique requirements and/or constraints impacting on OHS should be identified. The information gathered from the technical feasibility study will assist the agency in determining whether or not the project should proceed. The technical feasibility study is designed to uncover, evaluate and document OHS project needs. It should encompass issues such as site location; geographical features, such as ground conditions; air quality; traffic impacts; surrounding land use; protection requirements etc.

These issues should be reviewed in light of their project implications, program requirements and budgetary constraints.

Decisions about which options to consider further should be based on a detailed assessment of the OHS risks associated with each option. Thus, the technical feasibility study should involve risk identification/assessment for each of the possible options under consideration.

<b>KMA A4</b>	<b>Undertake technical feasibility study</b>
<b>Action</b>	Undertake a preliminary analysis of the solution proposed to meet the identified need.
<b>Phases</b>	<ul style="list-style-type: none"> <li>▪ Commence in Phase 2 - Outline feasibility</li> <li>▪ Phase 3 - Substantive feasibility and approval, following KMA B3</li> </ul>
<b>Description</b>	When studying the technical feasibility of the project, OHS risks associated with site conditions should be identified and assessed. In the event that the OHS risks associated with a proposed project option are extreme, this option may be considered infeasible and alternatives may need to be identified. Issues to consider include the site location; geographical features such as ground conditions; air quality; traffic impacts; surrounding land use etc. The identified risks of the

	approved project option should be recorded in the project risk register (refer to KMA A5).
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>Options that present significant OHS risks can be eliminated from further consideration.</li> <li>Confirmation that risks presented by project options proposed for further development can be managed.</li> </ul>
<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>Comprehensive site-based risk analysis</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>OHS risk identification/assessment based on technical feasibility</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>A4.1 Technical feasibility risk assessment checklist</li> </ul>

## Phase 3—Substantive feasibility and outline approval

### **‘Should the proposed solution/s be financed for development?’**

The decision to develop a solution or solutions further will need to be informed by the results of the substantive feasibility study or studies. The purpose of this phase is to finance the ‘right’ solution for concept design development and outline planning approval.

*Kagioglou et al. (1998)*

Once technical issues have been considered, a business case for the project must be developed. This requires a demonstration of the financial feasibility of the project. The business case for a project should reflect the agency’s OHS aims and objectives (as documented in its corporate OHS policy and the project charter).

When considering the financial feasibility of the project, careful attention should be given to the OHS requirements of the project. In particular, the technical and managerial requirements of ensuring the project is constructed safely and without risk to workers’ health and wellbeing must be considered in detail and subject to a comprehensive economic analysis. The agency must be satisfied that the selected solution provides ‘best value’ in terms of OHS as well as other project objectives and that budgetary constraints will not compromise the agency’s ability to achieve its stated OHS objectives for the project.

### **KMA A5 Record risk information**

OHS risks identified for the project should be recorded in a project risk register.

Once the ‘right’ solution for concept design and development has been selected, the agency should take steps to ensure that design consultants engaged on the project understand that they have a responsibility to meet the project deliverables, without compromising OHS through the project lifecycle. The project brief should specifically state:

- key OHS objectives and success criteria
- key drivers for project OHS performance
- the business case, describing the benefit of OHS as perceived by the agency
- a list of identified stakeholders on the project, whose OHS must be considered
- project governance and management arrangements

- the responsibility to maintain the project risk register, and transfer it to other stakeholders at the appropriate times in the project lifecycle.



KMA A5	Record risk information
<b>Action</b>	A project-specific risk register should be developed once the project concept option has been decided. Project OHS risk information will be recorded in this register throughout the life of the project. This will be a 'living document'. It will be updated, as required, throughout the project lifecycle as new risks are identified. When risks are eliminated they will be recorded as such but still remain on the risk register.
<b>Phases</b>	<ul style="list-style-type: none"> <li>Phase 3 - Substantive feasibility and approval, following KMA A4</li> <li>Updated and added to throughout the life of the project</li> </ul>
<b>Description</b>	<p>Agencies are responsible for initiating the project risk register and ensuring its continual updating and transfer between stakeholders. As the project continues, any new risks identified are to be added to the risk register. By the end of the project, risks identified at each phase will have been captured in a central repository and provide a clear insight into the decisions made throughout the project. The project risk register will become a key mechanism for the communication of OHS risk information between parties engaged on the project and during the transition between project lifecycle stages.</p> <p>Designers must ensure the risk register is updated and passed onto the contractor. Likewise contractors must update the register and ensure it is passed onto the owner/user on completion of the construction stage. The project risk register will be owned by the client agency but it will be readily available to all stakeholders throughout the project lifecycle.</p>
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>Single source of OHS risk information which can be readily viewed by all project participants.</li> <li>Mechanism for monitoring the implementation of OHS risk management actions.</li> </ul>
<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>All identified project OHS risks recorded in a central project OHS risk register.</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>Central repository for project OHS risk information</li> <li>The recording of all identified OHS risks, risk management decisions and ongoing monitoring of the implementation of risk management actions.</li> </ul>
<b>Documents</b>	



	<ul style="list-style-type: none"> <li>▪ A5.1 Risk assessment tool</li> <li>▪ A5.2 Risk register template/pro forma</li> <li>▪ A5.3 Risk treatment plan template</li> </ul>
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## KMA A6 Develop the project brief

The agency should develop a design brief for the project that clearly establishes the OHS responsibilities of design professionals in relation to project OHS during the construction stage. The agency should also collate all data relevant to the site and provide this to designers.

