

Highways Department

**Interchange Junction at
Pok Fu Lam Road and
Sassoon Road**

Risk Management Plan

Highways Department
Interchange Junction at Pok Fu Lam Road and Sassoon Road
Risk Management Plan

June 2005

CONTENTS

	Page
1. INTRODUCTION	1
2. SCOPE AND OBJECTIVES	1
2.1 Scope	1
2.2 Key Project Objectives	2
2.3 Key Elements	2
2.4 Stakeholders	3
3. RISK MANAGEMENT METHODOLOGY	3
3.1 Policy	3
3.2 Methodology	4
3.3 Risk Identification	4
3.4 Risk Categories (Heads of Risk)	5
3.5 Risk Analysis	5
3.6 Risk Evaluation	6
3.7 Risk Treatment	7
3.8 Monitoring and Review	7
3.9 Communication and Consultation	7
3.10 Risk Management Documentation	8
4. RESPONSIBILITIES	8
4.1 Strategic Management	8
4.2 Tactical Management	9
4.3 Operational Management	9
4.4 Project Team	9
4.5 Responsibility for Deliverables	10

APPENDICES

Error! No table of contents entries found.

1. INTRODUCTION

This document defines how risks to the achievement of the project objectives will be managed on the Design and Construction of the Interchange at Junction of Pok Fu Lam Road and Sassoon Road (hereafter called the Project).

Specifically, this document provides the following:

- An outline of the risk management activities that will take place on this project for the full lifecycle of the project, from the identification of the project requirements up to and including the operation of the facility
- Details on the roles, responsibilities, processes and procedures, standards, tools and documentation to be utilised during the course of the project in relation to the management of risk.
- Details on the context in which risks are to be managed, how they will be identified, analysed, evaluated, treated, monitored, reviewed, reported, and associated communication and consultation activities related to the risk management process.

This plan is consistent with current ETWB policies and procedures, and has been developed by Arup, on behalf of the Highways Department of the Hong Kong Special Administrative Region (HKSAR), and will be updated at regular intervals as the project proceeds.

2. SCOPE AND OBJECTIVES

2.1 Scope

Pok Fu Lam Road is a trunk road linking the Southern District and Central in the Hong Kong Island. The junction involves the provision of a through road for the mainline, access to Sassoon Road, Bisney Road and the main entrance to Queen Mary Hospital.

In outline the project is proposed to include the construction of a vehicular flyover system over a busy traffic junction on a hillside by means of elevated structures and retaining walls. A footbridge with lifts, seawater cooling intake system diversion and a utility trough will also be included.

Specific aspects of the proposed works include:

- challenging highway works, bridgework and geotechnical work
- widening of the section of Pok Fu Lam Road fronting Queen Mary Hospital involving the construction of new carriageway (partly on elevated structures) and reconstruction of existing carriageway;
- re-alignment of the upper section of Sassoon Road at its junction with Pok Fu Lam Road involving the replacement of the existing carriageway with new carriageway (partly on elevated structures);
- construction of a link bridge linking the re-aligned Sassoon Road and the access road to Queen Mary Hospital;
- re-alignment of the upper section of Bisney Road at its junction with Pok Fu Lam Road involving the replacement of existing carriageway with new carriageway (partly on elevated structures);
- demolition of the existing footbridge across Pok Fu Lam Road and construction of a new 40m span footbridge at the same location; and

- associated drainage, landscaping, retaining walls and slope works

Staged construction will be one of the key design considerations in maintaining through traffic and non-stop emergency access to and from the Hospital.

Client:	Highways Department (HyD)
Estimated Project Cost:	approximately HK\$300 million
Proposed Project Milestones:	
• Arup Assignment Commencement Date:	16 September 1996
• Construction Commencement Date:	01 December 1998
• Year of Completion:	2002

2.2 Key Project Objectives

The risk management strategy shall focus on the following stated key project objectives, and seek to provide certainty in achieving these objectives:

- Completion by Year 2002
- Completion within budget of approximately HK\$300 million
- Minimise adverse visual & environmental impact to Queen Mary Hospital
- Provision of safe conditions in all areas affected by the works, both for project personnel and members of the public
- Minimal disruption to existing vehicular and pedestrian traffic in the vicinity of Queen Mary Hospital

2.3 Key Elements

Key elements for the project have been identified from the main project phases and main external influences. These elements will be discussed and amended or accepted at the initial Risk Management Workshop.

