

CITY OF MOUNT GAMBIER

Meeting to be held at the Council Chamber, Civic Centre, 10 Watson Terrace, Mount Gambier  
on Tuesday 20<sup>th</sup> August, 2013 at 6.00 p.m.

AGENDA

**CONSIDERATION FOR EXCLUSION OF PUBLIC**

Cr Von Stanke moved that the following items be received, discussed and considered 'In Confidence' by excluding the public pursuant to Section 90(2) of the Local Government Act 1999, and an order be made that the public (with the exception of other Council Members and Council Officers now present) be excluded from the meeting in order for the items to be considered 'In Confidence' as the Committee is satisfied that the item is a matter that can be considered 'In Confidence' pursuant to the grounds referenced in Section 90(3) of the said Act:

ITEM NO.	SUBJECT MATTER	S90(3) GROUNDS
<b>Operational Services Committee</b>		
18.	<b><u>PROPERTY MANAGEMENT</u></b> - Mount Gambier Aquatic Centre Business Plan 2013/2014 - Ref. AF11/1451	(a) (b) (d)
19.	<b><u>PROPERTY MANAGEMENT</u></b> - Project Management - Former Mount Gambier Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224	(b) (d) (k)
20.	<b>CONSIDERATION FOR KEEPING MATTERS CONFIDENTIAL</b>	

Cr Mutton seconded

**Carried**

**19. PROPERTY MANAGEMENT - Project Management - Former Mount Gambier Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224**

*Goal:* *Building Communities*

*Strategic Objective:* (i) *Strive for an increase in services and facilities to ensure the community has equitable access and that the identified needs of the community are met*

The Acting Presiding Member reported:

- (a) Council has called Expressions of Interest for demolition of the Former Hospital and ancillary buildings. The Expressions of Interest closed on 31<sup>st</sup> July 2013;
- (b) a verbal report will be provided at the meeting on this;
- (c) the following Council Officers were involved in the assessment of the Expressions of Interest's and were selected to provide expertise in various areas in order to ensure a full assessment was undertaken on the Expression of Interest's:

**Assessment Panel**

Daryl Morgan - Engineering / Project Management / Work, Health and Safety

Michael Silvy - Architectural / Project Management

Gary Button - Financial

Aaron Izzard - Environmental Sustainability

Cr Des Mutton - Council Representation

Daryl Sexton - Process / Peer Review

- (d) Expression of Interest's were received from the following companies:

1. City Circle - Victoria
2. Royal Park Salvage - South Australia
3. D & V Services - South Australia
4. Delta Group - Victoria
5. Kyshor Contracting - South Australia
6. McMahon Services - South Australia
7. Gambier Earth Movers - South Australia (local)
8. SMB Civil - South Australia (local)

- (e) Council's Expression of Interest evaluation matrix was used to assess each of the eight (8) submissions and the following table summarises the assessment:

	EVALUATION CRITERIA	COMMENTS	CITY CIRCLE	ROYAL PARK	D&V SERV	DELTA	KYSHOR	McMAHON	GEM	SMB
	<b>1. PROFESSIONAL COMPETENCE</b>									
1.1	Compliance to Specifications		4.0	4.4	4.4	4.4	3.4	5.0	4.6	4.6
1.2	Capability / Availability		4.0	4.6	4.4	4.8	2.2	5.0	4.6	3.6
1.3	Past performance in similar sized projects		4.0	4.6	3.8	5.0	2.8	5.0	3.6	2.4
1.4	Customer service standards		1.4	2.2	2.8	3.6	2.2	4.4	4.4	3.0
1.5	Quality systems		2.8	4.6	4.6	4.6	3.0	5.0	4.0	3.4
	<b>2. COMMERCIAL CAPABILITY</b>									
2.1	Financial Viability of company		4.0	4.2	2.8	4.4	2.2	5.0	4.6	4.2
2.2	Adequate Professional Indemnity Insurance		1.6	1.0	1.0	2.6	0.6	5.0	5.0	4.0
2.3	Public liability Insurance		5.0	5.0	4.0	4.6	3.4	5.0	5.0	5.0
2.4	Financial capacity to fund works prior to progress payments		4.2	4.2	2.6	4.4	2.2	5.0	4.8	4.4
	<b>3 ENVIRONMENTAL COMMITMENT</b>									
3.1	Environmental controls to address project		4.4	3.6	4.4	4.8	3.4	4.8	4.8	3.2
3.2	Environmental approach to project (both statutory & financial sustainability viewpoint)		4.2	3.2	4.2	4.0	2.6	4.8	4.0	3.0
3.3	Environmental Management System		3.2	3.4	4.0	4.2	2.4	5.0	3.8	3.8
3.4	Sustainability Principles		3.6	2.8	3.2	4.2	2.0	4.8	3.6	2.6
3.5	Previous commitment to environmental considerations		3.2	3.4	2.4	4.0	2.4	4.8	2.8	3.0
	<b>4. WORK HEALTH &amp; SAFETY, RISK MANAGEMENT</b>									
4.1	Relevant licences / accreditations to carry out works		4.4	4.6	4.8	4.4	3.0	4.2	4.2	3.8
4.2	Compliance with WHS regulations		4.2	4.2	4.8	4.6	4.0	5.0	4.4	3.4
4.3	WHS policies and procedures in place		4.4	3.8	4.8	4.6	4.0	5.0	4.4	3.2
4.4	Methodology Statement prepared to address safety issues		4.8	3.8	4.8	4.2	2.6	5.0	4.6	4.2
4.5	Risk Management policies and procedures in place		4.6	2.8	4.6	4.6	3.6	5.0	4.4	3.4
4.6	Risk Analysis of project		3.6	2.4	4.8	3.8	2.8	5.0	4.6	3.6
	<b>5. SOCIAL CONSIDERATIONS</b>									
5.1	Involvement of Local Contractors		0.0	0.2	0.0	0.0	4.4	2.8	5.0	5.0
		<b>TOTAL</b>	<b>75.6</b>	<b>73.0</b>	<b>77.2</b>	<b>85.8</b>	<b>59.2</b>	<b>100.6</b>	<b>91.2</b>	<b>76.8</b>
		Raw score ranking	6	7	4	3	8	1	2	5



(f) Comments

There were three (3) clear standouts in the assessments being McMahons, Gambier Earth Movers and Delta Group who have supplied all the documentation that satisfied the key areas of the Expression of Interest, namely:

- Professional competence
- Commercial capability
- Environmental commitment
- Work, Health, Safety and Risk Management
- Social considerations

These three (3) companies have also demonstrated previous experience in large demolition projects and consequently have provided a sound methodology for demolition of the Former Mount Gambier Hospital site.