<b>KMA A6</b>	<b>Develop the project brief</b>
<b>Action</b>	Develop the project brief, including clear OHS requirements for the project.
<b>Phases</b>	<ul style="list-style-type: none"> <li>▪ Phase 3 - Substantive feasibility and approval, following KMA A5</li> </ul>
<b>Description</b>	<p>The project brief should communicate to prospective design consultants the importance of OHS to the agency. The brief should include details of the project OHS charter and establish clear performance criteria for OHS in design. The brief should identify people whose OHS could be impacted through the project lifecycle, for example people who will construct, occupy, maintain, clean and demolish the facility, and require designers to take reasonable steps to eliminate or reduce the OHS risk to these people.</p> <p>Agencies should provide designers with full information about the site. OHS risks identified in the technical feasibility study at KMA A4, including the site location; geographical features; ground conditions; air quality; traffic impacts; surrounding land use etc should be included in the brief. Information in the project risk register should be made available to the appointed designers.</p>
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>▪ Clear communication of client's OHS requirements relative to other design objectives</li> <li>▪ Designers have a full understanding of site constraints and existing OHS risks</li> </ul>
<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>▪ Clearly documented client requirements, providing a shared understanding of OHS expectations among the client–design team.</li> <li>▪ Design team addresses OHS as an objective of equal importance to other objectives, for example functionality, aesthetics, quality etc</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Identification of project stakeholders whose OHS interests must be considered in design decision making.</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>▪ Brief documentation contains detailed OHS requirements.</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>▪ A6.1 Project brief OHS checklist</li> </ul>



## KMA A7 Establish design requirements

The responsibilities of designers in regard to design OHS should be specified in the contract. These responsibilities could include participation in the project safety management processes, including design OHS reviews. Contract documents could also specify defined 'hold points' in the design process at which time OHS reviews must take place.

<b>KMA A6</b>	<b>Develop the project brief</b>
<b>Action</b>	Agencies should include, in contracts for design consulting services, clear requirements for the management of OHS actions taken by the design team.
<b>Phases</b>	<ul style="list-style-type: none"> <li>▪ Phase 3 - Substantive feasibility and approval, following KMA A5</li> <li>▪ Prior to the selection of a designer</li> </ul>
<b>Description</b>	<p>Design consultant/s appointed by the agency should be required to:</p> <ul style="list-style-type: none"> <li>▪ undertake formal design OHS risk reviews</li> <li>▪ report on the outcomes of these reviews, for example risks identified, risk assessment outcomes and risk elimination/reduction strategies</li> <li>▪ record this information in the project risk register</li> <li>▪ provide detailed design documentation identifying residual risks (that is, those remaining after risks have been eliminated/reduced in the design process)</li> <li>▪ establish processes for project governance and reporting of design decisions.</li> </ul>
<b>Key benefits</b>	<ul style="list-style-type: none"> <li>▪ Accountability for design consultant(s) to manage OHS in design.</li> <li>▪ OHS risks are systematically managed in the design process.</li> </ul>

<b>Desirable outcomes</b>	<ul style="list-style-type: none"> <li>▪ Where practicable, OHS risks are eliminated.</li> <li>▪ Where OHS risks cannot be eliminated, they are reduced.</li> <li>▪ Residual risks are manageable in the construction/post-construction phases.</li> <li>▪ Full information about residual risks is available for contractors, occupants, maintenance personnel and other stakeholders.</li> </ul>
<b>Performance measure</b>	<ul style="list-style-type: none"> <li>▪ Consultancy agreements contain detailed OHS requirements.</li> </ul>
<b>Documents</b>	<ul style="list-style-type: none"> <li>▪ A7.1 Suggested contractual requirements for design OHS</li> </ul>



## Stage review

A stage review should take place to review, confirm and approve all major decisions taken in the planning stage of the project. KMAs and their performance measures should be reviewed to ensure they meet the requirements of the Model Client Framework.

A suggested planning stage review template is in the appendix of this booklet.

## Conclusion

Having completed all of the KMAs in the planning stage, the groundwork will have been prepared for the construction project to progress to the next stage, design and procurement. The actions of a model client during the design and procurement of a construction project are described in detail in booklet three of the model client series.



## APPENDIX: Supporting documents

The following documents are available in electronic versions and can be downloaded from the OFSC website at [fsc.gov.au](http://fsc.gov.au).