- Framework for Assessment
- Concept Design
- Environmental Impact Assessment
- External Specialists – Geotechnical, Hydrology/ Hydraulics, Ground Survey
- Project Scope Control and Estimating
- Community Involvement
- Stakeholder Consultation
- Project Approvals
- Project Procurement Strategy
- Design Development
- Construction
- Operation

- Maintenance / Inspection

2.4 Stakeholders

Project Stakeholders include:

- Environment Transport and Works Bureau
- Arup
- Electrical & Mechanical Services Department
- Highways Department
- Geotechnical Engineering Office
- Hong Kong Electricity Company
- Hong Kong Police
- Transport Department
- Agriculture & Fisheries Department
- District Land Office
- Leisure and Cultural Services Department
- Water Supplies Department
- Hong Kong Telecom
- Cable TV
- Hong Kong & China Gas Company
- Queen Mary Hospital
- Architectural Services Department
- Fire Services Department
- District Lands Office
- Urban Services Department
- Hong Kong & China Gas Company
- Civil Engineering Department
- Lands Department

3. RISK MANAGEMENT METHODOLOGY

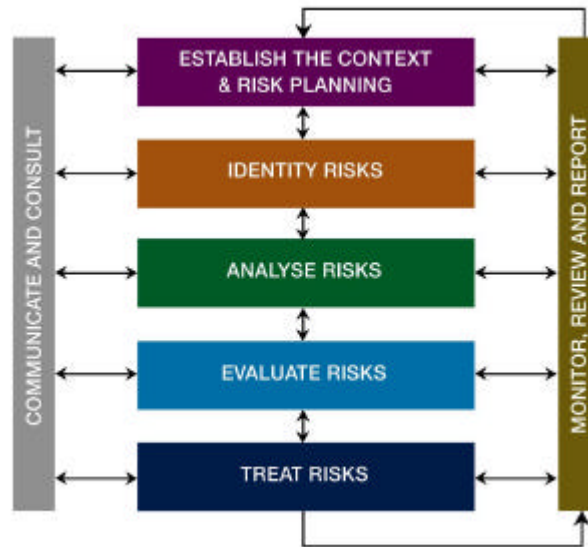
3.1 Policy

The risk management methodology that will be adopted on this project, and outlined in this plan, will be consistent with the policy requirements and guidelines set out under the following Environment, Transport and Works Bureau (ETWB) documents:

- TCW 6/2005: Implementation of Systematic Risk Management in Public Works Projects
- ETWB Risk Management User Manual

3.2 Methodology

The methodology used for the management of risk on this project will be consistent with the risk management process described in the ETWB Risk Management User Manual. This being summarised in the flowchart below:



THE RISK MANAGEMENT PROCESS

3.3 Risk Identification

The basic intent in this stage is to generate a comprehensive list of possible events and consider scenarios and causes.

Preliminary risk identification will be undertaken at an initial Risk Management Workshop, to be attended by a representative cross-section from the client team, consultant project team and key stakeholders. The exact composition of participants for the workshop will be agreed with HyD in advance. In this regard, please note that it is proposed to hold this initial workshop in the first week of November 1996, subject to availability of proposed workshop participants.

Prior to the workshop, a briefing pack and questionnaire will be issued to the proposed workshop attendees (and other personnel as appropriate). Within the briefing pack will be a feedback questionnaire, which will request targeted responses regarding their views on the objectives and concerns for the project - in their own words. The responses received from the questionnaire will be collated and selectively summarised for use at the workshop.

For this initial workshop, we will adopt a facilitated brainstorming approach for the identification of risks. Selected elements of the summarised pre-workshop context information will be displayed at the workshop to provide a focused prompt for consideration of risks. This will include the agreed project objectives. This session will be carefully facilitated to be free-flowing and non-evaluative. This “brain storming” session will draw out the key potential risk exposure areas. All risks will be recorded; no matter how trivial or seemingly irrelevant they might first appear. This documentation of all risks is a necessary part of the process of agreeing a set of the most important risk areas to be addressed in the next stage of the process. Highlighting and documenting previous lessons learnt will go some way to managing their potential re-occurrence on this project.