The assessment panel had some concerns over the ability of SMB Civil to undertake such a complex and significant project given they have limited experience in large scale demolition projects;

City Circle have significant experience in high rise demolition interstate but some concerns were raised regarding appropriate licences etc to operate in South Australia.

Royal Park, D & V Services and Kyshor all rated significantly lower by all panel members than that of the top three (3) submissions. Attached to the agenda was a copy of the top three (3) rated submissions (McMahon, Gambier Earth Movers and Delta Group), however if Members wish to see a copy of the other five (5) submissions then these can be made available upon request.

**Cr Von Stanke moved it be recommended:**

- (a) **The report be received;**
- (b) **Council invite tenders from the following three (3) companies:**
  1. **McMahon Services**
  2. **Gambier Earth Movers**
  3. **Delta Group**

**Cr Mutton seconded**

**Carried**

**20. CONSIDERATION FOR KEEPING MATTERS CONFIDENTIAL**

**Cr Harfield moved that an order be made pursuant to Section 91(7) of the Local Government Act 1999 that the documents in relation to the following items which have been considered by the Operational Services Committee on a confidential basis pursuant to Section 90 (3) be kept confidential as follows:**

ITEM NO.	SUBJECT MATTER	ELEMENT TO BE KEPT CONFIDENTIAL	DURATION, CIRCUMSTANCES OR REVIEW
18.	<u>PROPERTY MANAGEMENT</u> - Mount Gambier Aquatic Centre Business Plan 2013/2014 - Ref. AF11/1451	All details	12 months
19.	<u>PROPERTY MANAGEMENT</u> - Project Management - Former Mount Gambier	All details	Council Meeting of 20 <sup>th</sup> August

	<b>Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224</b>		<b>2013</b>
--	--	--	-------------

**Cr Von Stanke seconded**

**Carried**

Meeting closed at .....  
FM

# McMAHON SERVICES



## Expression of Interest

### Demolition of the Mount Gambier Old Hospital Site

Prepared for: City of Mount Gambier

Prepared by: McMahon Services Australia Pty Ltd

July 2013

- ▶ Civil Engineering
- ▶ Environmental Remediation
- ▶ Hazardous Waste
- ▶ Asbestos Removal
- ▶ Roofing & Cladding
- ▶ Building Services
- ▶ Rigging & Craneage
- ▶ Demolition
- ▶ Industrial Services
- ▶ Marine Contracting



McMahon Services Australia Pty Ltd  
ABN 75 097 072 565  
ACN 097 072 565  
www.mcmservices.com.au

26 Duncan Road Dry Creek SA 5094  
PO Box 542 Enfield Plaza SA 5085  
T (08) 8203 3100 | F (08) 8260 5210  
E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

31 July 2013

City of Mount Gambier  
Civic Centre  
10 Watson Terrace  
Mount Gambier SA 5290

Attention: Daryl Morgan

**RE: Expression of Interest**  
***Demolition of the Mount Gambier Old Hospital Site – 7 Lake Terrace West***

McMahon Services are pleased to present our Expression of Interest and supporting information for the above-mentioned project.

Should you require any further information, please do not hesitate to contact Mr. Chris Latham, Manager – Demolition & Operations on 0407 888 181 or [chrisl@mcmservices.com.au](mailto:chrisl@mcmservices.com.au)

We look forward to your consideration of this proposal and the opportunity to work with you in the near future.

Yours faithfully,



**Chris Latham**  
Manager – Demolition & Operations  
McMahon Services Australia Pty Ltd

## Table of Contents

<b>EOI Response .....</b>	<b>4</b>
<i>PART A: General Information.....</i>	4
<i>PART B: Curriculum Vitae.....</i>	5
<i>PART C: Response to Selection Criteria.....</i>	6
<i>PART D: Experience .....</i>	9
<i>PART E: Declaration .....</i>	13

### Appendices

Appendix A	Company Profile
Appendix B	Work Methodology Statement
Appendix C	Organisational Chart
Appendix D	Proposed Resources
Appendix E	Track Record
Appendix F	Financial Capacity
Appendix G	Sustainability
Appendix H	Compliance



# EOI Response

## PART A: General Information

### A1. Registrant Details

First name	Chris Latham	Last name	Latham
Position	Manager – Demolition & Operations		
Organisation	McMahon Services Australia Pty Ltd		
ABN	75 097 072 565	ACN	097 072 565

### A2. Contact Details

Email address	<a href="mailto:chrisl@mcmervices.com.au">chrisl@mcmervices.com.au</a>		
Phone	08 8203 3100	Mobile	0407 888 181
Fax	08 8260 5210	Website	<a href="http://www.mcmervices.com.au">www.mcmervices.com.au</a>

### A3. Address

Address line 1	26 Duncan Road
Suburb/City	Dry Creek
State	SA 5094

### A4. Corporate Structure & Affiliated Entities

Provide full details of corporate and ownership structure, including identification of any related bodies corporate. If the construction team is a subsidiary, provide full details of the legal and financial relationship between itself and its parent entities.

McMahon Services Australia Pty Ltd is owned by McMahon Services Holdings Pty Ltd.  
 Our construction team consists of full-time staff employed by McMahon Services Australia Pty Ltd.

**Refer Appendix C: Organisational Chart**

## **PART B: Curriculum Vitae**

Please provide a brief CV for each participating member of the company or team.

Our Project Management Team has been carefully selected based on their knowledge, expertise, previous experience and length of service in the appropriate fields. This will ensure that the project is being handled competently and that each member of team has an in-depth understanding of each undertaking, from scope of works through to methodology and programming.

**Refer Appendix D: Proposed Resources**

## PART C: Response to Selection Criteria

Applicants' capability will be assessed against the following SIX selection criteria. Please provide statements for each criterion.

**C1. Experience in the project type**

The management and technical capacity of the demolition team, including experience, expertise and performance on previous similar sized projects.