- Document A1.1** OHS team effectiveness checklist
- Document A1.2** Desired behaviours of OHS team members
- Document A1.3** Training requirements/competencies for OHS team members
- Document A2.1** Example project charter document
- Document A3.1** Project concept OHS risk identification/assessment tool
- Document A4.1** Technical feasibility risk assessment checklist
- Document A5.1** Risk assessment tool
- Document A5.2** Risk register template/pro forma
- Document A5.3** Risk treatment plan template
- Document A6.1** Project brief OHS checklist
- Document A7.1** Suggested contractual requirements for design OHS

### Stage review

Planning stage review template

## Document A1.1 OHS team effectiveness checklist

### Model client commitment to the OHS team

The following checklist enables Australian Government agencies to assess whether the project conditions will be supportive of the OHS team. Twelve project conditions are classified into the following categories: authority (A), resources (R) and credibility (C). Assessment of project conditions against this checklist will provide an indication of issues which might need to be addressed to ensure the effective functioning of the project OHS team.

Do these conditions exist?	Category	Yes/No
The project OHS team is led by a senior manager in the agency (or appropriate stakeholder).	A	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team has requisite authority to make decisions when necessary.	A	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team has input into formulation of OHS policy, plans and procedures on the project.	A	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team actively monitors the implementation of OHS policy, plans and procedures.	A	<input type="checkbox"/> Yes <input type="checkbox"/> No
Adequate time and resources (including financial resources, equipment, meeting room etc) have been allocated to support the project OHS team and its activities.	R	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team members have received appropriate OHS training.	R	<input type="checkbox"/> Yes <input type="checkbox"/> No
When necessary, the project OHS team can access specialist OHS advice.	R	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team is respected by project staff and its work is valued.	C	<input type="checkbox"/> Yes <input type="checkbox"/> No
When the project OHS team makes a recommendation, the project management team is supportive.	C	<input type="checkbox"/> Yes <input type="checkbox"/> No
People engaged on the project (whether site workers, designers, construction contractors, subcontractors or suppliers) feel they can approach the project OHS team with concerns or suggestions about OHS.	C	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team comprises a 'vertical slice' of project personnel, with all relevant stakeholders represented.	C	<input type="checkbox"/> Yes <input type="checkbox"/> No
The project OHS team has procedures and rules of operation, which cover: <ul style="list-style-type: none"> <li>▪ development of a project OHS vision setting out the commitment of the client to the creation of a strong OHS culture</li> <li>▪ a general policy statement setting out goals and attitudes</li> <li>▪ composition of the OHS team</li> <li>▪ determination of core practices which will support the desired OHS culture</li> <li>▪ responsibilities of team members</li> <li>▪ delegations of authority</li> <li>▪ reporting protocols</li> <li>▪ communications plans and strategies</li> <li>▪ meeting frequency</li> <li>▪ meeting procedures</li> <li>▪ management of records</li> <li>▪ arrangements for establishing other workplace safety committees required by legislation (which will report to the project OHS team)</li> <li>▪ arrangements for expanding the team when other stakeholders such as designers and construction contractors become involved in the project.</li> </ul>	C	<input type="checkbox"/> Yes <input type="checkbox"/> No



## Document A1.2 Desired behaviours of OHS team members

### Desired behaviours of the OHS team members

The statements listed below identify the desired behaviours of people appointed to the OHS team. Training and development of team members should focus on the development of these behaviours.

OHS team members should...	Tick if yes
Demonstrate personal commitment to OHS	
Communicate OHS information clearly to others	
Participate in inspections and routine hazard-spotting exercises	
Provide positive feedback and recognition for working safely	
Influence others' attitudes in support of OHS	
Delegate OHS activities as appropriate	
Provide advice and guidance on OHS, as appropriate	
Participate in team decision making about OHS	
Take responsibility for OHS	
Challenge higher level management when appropriate	
Strive to learn more about construction OHS	
Anticipate OHS risks and raise issues with the project management team	
Make practical suggestions for improving OHS	
Ask others for suggestions about how to improve OHS	
Be open to new ideas about OHS improvement	
Encourage team problem solving	
Avoid 'talking down' to others	
Motivate others to work safely	
Provide corrective feedback when observing others working unsafely	
Evaluate project OHS performance openly and honestly	
Learn from OHS incidents	
Explain the rationale for OHS policies and procedures	

## Document A1.3 Training requirements/competencies for OHS team members

### OHS team training requirements

The project OHS team should include a mix of people from different functional areas. Ideally, the team should include people with specialist OHS knowledge, agency staff with contract management experience and, where appropriate, representatives of design consultants and construction contractors.

Agencies should ensure that project OHS team members have the necessary OHS competencies to ensure the effective functioning of the team. A training needs analysis should be conducted to identify gaps in team members' OHS knowledge, skills and abilities. Where gaps exist, appropriate training should be provided. The following list suggests some OHS knowledge, skills and abilities that should be developed in project OHS team members. The level of knowledge and experience of project OHS team members should be commensurate with the OHS risk involved in the project.