3.4 Risk Categories (Heads of Risk)

The following categories of risk area are proposed, and will be confirmed by the participants at the initial Risk Management Workshop:

- Project Initiation
- Planning, Design, Program, Deliverables
- Environment & Sustainability
- Community & Social
- Health & Safety
- Political
- Financial & Economic
- Procurement
- Contractual
- Construction
- Operation
- Maintenance
- Human Factors
- Natural Events

3.5 Risk Analysis

Risks will be analysed against the identified risk analysis criteria using qualitative techniques. This form of risk analysis involves assessing the probability and consequences of each risk occurring to determine the relative level of risk.

Where present, existing controls will be identified and their strengths and weaknesses taken account of in the analysis.

The tables below present the proposed draft analysis criteria. These will be reviewed at the initial Risk Management Workshop.

Proposed Consequence Criteria

Consequence Descriptor	Description of Consequences
Catastrophic	Death, regional uncontained environmental impact, project halted, huge financial loss (>HK\$10 million)
Major	Extensive injuries, localised uncontained environmental impact, major project delay (> 1 year), major financial loss (HK\$1 million < HK\$10 million)
Moderate	Medical treatment required, contained environmental impact, moderate project delay (6 months < 1 year), moderate financial loss (HK\$100,000 < HK\$1 million)
Minor	First aid treatment, immediately contained environmental impact, slight project delay (1 month < 6 months), minor financial loss (HK\$10,000 < HK\$100,000)
Insignificant	No injuries, insignificant environmental impact, insignificant delay < 1 month), insignificant financial loss (< HK\$10,000)

Proposed Likelihood (Probability) Criteria

Likelihood Descriptor	Description of Likelihood
Almost Certain/Frequent	Is expected to occur in most circumstances (perhaps daily, or continuously)
Likely	Will probably occur in most circumstances (perhaps several times a year)
Possible	Might occur at sometime (perhaps once per year)
Unlikely	Could occur at some time in life of operation (perhaps once in 10 years)
Rare	May occur only in exceptional circumstances (perhaps once in 100 years, or less)

Proposed Risk Analysis Matrix

		Consequence				
		Insignificant	Minor	Moderate	Major	Catastrophic
Probability (Likelihood)	Rare	Low	Low	Low	Medium	Medium
	Unlikely	Low	Low	Medium	Medium	High
	Possible	Low	Medium	Medium	High	High
	Likely	Medium	Medium	High	High	Very High
	Frequent	Medium	High	High	Very High	Extreme

3.6 Risk Evaluation

The purpose of the risk analysis phase is to gain an understanding of level of risk to make decisions about future actions and define priorities. The following risk evaluation criteria are proposed to provide a means by which decisions can be made, and resources allocated.

Level of Risk	Recommended Level of Management Attention
Extreme	IMMEDIATE senior management attention needed, action plans must be developed, with clear assignment of individual responsibilities and timeframes.
Very High	Senior management attention needed, action plans must be developed, with clear assignment of individual responsibilities and timeframes.
High	
Medium	Risk requires specific ongoing monitoring and review, to ensure level of risk does not increase. Otherwise manage by routine procedures.
Low	Risk can be accepted or ignored. Manage by routine procedures, however unlikely to need specific application of resources.

3.7 Risk Treatment

For this project the following treatment hierarchy will be adopted for those risks that require treatment:

- Avoiding the risk
- Reducing the likelihood of occurrence
- Reducing the consequences
- Transferring or sharing the risk
- Retaining the risk.

Selection of preferred risk treatments will typically be a cost-benefit decision, with preference given to treatments that provide the best all round benefit to the project. In the majority of cases, the identification of which treatment provides the greatest benefit will be straightforward and will not require an in-depth analysis. Additionally, options for risk treatment will be assessed on the basis of the extent of any additional benefits or opportunities created.