**Refer Appendix E: Track Record**

**C2. Financial capacity**

Financial capacity and financial control systems including details of Building Licences and Public Risk Insurance policies held.

**Refer Appendix F: Financial Capacity**

**Refer Appendix H: Compliance**

**C3. WHS & Risk Management**

Conformance with current Work Health and Safety Regulations and other relevant Safe Work SA requirements, together with Risk Management Procedures.

McMahon Services have in place an integrated system, which utilises our Business Management System and project specific Management Plans. These plans outline our individual roles and responsibilities and how McMahon Services propose to perform activities in relation to all key risk areas.

Attached within this submission are Example Project Management Plans as follows:

- Project Risk Assessment Register (PRAR)
- Health, Safety & Environmental Plan (HSE)

McMahon Services will undertake a detailed review of the works identifying potential risks associated with the project. Areas of exposure or potential problems encountered will specify a risk level of the problem. Our PRAR will outline risk controls to be implemented to mitigate the exposure of the risk on the project, and then reassessed to an acceptable risk level to ensure a safe, environmentally-conscious and quality project.

**Refer Appendix G: Sustainability**



**C4. EPA**

Knowledge and understanding by the demolition team of the EPA guidelines associated with projects of this type.

McMahon Services will conduct our project activities in accordance with all EPA requirements. McMahon Services have a strong working relationship with the EPA and have consulted with them on numerous projects.

The ability to design and implement procedures and work practices that minimise the impact on adjoining stakeholders, whilst delivering the required project outcomes, will be a key factor for the project.

The issues of noise, dust, storm water, asbestos removal, working hours, transport routes, traffic management, approvals and licensing are all issues which could potentially negatively impact the project if not fully understood and properly managed.

Our delivery method of providing a highly skilled and experienced project team that are fully conversant with all relevant requirements and conditions of statutory bodies, codes of practice and regulations aligned with our comprehensive business management systems and company resources, will ensure that the requirements of the EPA are fully complied with.

**Refer Appendix H: Compliance**

**C5. Proposed resource allocation**

Number and type of staff proposed including proposed roles for each team member and available plant and machinery. Also include a list of likely subcontractors and their roles in this project.

McMahon Services have provided a proposed project structure chart and nominated key project personnel. We anticipate a peak work force in the order of 20 personnel. At this point we are not in a position to nominate sub-contractors but we have addressed local engagement in other areas of this submission.

We have also included a comprehensive list of our company-owned plant and equipment.

Please click on the below link to view our Ultra High Reach Demolition Excavator in action:  
<http://www.mcmservices.com.au/media/videos/ultra-high-reach-demolition-excavator/ultra-high-reach-demolition-excavator>

**Refer attached Appendix D: Proposed Resources**

**C6. Proposed start and completion date**

Having carried out previous detailed site assessments, McMahon Services is able to provide the following programme advice with confidence:

1. Provision of detailed tender submission following receipt of tender documentation – 2 weeks
2. Finalisation of project plan and authorities approvals from date of award – 2 weeks
3. Mobilisation to site and site establishment – 2 weeks
4. Site works – 10 weeks

Our current workload and pre commitments for the PC1250 would enable us to commence works on site in around 4 – 6 weeks.

**C7. Proposed work methodology statement**

Please indicate your proposed work method statement including how you will address criteria C3 and C4 above.

**Refer attached Appendix B: Work Methodology Statement**



## PART D: Experience

### DI. PROJECT SUMMARIES

Please provide summary details for up to five relevant projects you have carried out. Append additional copies of this section as required.

Project 1			
Contract	Adelaide Oval Redevelopment		
Start date	April 2013	Completion date	June 2013
Client Organisation	Baulderstone		
Client Contact Name	Chris Leopold	David Ising	Simon Jackson
Client Contact Phone number	8202 8888	0417 892 835	0418 451 142
Client Contact email	<a href="mailto:leopoldc@baulderstone.com.au">leopoldc@baulderstone.com.au</a>	<a href="mailto:isingd@baulderstone.com.au">isingd@baulderstone.com.au</a>	<a href="mailto:jacksons@baulderstone.com.au">jacksons@baulderstone.com.au</a>
Contract basis	Lump Sum		
Approximate Area {sq. m}	5,000		
Total project cost	\$1.7 Million		
Points of interest:			
<ul style="list-style-type: none"> <li>• CLICK ON THIS LINK TO SEE PROJECT FOOTAGE <a href="http://www.mcmservices.com.au/media/videos/adelaide-oval-demolition/adelaide-oval-demolition">http://www.mcmservices.com.au/media/videos/adelaide-oval-demolition/adelaide-oval-demolition</a></li> <li>• Demolition and salvage works</li> <li>• Utilised Ultra High Reach Demolition Excavator</li> </ul>			
<b>Refer attached Appendix E: Track Record</b>			

Project 2			
Contract	Former Harris Scarfes Building Redevelopment		
Start date	April 2010	Completion date	November 2011
Client Organisation	Hansen Yuncken		
Client Contact Name	Brenton Knowles		
Client Contact Phone number	0412 980 030		
Client Contact email	<a href="mailto:bknowles@hansenyuncken.com.au">bknowles@hansenyuncken.com.au</a>		
Contract basis	Lump Sum Tender		
Approximate Area {sq. m}	7,000 square metres		
Total project cost	\$7 Million		

Points of interest:

- CLICK ON THIS LINK TO SEE PROJECT FOOTAGE  
<http://www.mcmservices.com.au/media/videos/time-lapse-of-harris-scarfe-demolition/time-lapse-of-harris-scarfe-demolition>
- High profile inner-city asbestos removal, demolition and civil project
- Demolition of buildings up to seven storeys high
- Utilised Ultra High Reach Demolition Excavator
- Extensive safety procedures and excavations – revised frequently to account for changing access points