Desirable OHS knowledge, skills and abilities	Tick if training required
<p>OHS legislation</p> <ul style="list-style-type: none"> <li>▪ To understand the operation of OHS legislation in the relevant state/territory, including the main duties specified in the OHS Act and the operation of subsidiary Regulations dealing with OHS.</li> <li>▪ To understand the status of and relationship between statutory OHS responsibilities, codes of practice, guidance materials and Australian Standards.</li> </ul>	
<p>OHS hazard/risk management</p> <ul style="list-style-type: none"> <li>▪ To understand the process of OHS hazard/risk management, including the steps of hazard identification, risk assessment and the appropriate selection of OHS risk controls, according to the hierarchy of control.</li> <li>▪ To know about OHS hazards commonly experienced in construction work and be able to identify these hazards in hazard spotting exercises, safety walks or site inspections.</li> <li>▪ To understand and be able to apply simple methods/tools for risk assessment, such as the use of risk matrices.</li> </ul>	
<p>Contract management</p> <ul style="list-style-type: none"> <li>▪ To understand the contractual allocation of responsibility for OHS in standard contracts for design services and construction services, for different forms of project delivery, for example design-bid-build, design and construct etc.</li> </ul>	
<p>Contractor management</p> <ul style="list-style-type: none"> <li>▪ To understand processes for the management of contractors OHS, for example consideration of contractors OHS competence in prequalification/selection decisions, induction of contractors to the project, active monitoring of contractors' OHS performance and processes for issue resolution.</li> </ul>	
<p>Occupational health and safety management systems</p> <ul style="list-style-type: none"> <li>▪ To understand the basic components of an OHS management system — that is, policy, planning, resourcing and implementing, monitoring and reviewing — and be able to apply these to the overall management of the project.</li> <li>▪ To be able to actively participate in project OHS management processes, such as toolbox talks, safety walks, OHS audits, etc as appropriate.</li> </ul>	
Data analysis	

Desirable OHS knowledge, skills and abilities	Tick if training required
<ul style="list-style-type: none"> <li>▪ To understand the strengths, weaknesses and limitations of different methods of OHS performance measurement.</li> <li>▪ To be able to use project OHS performance data to identify trends, diagnose problems and inform suggestions for improvement through the lifecycle of the construction project.</li> </ul>	
<p>Effective communication</p> <ul style="list-style-type: none"> <li>▪ To understand the importance of communicating about OHS in the agency and to other project stakeholders.</li> <li>▪ To be able to communicate the importance of OHS in routine correspondence and interaction with project stakeholders.</li> </ul>	
<p>Project roles and responsibilities</p> <ul style="list-style-type: none"> <li>▪ To have a full understanding of project roles and responsibilities, including the potential OHS impact of decisions made by the client, designers and construction contractors during the project lifecycle.</li> </ul>	
<p>Design interpretation (ability to read plans)</p> <ul style="list-style-type: none"> <li>▪ To be able to interpret design (that is, read construction plans) and participate actively in design OHS reviews.</li> </ul>	
<p>Team building and leadership skills</p> <ul style="list-style-type: none"> <li>▪ To understand and consistently adopt and reinforce project OHS requirements.</li> <li>▪ To understand the importance of acting as 'role models' in the adoption of safe behaviour on the project.</li> </ul>	
<p>End of project evaluations</p> <ul style="list-style-type: none"> <li>▪ To have the analytical skills to review project OHS performance and identify strengths, weaknesses and opportunities for improvement on future construction projects.</li> </ul>	

## Document A2.1 Example project charter document

A project OHS charter should contain the following information:

- a statement of the agency's commitment to OHS on the project
- some details about the project, that is, title/scope and, where applicable, reference to unique or extreme OHS risks
- a mission statement
- a statement of the agency's OHS objectives for the project
- a statement of broad OHS roles/responsibilities of stakeholders in the project.

The project OHS charter should be signed by a senior agency manager.

It is recommended that agencies develop their own OHS charters on a project-by-project basis. However, an example project OHS charter is provided below.

[insert project name]

### Project occupational health and safety charter

In accordance with our commitment to occupational health and safety (OHS), we are deeply committed to working cooperatively with designers, contractors and other industry stakeholders to build and sustain a culture of safety in all of our building and construction projects. We recognise that the health, safety and wellbeing of all people is critical to the success of our building and construction projects, and also to the business of [agency name] and the community as a whole.

We commit to striving for excellent OHS performance through the lifecycle of our building and construction projects, from planning through to completion. We endeavour to ensure that no one engaged in the design, construction, operation and maintenance of the facilities we build should suffer injury or ill-health as a result. We also commit to protecting the health, safety and wellbeing of members of the public who may be affected by our building and construction projects.