For any particular risk, a number of treatment options may be considered, and applied either individually or in combination.

3.8 Monitoring and Review

Risk management is a dynamic process. The importance of identified risks will change, and new risks will emerge, as the project proceeds.

Therefore, although the Risk Register that will be produced as a key outcome of the initial risk management workshop will represent an understanding of the significant risks associated with the project at this time; it should not be viewed as a ‘one-off’ exercise.

It is essential to project success that the risk management process is kept relevant and alive throughout the duration of the project. Risks (consequence and likelihood) and the effectiveness of control measures need to be monitored, as they will change with time. Additionally, as the project proceeds through planning, design, procurement and construction phases, new (or previously overlooked) risks will emerge. As such, ongoing review of the process and monitoring is essential to ensure that risks and the controls/treatments for the management of them remains relevant and effective.

It is therefore proposed to undertake regular risk reviews at key milestones during the course of the project. As a minimum it is suggested that risk reviews be undertaken to coincide with the following delivery milestones:

- At the start of detailed design
- During finalisation of tender documentation
- At commencement of construction

Additionally, the Risk Register and the effectiveness of Risk Treatment Action Plans should be reviewed as an agenda item in monthly Project Steering Committee meetings, and included in the monthly progress reporting to HyD.

3.9 Communication and Consultation

Communication and consultation are important considerations at each step of the risk management process.

Internal stakeholders are involved in the risk management process either through direct involvement in the risk management workshops, or via information distribution by standard project communication protocols (such as meetings, minutes, progress reports etc).

All internal stakeholders not directly involved in risk management workshops are encouraged to contribute to the risk management process, by proposing risks through their supervisor or direct to the Risk Manager.

External stakeholders are also indirectly involved in the risk management process through consultation with ETWB and/or HyD staff.

The Risk Management Plan, Risk Register and Risk Treatment Action Plans will be circulated to the Project Steering Committee, leaders within the project team and sub-consultants for the project team.

3.9.1 Project Steering Committee Meetings

Project Steering Committee meetings will be held monthly. Risk management will feature as a regular agenda item during these meetings. The meetings provide a regular opportunity to ensure that the risk management process is being implemented, reviewed and controlled.

The meetings serve as a forum for reviewing risk management activity and determining what action is necessary. Newly identified risks, their treatment and the progress of risk issues will be discussed, as should any higher-level decisions that require action. This includes decisions on issues such as the adequacy of current risk activity, performance of stakeholders and problems being encountered. The Risk Manager should chair this section of the Project Steering Committee meeting.

3.10 Risk Management Documentation

For this project three forms of risk management documentation will be utilised, being:

- Risk Management Plan – this document will be updated to coincide with the key risk review key risk review milestones identified in Section 3.8
- Risk Register – this will be the primary repository for all risk information, and will be updated monthly during the life of the project. The template for the Risk Register that we will use on this project is the same as that contained in the ETWB Risk Management User Manual
- Risk Treatment Action Plans - the template for the Risk register that we will use on this project is the same as that contained in the ETWB Risk Management User Manual

4. RESPONSIBILITIES

4.1 Strategic Management

The strategic management of risk is the responsibility of HyD and includes:

- Ensuring that a risk management process is implemented on the project to comply with ETWB policy.
- Ensuring that there are sufficient resources to undertake risk management activities.
- Ensuring that business risks are identified, assessed, treated and communicated to other levels of management where appropriate.
- Making decisions on project risk issues that are escalated from tactical levels of management

Responsible Person: Mr J Chang

Organisation: HyD

4.2 Tactical Management

Tactical risk management is the responsibility of Arup and includes:

- Preparation of the risk management plan
- Ensuring that the risk management plan is implemented in accordance with the ETWB Risk Management User Manual
- The assignment of operational level responsibilities
- The co-ordination of all risk related project activity.
- Making risk based decisions that are passed up from operational levels
- Ensuring that project and operational risks are identified, assessed, treated and communicated to other levels of management
- Referring strategic level decisions to strategic management.