**Refer attached Appendix E: Track Record**

Project 3			
Contract	Fisher Street Building Demolition		
Start date	February 2011	Completion date	March 2011
Client Organisation	Living Choice		
Client Contact Name	Leigh Buckton		
Client Contact Phone number	0438 562 564		
Client Contact email	<a href="mailto:bldwise@bigpond.net.au">bldwise@bigpond.net.au</a>		
Contract basis	Lump Sum Tender		
Approximate Area {sq. m}	6,200		
Total project cost	\$950,000		
Points of interest:	<ul style="list-style-type: none"> <li>• Complete demolition of dilapidated form Julia Farr Building</li> <li>• Collection and removal of scrap metal for recycling</li> <li>• Utilised Ultra High Reach Demolition Excavator</li> </ul>		
<b>Refer attached Appendix E: Track Record</b>			

Project 4			
Contract	Kimberly-Clark Project Marvel		
Start date	December 2011	Completion date	June 2012
Client Organisation	Kimberly-Clark		
Client Contact Name	Wayne McNally		
Client Contact Phone number	0409 252 915		
Client Contact email	<a href="mailto:Wayne.mcnally@kcc.com">Wayne.mcnally@kcc.com</a>		



Contract basis	Lump Sum Tender
Approximate Area {sq. m}	4,500
Total project cost	Confidential
Points of interest: <ul style="list-style-type: none"> <li>• Deconstruction of three large tissue machine buildings and storage silo</li> <li>• Existing surrounding structures still in use</li> <li>• Utilised Ultra High Reach Demolition Excavator</li> <li>• 1,400 tonnes of deconstructed materials transported to Adelaide for processing</li> </ul>	
<b>Refer attached Appendix E: Track Record</b>	


Project 5			
Contract	Queen Elizabeth Hospital Demolition		
Start date	September 2011	Completion date	October 2011
Client Organisation	DTEI / Hansen Yuncken		
Client Contact Name	Ben Tolley		
Client Contact Phone number	0438 898 535		
Client Contact email	-		
Contract basis	Lump Sum Tender		
Approximate Area {sq. m}	9,000		
Total project cost	\$3.2 Million		
Points of interest: <ul style="list-style-type: none"> <li>• Hospital and boiler house demolition works, including 40 metre high chimney stack</li> <li>• Sensitive area, adjacent boundary residential properties</li> <li>• Utilised Ultra High Reach Demolition Excavator, less noise and significantly less dust emissions – ideal for confined suburban projects</li> </ul>			
<b>Refer attached Appendix E: Track Record</b>			

Project 6			
Contract	Nyrstar Lead Smelter Emergency Shutdown		
Start date	November 2012	Completion date	October 2012
Client Organisation	Nyrstar		
Client Contact Name	Steven Finn		
Client Contact Phone number	0408 831 753		

Client Contact email	<a href="mailto:Steven.finn@nyrstar.com">Steven.finn@nyrstar.com</a>
Contract basis	Lump Sum Tender
Approximate Area {sq. m)	15,000
Total project cost	\$1.4 Million
Points of interest: <ul style="list-style-type: none"> <li>• Port Pirie Lead Smelter emergency shutdown works</li> <li>• 80 full-time personnel, 4 week shutdown</li> <li>• Included extensive industrial cleaning</li> <li>• Utilised Ultra High Reach Demolition Excavator</li> </ul> <p><b>Refer attached Appendix E: Track Record</b></p>	

## PART E: Declaration

As the Respondent's duly authorised representative, I declare that the particulars shown herein are true and correct in every detail and all the required information has been supplied.

Name of Authorised Person	Chris Latham
Position	Manager – Demolition & Operations
Signature	





**Appendix A**  
**Company Profile**



## Company Overview

### McMahon Services Australia Pty Ltd

McMahon Services is an industry leading, privately owned industrial, construction and environmental service provider.

Established in 1990 by brothers David and Andrew McMahon, McMahon Services has grown from a team of 12 into a truly national business. Our family business heritage and culture of innovation set us apart, fostering a commitment to developing leading edge approaches across the whole organisation that surpass industry standards.

With offices in South Australia, Queensland, Western Australia and the Northern Territory, we employ more than 450 staff and operate across Australia, from city centres to remote locations.

Through our multi-disciplinary approach, we have successfully completed some of Australia's largest and most significant construction projects with a combined value in excess of \$1 billion. Our work spans high volume small works to large scale multi-million dollar projects over a large geographical area.

Our key service areas include:

- Civil Engineering
- Building Services
- Environmental Remediation
- Rigging and Cranage
- Hazardous waste
- Demolition
- Asbestos Removal
- Industrial Services
- Roofing and Cladding
- Marine Contracting

We go to where our clients need us to be, with a proven ability to undertake work in remote locations, coupled with an exceptional emergency response capability. Our immediate response means we are on-site ready to commence work when needed. Our experience covers derailment clean-ups and recovery, through to hazardous spills, and fire and water damage.

Our diversity and can-do attitude are our core strengths. We apply our knowledge, resources and experienced teams to work across a broad range of disciplines and sectors, providing our clients with the expertise and hands-on skills to meet their specific needs.

As a multi-disciplinary, full service provider, we use our own direct wage staff and boast a \$60 million network of modern company-owned plant and equipment.

Safety is at the forefront of our operations, with McMahon Services awarded Federal Safety Accreditation in 2009 – the first multi-disciplinary construction services company in Australia to achieve this recognition.

We also hold third party accreditation to AS/NZS ISO 9001:2008 (Quality Management Systems), AS/NZS ISO 14001:2004 (Environmental Management Systems) and AS/NZS 4801:2001 (Occupational Health & Safety Management Systems).

We look forward to the future and tackling new challenges with the same enthusiasm, dedication and excellence that has been true of all our operations to date.

## Financial Capacity

Since the commencement of the McMahon Services business in 1990, the McMahon Services group has continued to build its financial capacity year upon year. For the 2011/2012 financial period we had a group turnover of more than \$158 million and a net profit before income tax of \$14.5 million. With net assets in excess of \$35 million and access to significant funding with our long term banking partner, the group is in a strong financial position.

The Group's financial position provides the assurance we are capable of providing the financial resources to achieve a successful outcome for the project.

## Insurance

McMahon Services has purchased the most all-embracing insurance cover available in Australia to not only protect ourselves as contractors, but also where required, to transmit to our clients the benefits that we have secured by incorporating the client's interests under the policies.