Date:

Project name:

Project address:

Description of project:

We will strive to provide a healthy and safe environment for all project stakeholders by:

- requiring safe performance of suppliers of professional services relating to the project
- adequately resourcing the OHS effort
- ensuring the provision of adequate instruction, training, supervision and oversight to ensure OHS on the project
- taking prompt action when OHS deficiencies are identified.

### Mission

Through the development of a culture that promotes OHS we will not knowingly permit unsafe conditions to exist, nor will we permit project participants to compromise OHS. We are committed to:

- ensuring that 'safe' design requirements are met
- providing a facility that is safe to construct, use/occupy and maintain
- reviewing OHS performance and continuously improving our OHS management processes.

### Objectives

We recognise that our mission to create a healthy and safe construction project depends on our performance and the expectations of our project management personnel and those of other project stakeholders. Therefore we are committed to creating a culture in which all project stakeholders share the highest expectations of project OHS performance. We are committed to creating a project that is injury free by:

1. ensuring the systematic identification and assessment of OHS risks

2. assigning personnel dedicated to the implementation and oversight of OHS
3. establishing and planning for OHS throughout the lifecycle of the project
4. integrating OHS considerations into the selection of project participants, the management of contracts and other project management processes
5. regularly monitoring and reviewing the OHS performance of stakeholders throughout the project lifecycle
6. promoting free and honest communication among all project stakeholders
7. developing and implementing joint initiatives for the purpose of improving and sustaining good OHS performance in the project.

## **Responsibilities**

All parties involved in the design, procurement, construction and maintenance of the project are expected to actively promote OHS and strive to meet the objectives articulated in this charter for the term of their engagement on the project. Stakeholders include, but are not limited to the client, designers, professional advisers, engineers, suppliers, contractors and maintenance personnel.

## **Acknowledgement**

[agency name] acknowledges the importance of OHS, endorses the objectives set out in this OHS charter and agrees to participate and work with all project stakeholders to achieve the highest standards of OHS on the project.

**Name:**

**Position:**

**Date:**

## Document A3.1 Project concept OHS risk identification/assessment tool

In the conception of need phase of the project, agency staff (as part of the OHS team already created in KMA A1) should lead an analysis of the OHS hazard/risks associated with different project options. The extent to which external consultants/advisers (project managers, design specialists or OHS professionals) need to be involved in this process will depend on the complexity of the project and knowledge and experience of agency staff. An agent may be appointed to undertake this analysis. Reference should be made to Document A5.1 for guidance on rating the level of OHS risk presented by identified hazards. Agencies may find the pro forma provided below useful as a prompt sheet. Please note that the list is by no means exhaustive. Space has been left at the bottom of each stage for any additional hazards/risks identified.

Project Title:

Date:

Purpose of the project:

Description of the project:

Estimated total duration of project:

### Preliminary site work

Ref no.	Areas for consideration	Hazards on project and within site boundaries (Tick if applicable)	Effects on adjoining site and/or Surroundings (Tick if applicable)	Hazard/risk	Risk rating	Mitigation controls or comments
	Size of allotment (needs to accommodate construction, storage, personnel facilities, etc)					
	Access to site					
	Type of public protection/security (for example, hoarding)					
	Security					
	Encroachments required onto roadways, paths, public areas (to allow erection of scaffolding, cranes, deliveries etc)					
	Occupancies of adjoining properties					



## Construction

Ref no.	Areas for consideration	Hazards on project and within site boundaries (Tick if applicable)	Effects on adjoining site and/or Surroundings (Tick if applicable)	Hazard/risk	Risk rating	Mitigation controls or comments
	Working over/near water					
	Working in confined space					
	Vibrations					
	Noise generated during construction					
	Installation of scaffolding					
	Installation of lifting equipment (that is, use and location of cranes)					
	Use of lifting equipment					
	Tunnels or below ground excavations					
	Offsite/onsite construction					
	Exterior construction (concrete, tilt up, brick, glazing etc)					
	Type of exterior finishes (for example, lots of glazing causing glare)					

## Commissioning, operation and maintenance

Ref no.	Areas for consideration	Hazards on project and within site boundaries (Tick if applicable)	Effects on adjoining site and/or Surroundings (Tick if applicable)	Hazard/risk	Risk rating	Mitigation controls or comments
	Location of plant					
	Cleaning exterior of building					
	Cleaning interior of building					
	Noise					
	Chemical hazards					
	Storage and disposal of waste					
	Location and access to services/utilities					
	Hours of operation					
	Emissions					
	Fresh air intake					

## Demolition

Ref no.	Areas for consideration	Hazards on project and within site boundaries (Tick if applicable)	Effects on adjoining site and/or Surroundings (Tick if applicable)	Hazard/risk	Risk rating	Mitigation controls or comments
	Piecemeal demolition					
	Deliberate control demolition					
	Stressed/tensions building components					
	Dismantling					

## **Hazard/risk assessment team sign off**

### **Participant 1**

Name:

Position held:

Signature:

### **Participant 2**

Name:

Position held:

Signature:

### **Participant 3**

Name:

Position held:

Signature:

### **Participant 4**

Name:

Position held:

Signature:

### **Participant 5**

Name:

Position held:

Signature:

### **Participant 6**

Name:

Position held:

Signature:

## Document A4.1 Technical feasibility risk assessment checklist

In the Outline feasibility phase of the project, agency staff (as part of the OHS team already created in KMA A1) should lead a technical feasibility hazard/risk assessment. The extent to which external consultants/advisers (project managers, design specialists or OHS professionals) need to be involved in this process will depend upon the complexity of the project and knowledge and experience of agency staff. A consultant may be appointed to undertake this analysis. Agencies may find the pro forma provided below useful as a prompt sheet and record of the analysis.

Project Title:

Date:

Address:

Names of assessors:

Criteria assessment		Identified?	Location	Comments
Geotechnical	Stability of soil, that is, is it subject to land slip	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Proximity of bodies of water to project	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Presence of water table	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Slope of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Soil classification/condition, for example, highly reactive	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Susceptible to flooding	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Landfill	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Susceptible to seismic activities	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Existing infrastructure	Overhead services	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Underground services/utilities	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Underground communication lines	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Any existing infrastructure/assets on site, for example buildings, underground tanks	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

Criteria assessment		Identified?	Location	Comments
	Access/connection to services/utilities	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Demolition required	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Access restrictions	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Traffic management	Disruption to traffic/pedestrian movement	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Additional lighting requirements	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Proximity to major infrastructure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Ability to erect plant, scaffolding etc	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Disruption to public transport	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Site surroundings	Proximity to adjoining property/buildings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Protection of adjoining property/buildings	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Workplace/site restrictions	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Identification and proximity to other construction sites	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Proximity to plant and equipment	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Surrounding occupancies, such as other residential (with respect to risks of noise, dust, working hours etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Ability to expand the facility in the future	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Restrictions due to surrounding usage, such as proximity to airports	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Negative impact from vegetation	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Dilapidation review of adjoining structures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

Criteria assessment		Identified?	Location	Comments
Security	Theft/malicious damage	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Trespass	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Isolated location	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Hazardous material	Hazardous materials contained in existing infrastructure/assets	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Soil contamination	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
	Surrounding hazards, such as proximity to storage tanks associated with a petrol station	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		

## Document A5.1 Risk assessment tool

Risk management is a three step process of:

1. hazard/risk identification
2. risk assessment
3. risk control.

The risk assessment matrix below is a quick and simple tool that can be used by agency staff and/or the project OHS team to assess the level of risk posed by an identified hazard/risk. It should be used once a comprehensive hazard/risk identification exercise has been undertaken.

Agency staff and project OHS team members can find more information on risk management (including some useful tools and guidance) in the following documents, published by Standards Australia:

*AS/NZS 4360: 2004, Risk Management*

*HB 436:2004, Risk Management Guidelines: Companion to AS/NZS 4360:2004*

*HB205-2004: OHS Risk Management Handbook*

### Risk assessment matrix

Risk is a function of the likelihood (or probability) of an unwanted event occurring and the severity of the consequences of this event if it did occur. This means that to determine the level of risk, you must identify the likelihood of the event and the severity of the result (consequence) if the event did occur.

A simple assessment of a risk can be made using the matrix provided below. Use the qualitative likelihood and consequence descriptors provided and then locate the risk rating using the matrix. Locate the probability in the first column of the matrix and the consequence across the top row of the matrix. The level of risk indicated by the matrix can then be used to prioritise OHS actions.

		Consequence		
		Major	Serious	Minor
Likelihood	Likely	HIGH	HIGH	MEDIUM
	Possible	HIGH	MEDIUM	LOW
	Unlikely	MEDIUM	LOW	LOW

No action required by the client or contractor.

**Serious** - Moderate injury either to employees or to the public with full recovery, that is, lost time incident.

Action required by client or contractor.

**Major** - Loss of life potential or severe injury either to employees or to the public with long term damage.

Action required by client or contractor.

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## Document A5.2 Risk register template/pro forma

In the planning stage of a construction project, a project risk register should be initiated. This is a record of OHS risks identified and assessed throughout the project lifecycle and becomes a mechanism for communicating important OHS information about the project to project stakeholders as these stakeholders change throughout the project. Information from the technical feasibility study (KMA A4) should be recorded in the project risk register. The template/pro forma below is a suggested format for the risk register.

### Project risk register

All risks identified are to be recorded on the project risk register. Document A5.2 in Booklet 2 has a worked example for your reference. Remember you may not be the only person reading this register so provide information that others will be able to interpret.