Responsible Person: Louis Lau

Organisation: Arup

4.3 Operational Management

The **Risk Manager** from Arup is responsible for ensuring that risk management activity is properly facilitated and administered. Responsibilities include:

- Ensuring that all those involved understand the risk management process that is to be undertaken and their responsibilities to it.
- Chairing risk management sessions
- Compliance with the risk management plan and the ETWB Risk Management User Manual
- The assignment of risk management activity where appropriate.
- Making risk based decisions where appropriate
- Consultation with project team members, strategic and tactical management on risk issues.
- Recording and updating risk information on the risk register
- Monitoring, control and review of risk management activity
- Communication of risk management issues
- Preparing and updating all risk management documentation

Responsible Person: Louis Lau

Organisation: Arup

4.4 Project Team

All those within the project team should have an awareness of risk management and relate the details of risks to the core team responsible for the implementation of this risk management

plan. Project team members also have a responsibility to undertake risk management activity where it is assigned to them by the core team and by the mechanisms detailed in this document.

The Risk Manager appointed by Arup for the delivery of this project is Louise Lau (louise.lau@arup.com.au) of Arup Hong Kong. The Risk Manager will report directly to the Project Steering Committee.

4.5 Responsibility for Deliverables

Deliverable	Timing	Responsible
Risk Management Plan	At the commencement of the project – with updates of the plan to coincide with the key risk review milestones identified in Section 3.8	Risk Manager
Risk Register	Maintained throughout the project	Risk Manager
Risk Meetings	As considered necessary by the Risk Manager	Risk Manager
Risk Reporting to Project Steering Committee Meetings	Monthly & prior to Steering Committee Meeting	Risk Manager
Risk Treatment Action Plans	Whenever risk treatments are defined and the risk owner can be informed of his responsibility	Risk Manager
Stakeholder' s Reports	Reporting to external stakeholders as required	HyD

EXAMPLE RISK TREATMENT ACTION PLAN



Risk Treatment Action Plan		Treatment Plan No: 22.1
Project Name: Interchange Junction at Pok Fu Lam Road and Sassoon Road		Risk ID No: 22
Approved and issued by: <i>(Project Risk Manager)</i> HyD Project Risk Manager (Terence Chan)	Issued to for implementation by: <i>(Risk Treatment Owner)</i> Zen Pacific Site Manager (Leng Lim)	Date Issued: 15 Feb 1997
<i>Full description of risk:</i> The Traffic Management Plan (TMP) is flawed or fails to provide effective 24 hour access to Queen Mary Hospital leading to delays for emergency vehicle access to the hospital		
<i>Summary of likely impacts (consequences) and recommended response and impact:</i> This may result in the delay of the provision of urgent medical treatment to accident / emergency patients, with possible resultant long-term health impacts or loss of life.		
<i>Specific details of agreed treatment actions (action plan):</i> Zen Pacific to reschedule construction activities to reduce impacts of road closures and traffic management (associated with construction contract) provisions on emergency vehicle access to Queen Mary Hospital.		
<i>Approved resource requirements:</i> Variation No. 24/97 issued in favour of Zen Pacific (approved on 15 Feb 1997) for implementation of the above action plan. This includes approved contract EoT of 45 working days, and a contract sum increase of \$286,000.00 for prolongation costs and allowance for additional traffic management activities.		
<i>Responsibility:</i> Zen Pacific Site Manager (Leng Lim), supported by HyD Project Risk Manager (Terence Chan) as appropriate based upon ongoing liaison with Queen Mary Hospital.		
<i>Timing:</i> Revised programme to be forwarded to by HyD Project Risk Manager (Terence Chan) for review on or before 28 Feb 1997. HyD (supported by Arup) then have 10 working days to review revised programme. Approved programme must then be implemented no late than 15 March 1997.		
<i>Monitoring & reporting requirements:</i> Effectiveness of revised programme and associated provision of emergency access to Queen Mary Hospital to be monitored by: <ul style="list-style-type: none"> • Site superintendent daily logs • Incident reports received from Queen Mary Hospital • Regular monthly contract progress meetings • Ongoing liaison with Queen Mary Hospital 		
Treatment completed by: <i>(Risk Treatment Owner)</i> Zen Pacific Site Manager (Leng Lim) Signature:..... DATE : 28.12.2001	Treatment close-out approved by: <i>(Project Risk Manager)</i> (Terence Chan) Signature:.....	Date of Completion: 30 Dec 2001