McMahon Services insurance program incorporates the following Insurance protection:

Insurance Class	Liability Limit
Combined General Liability (Excluding Asbestos & Demolition)	\$25,000,000
Combined General Liability (Asbestos Removal & Demolition)	\$20,000,000
Combined General Liability (Asbestos Disease)	\$20,000,000
Annual Contract Workers	\$5,800,000
Contractor's Plant & Equipment	\$3,774,645
Motor Vehicle	\$30,000,000
Workers Compensation - South Australia	Varies - dependent on claim
Workers Compensation - Queensland	Varies - dependent on claim
Workers Compensation - Northern Territory	\$20,000,000
Workers Compensation - Western Australia	\$50,000,000

## Risk Management

Risk Management is at the core of improving operational effectiveness and efficiency. Our risk management approach is based on the continual identification and assessment of risks, with the overall aim of improving governance, and strengthening health and safety performance and environmental protection.

Our Business Management System, which governs every contract undertaken by McMahon Services, has formalised procedures to effectively manage risk in all areas of the business and complies with AS/NZS ISO 31000:2009 (Risk Management).

McMahon Services also has the expertise to work with our clients to develop risk mitigation plans particularly in the areas of property conservation and operational continuity.



## Safety and Sustainability

Safety and sustainability are at the forefront of our operations across Australia. Our Management Systems, exemplary safety record and comprehensive internal structures and processes in this area demonstrate our commitment.

McMahon Services shows an unwavering commitment to our workforce, safety culture, the environment around us, and communities in which we work.

We are proud to be recognised as industry leaders for our initiatives, achieving third party accreditation from SAI Global and the Federal Safety Commission as listed below.

## Management Systems



### Occupational Health & Safety Management System

Requirements	AS/NZS 4801:2001
Certificate No	OHS20284
Originally Certified	23 December 2008
Expiry Date	31 October 2013



### Quality Management System

Requirements	AS/NZS ISO 9001:2008
Certificate No	QEC7809
Originally Certified	11 June 1998
Expiry Date	2 July 2016



### Environmental Management System

Requirements	AS/NZS ISO 14001:2004
Certificate No	C10081
Originally Certified	5 March 1999
Expiry Date	2 July 2016



### Federal Safety Commission Certification

Requirements	Australian Government Building & Construction OHS Accreditation Scheme
Accreditation No	0142
Issue Date	20 April 2009
Expiry Date	26 November 2015

## Health & Safety Management



Health &  
 Safety  
 AS 4801



**Our Mission: To foster a safety culture that positions us as industry leaders, where we work together as a team to ensure a zero harm environment for our workers, stakeholders and the wider community.**

Safety is at the forefront of our operations across Australia, demonstrated by our Occupational Health and Safety Management Systems being certified to AS/NZS 4801:2001, our exemplary safety record and comprehensive internal structures and processes.

Furthermore, we were the first multi-disciplinary construction services company in Australia to achieve Federal Safety Accreditation.

### Our health and safety initiatives include:

- Ongoing identification, assessment and control of risks
- Increased training and supervision
- Improved communication that welcomes feedback and initiative
- Emphasising health and safety issues in daily Site Safety Toolbox Meetings and through workshops and staff newsletters
- Detailed and effective incident investigation
- Comprehensive rehabilitation programmes for injured employees



Our objective is to continually review our safety record and improve our safety performance to achieve a standard that is above industry requirements. As an organisation, we implement a Health, Safety and Environmental Management Plan for every project. The purpose of the HSEP is to identify and describe potential safety and environmental risks, analyse the level of risk, and outline measures that will be used to minimise or eliminate the hazard.

We are proud to be recognised as industry leaders for our safety initiatives. Our staff know that their actions, as individuals, promote an injury free environment and that everyone has responsibility for maintaining our safety culture.

### Safety Focused Behavioural Program



Our "Safety Focused" behavioural program is designed to build a strong safety culture throughout our organisation. To implement changes in attitudes and behaviours we work closely with our site personnel by utilising a mix of workshops, training materials, on site mentors and behavioural prompters. We encourage open communication with the aim of creating greater awareness to help reduce injuries and improve our safety performance.

We recognise that the involvement of managers in the safety management process is critical, particularly at the site manager and supervisor level. Our Safety Focused Program is aimed at developing skills in safety leadership and influencing attitudes and behaviours surrounding best safety practice.

### Safety Performance

A key element in the management of our safety program is the continuous review of our performance, enabling the setting of goals for driving improvement. McMahon Services seek to create a mindset and an environment where people believe it is possible to work injury free.



<u>Company Safety Statistics</u>			
These tables are tabulated in accordance with AS 1885.1 – 1990 (Workplace Injury and Disease Recording Standard).			
	2012	2011	2010
Man-hours worked	1,114,260	1,160,265	1,173,047
Lost Time Injuries (LTI)	3	3	3
Medically Treated Injuries (MTI)	14	15	14
LTI Frequency Rate (per 1,000,000 M/H)	2.7	2.6	2.6
MTI Frequency Rate (per 1,000,000 M/H)	12.6	12.9	11.9

## Quality Management



Quality  
ISO 9001  
SAI GLOBAL

**Our Mission: To deliver quality project outcomes through the highest standards of performance, professionalism, and customer service.**

McMahon Services strives to consistently deliver the highest quality standards across all service areas. We are committed to providing quality products and engaging with our customers to understand their specific needs. Our third party accreditation to AS/NZS ISO 9001:2008 Quality Management Systems underlines this commitment.

Our quality assurance approach is managed by company-wide policies and procedures, with the aim of continually improving customer satisfaction. To measure, analyse and improve our performance, we seek feedback from our clients, reflecting on our services, staff, safety standards and communication.

### Our quality management approach includes:

- A Business Management System Manual
- Clear procedures outlining our approach and operations
- Detailed Safe Work Instructions
- Regular training and refresher training
- Project specific Health, Safety and Environmental Plans
- Customer Satisfaction Surveys

### The implementation of this system for each project shall assure;

- The project is well planned prior to commencement;
- All contractual obligations will be met;
- There will be evidence of compliance with the specific contract requirements;
- There will be evidence all McMahon Services personnel working on the job site will adhere to the HSEP; and
- There will be evidence that all subcontractors and suppliers engaged by McMahon Services have complied with the direction and policy of the company's Quality System.

McMahon Services project specific HSEP addresses the goals, objectives and organisation of the project, including a project background and relevant procedures and SWIs. This covers all administrative and operational aspects of the project, assuring the client that works undertaken by us will be to first class standards.