Ref no.	Activity/stage	Hazard/risk	Justify the likelihood of the hazard/risk occurring	Explain the consequences of the hazard/risk occurring	Rating	Accept risk? Yes/No
1a	Planning Stage	Contamination of soil on allocated site	<b>Likelihood: Likely</b> <ul style="list-style-type: none"> <li>Previous use of the site was a rifle range. It was not uncommon in past years to have bullets containing lead</li> </ul>	<b>Consequence : Major</b> <ul style="list-style-type: none"> <li>Health risks to people and animals through contact with lead</li> </ul>	High	No
1b	Planning Stage	The land is susceptible to flooding	<b>Likelihood: Possible</b> <ul style="list-style-type: none"> <li>Water authority records show that a portion of the land is subject to a 1:100 year flood</li> </ul>	<b>Consequence : Serious</b> <ul style="list-style-type: none"> <li>Loss of assets if that area is built on and not protected</li> <li>Public backlash once it was known that the area was developed knowing it was subject to flooding</li> <li>Access issues in and around flood prone area</li> </ul>	Medium	No



Ref no.	Activity/stage	Hazard/risk	Justify the likelihood of the hazard/risk occurring	Explain the consequences of the hazard/risk occurring	Rating	Accept risk? Yes/No
1c	Planning Stage		<b>Likelihood: Unlikely</b> <ul style="list-style-type: none"> <li>▪ The land in its current state is vacant and the previous owner cleared all structures</li> <li>▪ There are no pits, underground tanks, etc located on the site</li> <li>▪ All service connections have been isolated/disconnected by the relevant authorities (evidence supplied by relevant authorities). Any existing services on the site can be removed through standard excavation/construction.</li> </ul>	<b>Consequence : Minor</b> <ul style="list-style-type: none"> <li>▪ No planned demolition works are required</li> </ul>	Low	Yes

## Document A5.3 Risk treatment plan template

Once OHS hazards/risks have been identified and systematically assessed, ways in which they are to be treated should be considered. The project OHS team should be actively involved in decisions about risk treatment. Responsibility for risk treatment will vary by project stage. In the planning stage, the client agency will usually take responsibility for risk treatment decisions but, as the project moves into the design and procurement and construction stages, other parties will become more involved. In all cases, risk treatment decisions should be made in accordance with an accepted 'hierarchy of risk controls', which recognises that risk control measures that eliminate a hazard or reduce risk through engineering/design changes are more effective than administrative or behavioural controls. See the Standards Australia publication, *HB 436:2004, Risk Management Guidelines: Companion to AS/NZS 4360:2004* for more information on this hierarchy.

### Risk treatment schedule plan

Risks that have been identified as not being acceptable are to be recorded in a risk treatment schedule plan. All actions to be undertaken are to be recorded and regularly monitored to ensure risk treatments are properly implemented. Example data has been provided.

Ref no.	Hazard/risk	Preferred options	Result of cost-benefit analysis A: Accept B: Reject	Person responsible	Timetable for implementation	Monitoring details
1a	Contamination of soil on allocated site	<b>Option 1:</b> Remove areas of contaminated soil and replace with clean compacted fill	<b>Option 1 – Accept</b> <ul style="list-style-type: none"> <li>Removal of soil</li> <li>Sourcing and purchasing of clean fill</li> <li>Delivery and compaction of clean fill</li> </ul>	Ken Henry	Soil Purchase 25.3.07  Removal 21.3.07  Compact 8.9.08	21.3.07— Soil sourced and purchased  25.3.07— Removal of soil commenced. Delays due to weather. Expected removal completed by 1.10.07
1b	The land is susceptible to flooding	<b>Option 1:</b> Build a flood wall  <b>Option 2:</b> Raise ground levels by using clean fill and compacting  <b>Option 3:</b> Ensure footprint of structures or building envelopes are located beyond flood zones. Allocate area subject to flooding to open space/landscaping/recreational area	<b>Option 3 – Accept</b> <ul style="list-style-type: none"> <li>No reduction in footprint</li> <li>Guaranteed open space</li> <li>No impact on adjoining property due to location of construction works</li> </ul>	Brigitte Ewe & Designer (TBD)	Include flood and footprint delays in design brief. Design brief completed 2.1.06  Engagement of Designer 1.3.06  Inclusion of site layout requirements on Design Docs. 5.11.06	Brief changed 30.1.06  Designer contracted 10.3.06  Stage 1 Drawing completed (showing site layout) 15.1.07

Ref no.	Hazard/risk	Preferred options	Result of cost-benefit analysis A: Accept B: Reject	Person responsible	Timetable for implementation	Monitoring details

## Document A6.1 Project brief OHS checklist

### Functional OHS brief checklist

Agencies may find this pro forma useful as a prompt when considering project briefing requirements. Please note that the list is not exhaustive.