Design and Construction of the Interchange at Junction of Pok Fu Lam Road and Sassoon Road

Example Extract from Project Risk Register

Risk ID	Identified Risk Item		Existing Control Measures (ECMs)		Initial Risk Analysis			Residual Risk Analysis						Close Out			
	Risk Item	Consequences & Additional Comments / Notes	ECMs Already in Place	ECM Owner	Consequence of Risk with ECMs	Likelihood of Risk with ECMs	Risk Rating with ECMs	Treatment Strategy	Possible Treatments (Additional Risk Control Measures RCMs)	Approved for Implementation	Risk Treatment Action Plan Ref. No.	Treatment Owner	Timeframe for Implementation		Consequence of Risk with additional RCMs	Likelihood of Risk with additional RCMs	Risk Rating with additional RCMs
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
22	The Traffic Management Plan (TMP) is flawed or fails to provide effective 24 hour access to Queen Mary Hospital leading to delays for emergency vehicle access to the hospital	Compromises health / safety of patients needing emergency medical treatment	Traffic Impact Assessment (TIA)	(Louis Lau) Arup	Major	Possible	High	Mitigation	Alter design to reduce construction impacts on access to Queen Mary Hospital	<input checked="" type="checkbox"/> Approved				Major	Unlikely	Medium	
		Legal action from patients suffering long term effects from delay in receiving emergency medical treatment, associated with traffic delays caused by project / construction activity	Consultation with Queen Mary Hospital	Terrence Chan (HyD)				Mitigation	Reschedule construction activities to reduce construction impacts on access to Queen Mary Hospital	<input checked="" type="checkbox"/> Approved	22.1	Leng Lim (Zen Pacific)	30-Dec-98				
		Programme delays associated with rescheduling of the construction works to accommodate a revised TMP	Traffic Management Plan (TMP)	(Louis Lau) Arup				Mitigation	Independent checking of TIA and modelling of TMP	<input checked="" type="checkbox"/> Approved	22.2	Terrence Chan (HyD)	30-May-98				
		Cost impacts associated with rescheduling of the construction works to accommodate a revised TMP	Provisions with thin the construction contract that require the contractor to provide 24 hour unimpeded access to Queen Mary Hospital for emergency vehicles	Leng Lim (Zen Pacific)				Mitigation	Trial run of TMP	<input checked="" type="checkbox"/> Approved	22.3	Leng Lim (Zen Pacific)	31-Oct-98				
			Traffic ordinances	Terrence Chan (HyD)				Mitigation	Reduce duration of construction programme (reduction of period of possible disturbance)	<input type="checkbox"/> Approved							
								Avoidance	Divert all emergency vehicles to another hospital when road closures/disturbance is at its peak	<input type="checkbox"/> Approved							
								Acceptance with contingency	Installation of CCTV cameras to monitor road conditions, and allow rapid implementation of contingency measures	<input type="checkbox"/> Approved							
23	The procurement / tendering process is flawed or inappropriate leading to the appointment of an inappropriately qualified / experienced contractor	Significant delays in progress	Procurement guidelines and procedures contained in ETWB TCWs	Terrence Chan (HyD)	Moderate to Major	Unlikely	Medium			<input type="checkbox"/> Approved							
		Failure to meet required specified quality standards for construction	Guidelines within the Project Administration Handbook	Terrence Chan (HyD)						<input type="checkbox"/> Approved							
		Legal action / claims against the contractor for failure to meet contract requirements	STORE procurement regulations	Terrence Chan (HyD)						<input type="checkbox"/> Approved							
			Prequalification process and approved lists of contractors for public works projects	Terrence Chan (HyD)						<input type="checkbox"/> Approved							
			Well developed evaluation processes	Terrence Chan (HyD)						<input type="checkbox"/> Approved							
24	Unforeseen or uncharted utilities encountered during construction, with possible damage to utilities and disruption of services to the Queen Mary Hospital and other local premises	Delays to construction activity whilst services are repaired / diverted	Site investigation (trial pits) during design stage	(Louis Lau) Arup	Major to Catastrophic	Possible	High	Avoidance	Change in road alignment to avoid potential services	<input type="checkbox"/> Approved				Major	Unlikely	Medium	
		Costs associated with repair / diversion of services	Historical plans / records maintained by utilities authorities	(Louis Lau) Arup				Avoidance	Diversion of services by utilities authorities prior to commencement of construction contract	<input type="checkbox"/> Approved							
		Protests and / or claims from the Queen Mary Hospital and local businesses / community associated with disruption of utility services	Consultation with utilities authorities	Terrence Chan (HyD)				Mitigation	Additional site investigations (hand-dug trial pits)	<input checked="" type="checkbox"/> Approved	24.1	Leng Lim (Zen Pacific)	31-Jan-99				
		Safety of site personnel compromised	Excavation permit process	Leng Lim (Zen Pacific)				Mitigation	Additional site supervision resources to monitor excavation activities	<input checked="" type="checkbox"/> Approved	24.2	Leng Lim (Zen Pacific)	Ongoing				
			Contract provisions for protection of utilities during excavation	Leng Lim (Zen Pacific)				Acceptance with contingency	Development of contingency plans should services be severed / disrupted	<input checked="" type="checkbox"/> Approved	24.3	Leng Lim (Zen Pacific)	28-Feb-99				
								Mitigation	Modify design to reduce volume of excavation	<input type="checkbox"/> Approved							
25	Noise pollution arising from the site works exceed agreed (forecast) levels resulting in complaints from the local community and Queen Mary Hospital	Additional costs arising from change in working practices to reduce noise levels	Environmental permit process	Leng Lim (Zen Pacific)	Minor	Possible	Medium			<input type="checkbox"/> Approved							
		Programme delays associated with rescheduling of noisy activities to alternate times	Compliance with statutory regulations	Leng Lim (Zen Pacific)						<input type="checkbox"/> Approved							
			Contract provisions in relation to noise disturbance	Terrence Chan (HyD)						<input type="checkbox"/> Approved							
			Agreed working hours	Leng Lim (Zen Pacific)						<input type="checkbox"/> Approved							
										<input type="checkbox"/> Approved							