## Environmental Management



**Our Mission: To protect and preserve the environment around us, by continually refining our methods and reducing our carbon footprint.**

Environmental management planning is an integral part of our overall project approach, embedding environmental considerations into every aspect of our operations and activities.

Our commitment to the protection and preservation of the environment is best demonstrated by our certification to AS/NZS ISO 14001:2004 Environmental Management Systems.

**Our internal Health, Safety and Environmental Management Plan (HSEP) addresses how we will manage environmental impacts such as:**

- Construction noise
- Vibration and dilapidation
- Air quality
- Soil and groundwater quality and conservation
- Water quality
- Protection of flora and fauna
- Visual impacts
- Aboriginal and natural heritage
- Hazardous waste and other dangerous materials

The intent of our EMP on each project is to ensure potential design and construction related impacts upon the environment are avoided. Where environmental impacts cannot be avoided they will firstly be minimised, within the guidelines and legal requirements, and then controlled. This is achieved through pro-active environmental management planning prior to carrying out particular elements of work. Accordingly, emphasis is placed upon integrating EM planning with design planning and construction method planning.

McMahon Services understands its obligations to avoid waste generation and enable the recycling and reuse of waste generated by our operations and activities. We have adopted a 0% waste target for our company operations and we are continuously refining our methods of waste processing to achieve this goal.

### Our Environmental Footprint

As part of our commitment to sustainable development and to build on our existing environmental management initiatives, McMahon Services are annually monitoring energy consumption and greenhouse gas emissions, and are continually working to reduce our environmental footprint.

*McMahon Services environmental footprint is audited annually by Balance Carbon Pty Ltd.*



## Industrial Relations

### Our People

McMahon Services acknowledges the importance of our most valuable asset, our people. Our core values stem from our beginnings as a small family business and remain unchanged, so our focus is to attract and retain highly skilled personnel who support the McMahon Services culture. We aspire to maintain a workforce that upholds world-class operational safety and environmental standards.

Our Human Resources procedures are incorporated into our overall Business Management System, ensuring that Human Resource Management remains as a key driver in our overall business practices, sustainability approach and decision-making processes.

### Procedures

Our Human Resources Management Procedures detail the following:

- Objectives
- Labour Recruitment and Engagement
- Indigenous Employment Opportunity
- Fitness for Work
- Employee Relations
- Dispute and Grievance
- Fair Treatment processes
- Roles and Responsibilities
- Training
- Communication, and
- Community Relations

### Policy

McMahon Services has developed a number of crucial HR policies to provide governance and the proactive management of our workforce across Australia. These policies include:

- Human Resource Policy
- Workers Compensation Work Injury Management Policy
- Injury management and Rehabilitation Policy
- Equal Opportunity Policy
- Equal Opportunity for Women in the Workplace Policy
- Workplace Harassment Policy
- Sexual Harassment Policy
- Employee Assistance Program Policy
- Alcohol and Other Drug Policy
- Smoke Free Workplace Policy
- Recruitment Selection and Appointment Policy
- Grievance Policy
- Zero Tolerance Policy for Unsafe Acts

McMahon Services believe the dedication of Management, the commitment of our workforce and the implementation of these measures will provide an environment for our people to have respect and be respected, provide leadership and interaction, maximise the opportunity for individual growth and provide our business with a sustainable and successful future.

## Relationship with Our People

Many of our staff are second generation McMahon Services employees. Our work environment is positive, collaborative and open and we operate as a team. We are committed to looking after our staff, from safety in the workplace through to professional development, equal opportunities and ongoing training and development

McMahon Services employees work under an EBA and individual AWAs. The AWAs and EBA gives McMahon Services and our clients, flexibility and confidence in our workforce, and ensures our operations are never affected by employee actions.

The Director of the Company personally handles all industrial matters with the aim of encouraging the highest standards of practice, values and ethics.

## Community Relations

We understand that our operations can have short and long-term impacts on communities where we work, so we aim to minimise disruptions, encourage and support open communication with local communities, and actively tailor projects in consultation with all key stakeholders.

McMahon Services works closely with local residents and businesses, along with union representatives, safety authorities and local governments to facilitate open and transparent communication. With the approval of our clients McMahon Services also conducts consultative meetings with stakeholder groups who show interest in the project prior to commencement to explain the methods to be employed, safety standards, operational details, and overall outcomes of the project.

The following projects conducted by McMahon Services involved a high level of community interest / concern and their successful completion reinforces our commitment to the maintaining effective community relations:

- Wittenoom Township - Remediation
- Royal Adelaide Hospital - Asbestos Removal
- National Library of Australia - Asbestos Removal
- D.S.T.O. Salisbury - Remediation (radioactive)
- Carlton United Brewery (high level contamination) - Remediation



## Company Details

ABN	75 097 072 565
ACN	097 072 565
Head Office	26 Duncan Road, Dry Creek SA 5094
Postal Address	PO Box 542, Enfield Plaza SA 5085
Telephone	(08) 8203 3100
Facsimile	(08) 8260 5210
Email	<a href="mailto:mcs@mcmervices.com.au">mcs@mcmervices.com.au</a>
Web Site Address	<a href="http://www.mcmervices.com.au">www.mcmervices.com.au</a>
Company Chairman	John H. Heard
Company Directors	David John McMahon Andrew Glen McMahon
Company Secretary	Andrew Glen McMahon
Accountant	Ernst & Young Level 12, 121 King William Street, ADELAIDE SA 5000
Solicitors	Kain C+C Lawyers 315 Wakefield Street, ADELAIDE SA 5000
Bankers	Commonwealth Bank of Australia Corporate Banking Adelaide SA Level 8, 100 King William Street, ADELAIDE SA 5000
Insurance Broker	Gallagher Australia 155 Fullarton Road, Rose Park SA 5067



Appendix B  
**Work Methodology Statement**



## Work Method Statement - Asbestos Removal

Asbestos materials have been identified in a preliminary investigation at the Mount Gambier Old Hospital Site.

Asbestos materials have primarily been identified including bonded sheeting and lining, backing boards and gaskets. Also identified are window caulking and roof membranes with asbestos contents of up to 25%.