#### Overview

Project OHS design considerations	Addressed and included in brief?
Why has this project come about? What it will be used for? Who will be using it?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What do you as the model client hope to achieve from a health and safety perspective? What are the safety objectives?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Minimum OHS competency requirements of stakeholders engaged by the agency	<input type="checkbox"/> Yes <input type="checkbox"/> No
References to relevant legislation and agency policies	<input type="checkbox"/> Yes <input type="checkbox"/> No
Budgetary constraints that may impact on safety	<input type="checkbox"/> Yes <input type="checkbox"/> No
Any time constraints that may affect the design	<input type="checkbox"/> Yes <input type="checkbox"/> No

#### The stakeholder

Project OHS design considerations	Addressed and included in brief?
Who are the relevant stakeholders involved in the project?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are there consultative requirements to have stakeholders participate on the project? At what stages is consultation required? Who is to be involved? What are the expectations and level of involvement?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What are the safety aims and objectives? For example, clearly identifying that the construction, occupancy/use, maintenance and demolition all need to be considered.	<input type="checkbox"/> Yes <input type="checkbox"/> No

#### Risk

Project OHS design considerations	Addressed and included in brief?
Inclusion of any identified concept risk	<input type="checkbox"/> Yes <input type="checkbox"/> No
Site specific details/description	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inclusion of any identified site-specific OHS risks	<input type="checkbox"/> Yes <input type="checkbox"/> No

#### Construction

Project OHS design considerations	Addressed and included in brief?
Foundation design (that is, driven piles instead of bored piles)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Working at heights (that is, consider offsite fabrication)	<input type="checkbox"/> Yes

Project OHS design considerations	Addressed and included in brief?
	<input type="checkbox"/> No
Manual handling (that is, reduce size of cladding for easy handling)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hazardous substances (that is, do not specify processes which can generate hazardous by-products such as cutting and chasing)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Integration of design into construction (that is, design stairways for use in construction)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Temporary work (that is, include positions of safety lines and fixings during construction)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety to the public during construction	<input type="checkbox"/> Yes <input type="checkbox"/> No
Proximity of services to construction works	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Use

Project OHS design considerations	Addressed and included in brief?
Traffic management/vehicular access requirements	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pedestrian access	<input type="checkbox"/> Yes <input type="checkbox"/> No
Security requirements (that is, what areas to be public)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Disabled access	<input type="checkbox"/> Yes <input type="checkbox"/> No
Heating and cooling expectations	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lighting (that is, natural lighting, but limiting inclusion of skylights, external lighting requirements)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Floor coverings (that is, no use of high gloss, smooth floor tiles)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exterior cladding	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Completion

Project OHS design considerations	Addressed and included in brief?
Maintenance expectations (that is, use materials that don't require regular maintenance such as painting)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Access to equipment (that is, ensure all services can be easily accessed, no confined spaces)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demolition (that is, use alternative to tensioned reo)	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Document A7.1 Suggested contractual requirements for design OHS

### Does the contract for consulting services require the designer to:

- ☐ review the existing risk register to gain an understanding of the inherent risks already identified with the proposed project?
- ☐ consult and communicate OHS information with identified stakeholders throughout the design stage?
- ☐ undertake formal design OHS risk review of design options?
- ☐ report on the outcomes of the OHS risk review?
- ☐ record any identified OHS risks on the risk register?
- ☐ provide detailed design documentation identifying residual OHS risks?
- ☐ identify OHS KPIs and the reporting requirements for the design service to be provided?
- ☐ specify how the OHS objectives will be monitored and reviewed?
- ☐ clearly identify and specify authority for the inclusion of OHS requirements in design documentation?
- ☐ nominate the minimum OHS design experience required of service providers?
- ☐ require the designer to commit to the project safety charter?

If not, agency staff are to document reasons:

#### Completed by

Name:

Signature:

Date:

#### Witnessed by

Director/Manager:

Signature:

Date:

## Stage Review

### Planning stage review template

#### Planning stage review

A1 Appoint OHS team	Assessment	Actions
<ul style="list-style-type: none"><li>▪ appointment of senior Australian Government agency representatives with responsibility for OHS on the project</li></ul>		
A2 Develop project OHS charter	Assessment	Actions
<ul style="list-style-type: none"><li>• project charter containing clear OHS vision</li></ul>		
A3 OHS risk analysis of project options	Assessment	Actions
<ul style="list-style-type: none"><li>• documented OHS risk identification/assessment for project concept options</li></ul>		
A4 Undertake technical feasibility study	Assessment	Actions
<ul style="list-style-type: none"><li>• OHS risk identification/assessment based upon technical feasibility</li></ul>		
A5 Record risk information	Assessment	Actions
<ul style="list-style-type: none"><li>• the recording of all identified OHS risks, risk management decisions and ongoing monitoring of the implementation of risk management actions</li></ul>		
A6 Develop the project brief	Assessment	Actions
<ul style="list-style-type: none"><li>• brief documentation contains detailed OHS requirements</li></ul>		
A7 Establish design requirements	Assessment	Actions
<ul style="list-style-type: none"><li>• consultancy agreements contain detailed OHS requirements</li></ul>		

#### Further information

This booklet is the second in a series about clients promoting safe construction. Further information about the Model Client Framework is available from the Office of the Federal Safety Commissioner.

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