Notes:

(1) Unique identification number for each identified risk	(7) Likelihood that the assessed level of consequence will occur. Level of likelihood derived from risk analysis criteria (taking into account the influence of any Existing Control Measures)	(13) Person / party responsible for implementation of the approved treatment (Additional Risk Control Measure)
(2) Full description of the risk and outcomes	(8) Level of risk (risk rating) derived from the combination of adjudged level of consequence and the associated (linked) level of likelihood, using the risk analysis matrix	(14) Timeframe / schedule for implementation of the approved treatment (Additional Risk Control Measure)
(3) Description of the consequences of the risk on project objectives, together with any other additional details as appropriate	(9) The proposed treatment strategy e.g. avoid, mitigate by reducing likelihood, mitigate by reducing consequence, share, transfer, accept	(15) Residual level of consequence derived from risk analysis criteria (taking into account the influence of any approved Additional Risk Control Measures and also the Existing Control Measures)
(4) Details of Existing Control Measures that will exert a positive influence the risk	(10) Full details of the proposed risk treatment activities (Additional Risk Control Measures)	(16) Residual likelihood that the assessed level of consequence will occur. Level of likelihood derived from risk analysis criteria (taking into account the influence of any approved Additional Risk Control Measures and also the Existing Control Measures)
(5) Person / party responsible for implementation of the Existing Control Measure	(11) Confirmation of senior management approval for implementation of treatments (Additional Risk Control Measures)	(17) Residual level of risk (residual risk rating) derived from the combination of adjudged level of residual consequence and the associated (linked) residual level of likelihood, using the risk analysis matrix
(6) Level of consequence derived from risk analysis criteria (taking into account the influence of any Existing Control Measures)	(12) Reference No. for associated Risk Treatment Action Plan (where appropriate)	(18) Any comments on risk issues and report on current status should be entered here