The asbestos removal methodology will provide a Stage D, step-by-step approach for the establishment of controlled conditions for the safe removal of asbestos containing materials from Mount Gambier Old Hospital Site.

McMahon Services will identify all the key risks associated with removing the asbestos and the required controls and systems of work to complete the project safely, and with zero harm.

### Synthetic Mineral Fibre (SMF) Removal

There is a potential for the presence of SMF as installed thermal insulation on pipes.

Prior to removal of SMF materials, inspections will be undertaken to identify type, location and quality of SMF to be removed. Risk assessments and a detailed job safety analysis will be completed for each SMF removal zone.

All vessels and pipes containing SMF at height will be lowered to the ground by craning, SMF will be removed within a SMF removal zone under controlled conditions using mechanical means and dust suppressing agents.

SMF waste materials will be packaged in 200um plastic liners for disposal to approved landfill.

### Asbestos / Hazardous Material Register

Prior to commencement of any asbestos removal, hazardous material removal or demolition works, a hazardous material inspection audit will be conducted. This inspection will be a destructive audit to identify and locate the presence and quantities of all remaining hazardous materials. The audit will be completed in conjunction with the environmental consultant (HSE) and McMahon Services. Following the inspection / audit the hazardous material register will be updated to reflect any changes. All identified hazardous materials on site will be labeled.

Key requirements for McMahon Services in completing the asbestos removal works include:

- Development of a detailed Asbestos Removal Control Plan, Safe Work Method statement and Job Safety Analysis for the asbestos removal works
- Submit application for planned asbestos removal work to SafeWork SA
- Lodge applications and maintain any permits or approvals required for the works
- Provide notification to Council on planned asbestos works and ensure all persons in the vicinity of Mount Gambier Old Hospital are notified prior to work commencing
- Ensure asbestos removal work is supervised by a competent and training 'Class A' asbestos removalist
- Ensure all McMahon Services' employees involved with the removal of asbestos materials are 'A Class' asbestos removal trained and participate in a health surveillance program for asbestos exposure



- Engage an Independent Environmental Hygienist to undertake Environmental consultant works which include;
  - Pre-demolition hazardous material survey of the buildings and structures
  - Assist in the development of work procedures and safe work method statements for hazardous material removal works
  - Undertake enclosure / integrity inspections (smoke testing) and ensure all necessary control items are in place i.e. negative pressure units, airlock, material and personnel decontamination unit
  - Undertake control asbestos fibre air monitoring during removal works
  - All air monitoring will be conducted in accordance with the guidance note on the membrane filter method for estimating airborne asbestos fibres 2<sup>nd</sup> edition NOHSL: 3003 (2005) and in accordance with Australian Standard (AS)ISO/IEC 17025-2005
  - Undertake a visual clearance inspection in the area's where asbestos materials have been removed and conduct clearance air monitoring following completion of the removal works
  - Air monitoring control limits

### Air Monitoring Control Limits

Action Level (Fibres/ml)	Control	Action
<b>&lt; 0.01</b>	No new control measures are necessary	Continue with control measures
<b>0.01 to &lt; 0.02</b>	1. Review	Review control measure
	2. Investigate	Investigate the cause
	3. Implement	Implement controls to eliminate or minimise exposure and prevent further release
<b>&gt; 0.02</b>	1. Stop Removal	Stop removal work.
	2. Notify regulator	Notify the regulator (SafeWork SA) by phone followed by fax or written statement that work has ceased & the results of the air monitoring.
	3. Investigate the cause	Conduct a thorough visual inspection of the enclosure (if used) & associated equipment in consultation with all workers involved.
	4. Implement controls to eliminate or minimise exposure and prevent further release	Extend the isolated / barricaded area around the removal area / enclosure as far as reasonably practicable (until fibre levels are < 0.01 fibres/ml), wet wipe and vacuum the surrounding area, seal any identified leaks & smoke test the enclosure until it is satisfactorily sealed.
	5. Do not recommence removal work until further air monitoring is conducted	Do not recommence until fibre levels are < 0.01 fibres/ml.

### Asbestos Waste Disposal

All asbestos waste removed from the Mount Gambier Old Hospital Site will be packaged, transported and disposed in full compliance with the requirements of McMahon Services' EPA Licence 13936.

## Statutory Compliance

Hazardous removal works will be completed in accordance with the following:

- Work Health & Safety Act 2013
- Work Health & Safety Regulations 2013
- Code of Practice – How to Safely Remove Asbestos
- Code of Practice – How to Manage and Control Asbestos in the Workplace
- Code of Practice – Safe Use of Synthetic Mineral Fibres
- Code of Practice – Demolition Work
- Code of Practice – Managing the Risk of Falls at Workplaces
- Code of Practice – Plant
- AS 2550 Cranes, hoists and winches
- AS 2602 Demolition of Structures
- AS 3000 Wiring rules
- AS 2294.1:1997 Earthmoving Machinery – Protective Structures – General
- AS 1576:2010 Scaffolding General Requirements
- Environmental Protection Act



## Work Method Statement - Demolition Work

McMahon Services approach to developing our work methods for the Demolition of the Mount Gambier Old Hospital Site at Mount Gambier will be to carry out a detailed Risk Assessment and review of selected key work scope activities. There are a range of approaches and options for different areas of the site, but we have selected a 'minimal risk' approach when determining our final method solution for each item of the works.

Our approach will be to adopt a mechanical means solution using our PC1250 Ultra High Reach Demolition Excavator as the principal demolition excavator for the project. Weighing over 150t and with an operating reach of 45m, this purpose built unit is the largest of its type in Australia. We will utilise hydraulic pulverisers and shears to progressively demolish the structures whilst working from the ground. The high volume water nozzles fitted to the boom will provide continual dust suppression. Boom mounted cameras will provide constant video feed to the operator who will work from the elevated reclining cab.

The capacity of this unit, combined with its inbuilt safety and operational features will provide significant advantages for a successful delivery of the project. The requirement to place small machines on the upper floor levels will be eliminated as will the requirement for personnel to access the partially demolished structure. Dust will be kept to an absolute minimum and the use of pulverising in lieu of breaking methods will significantly reduce the noise impact to the surrounding stakeholders.

To do this, we will commit a fleet of company owned and operated demolition and scrap processing excavators, which are maintained to the highest standards.

### Project Team

In developing our proposal for the asbestos removal and demolition of the Mount Gambier Old Hospital Site at Mount Gambier, we have given particular attention to the structure, make up and personnel required to successfully deliver the project.

Acting as the Principal Contractor for the project and the City of Mount Gambier's onsite representative, McMahon Services will be required to liaise and coordinate our activities with a range of stakeholders.

This will include SafeWork SA, EPA, Local Council and surrounding businesses and residents. Due to the nature of the works and the sites location, the project has the potential to attract the attention of media, resident groups and unions. These issues, coupled with the high risk nature and extent of the project, demand that we provide a full time Project Manager of the highest caliber for the duration of the works. Andrew Levett will fill this role.

The Project Manager will be supported by a dedicated Demolition Site Manager and Asbestos Site Manager, Daniel Carter and Peta Tahua have been nominated to fill these roles and they will manage the daily site activities. Highly experienced and motivated long term McMahon Services employees, Daniel and Peta will ensure that site activities are carried out to the highest of standards, in accordance with the approved project plans and procedures.

To ensure that all aspects pertaining to safety are addressed and managed, a full time WHSEQ Supervisor will be dedicated to the project. Tim Cotton will fill this role and he will bring significant experience and support to both the management team and the workforce personnel. Tim will ensure that our federally accredited safety systems and



procedures are fully implemented, utilised and integrated with the City of Mount Gambier's management systems. Tim's ability to assist in the development of safe systems of work and his ability to engage with the site team will be highly beneficial to the project.

The project team will receive high level support and guidance from senior management. The senior managers involved in this project include Chris Latham, John Flavel, Brenton Vogelsang, Chris Chisholm, Melissa Hudson and Adam Keenan. The project team will be able to draw on a wealth of industry experience and expertise to assist them as required. This will include visiting manager audits to ensure documentary and system compliance and attendance as required at weekly site meetings.

## Workforce

To deliver the demolition process we have developed for the project, we will require a large, highly skilled workforce. McMahon Services Australia currently directly employ over 450 personnel and are recognised by the Construction Industry Training Board (CITB) of South Australia, as the largest employer of construction industry personnel in South Australia. Our workforces are highly skilled, trained and adaptable and are regularly transferred between company divisions to support the areas of highest demand. This gives us great flexibility and provides long term stable employment for our personnel, many of whom have been with the company for over 10 through to 30 years.

Drawing on this workforce we will be able to provide in-house delivery of the labour requirements for the project. With the exception being, where our highly specialised partners are engaged.

The capacity to deliver the project in-house enables us to have intimate knowledge of our people, their specialist capability and enables us to hand pick the team for the project. Our team are fully conversant with the company's safe systems of work and procedures and are committed to our safety focused behavioral based program.

We will dedicate a project team that are of the highest caliber. They have a wealth of experience in successfully completing highly complex, hazardous materials / demolition projects.

## Local Engagement

A key to our delivery strategy will be to utilise the expertise and resources of local contractors for activities other than high risk demolition and asbestos removal works. Operating extensively in regional and remote South Australia, McMahon Services recognise that providing opportunities for local contractors provides significant project, community and social benefits. For the Mount Gambier Old Hospital project we see the areas of crushing, cartage, material disposal and civil works as areas where we will look to align ourselves with local contractors.

## Specialised Plant

To support the processes we have developed for our demolition solutions a significant quantity of plant and equipment will be required to deliver the project. The full inventory of McMahon Services plant and equipment is contained within the tender submission. This equipment is wholly owned by McMahon Services and will be made



available for the project. To have the ability to safely carry out the demolition works associated with the project will require purpose built demolition excavators of significant capacity. We will provide as a minimum;

- 1 x Komatsu PC1250 Ultra Reach Demolition Excavator
- 1 x Komatsu PC800 Demolition Excavator (85 ton)
- 1 x Komatsu PC450 Demolition Excavators (50 ton)
- and a range of smaller demolition excavators in the 22 – 30 ton class

The very large capacity of these large machines is required, not only to deal with the size of the structures and footing systems but also to have the ability to fit large processing tools to enable these structures to be pulverised down for crushing. We will provide LaBounty Saber Series 4500R Shears, which will have the ability to shear plate up to 28mm in thickness, which will operate on the 80 ton excavators and MSD 50 Shears on the 45 ton excavator to process structural steel.

Supporting our fleet of heavy duty demolition excavators will be our heavy lift crane crew. Fully owned, operated and staffed by McMahon Services, can provide our;

- Liebherr 250 ton hydraulic slewing crane,
- Grove 100 ton hydraulic slewing crane,
- Franna 25 ton non slewing articulated crane.

Our crane drivers and riggers are highly experienced demolition operators who are fully conversant with the potential risks associated with demolition activities. Aztec Analysis will provide comprehensive lift studies for each heavy lift and critical lift carried out throughout the works. Please refer to Aztec Analysis' enclosed documentation.

### Delineation, Separation – Minimal Risk

In line with our minimal risk approach we have determined that a process of delineation and separation must be adopted to safely deliver the project. Experienced task specific teams, who are comprehensively managed, will be committed to the project. These teams will progressively work across the site, each in their own segregated Active Zones carrying out their specified tasks. This segregation process will give ownership of the task and the specified zone to the individual work teams, and will enhance the safety focused culture across the site.

The works will proceed in a clearly defined process with hold points established. This will prevent the commencement of works in areas which have not been cleared and validated free of hazardous substances, and ensure each step is tightly managed.

The works will proceed in the following sequence;

1. Pre-validation and preparation
2. Hazardous substance removal
3. Manual cold cut / dismantle separations adjacent live services / plant
4. Mechanical demolition of low level structures
5. Mechanical demolition of high level structure and removal of slabs and inground footings.



Each of these processes will have dedicated work crews, highly skilled, fully resourced and comprehensively managed. By task dedication we will eliminate the risk of personnel carrying out procedures for which they do not have the required skill set or training. In addition, the risk of multi-level activities with men working above one another, simultaneous site operations and work processes is eliminated.

## Comprehensive Pre-validation and Preparation Works

During the site investigation process and review of the Tender Documents it has become apparent that there is the potential for presences of hazardous materials.

A core protocol of our proposal will be that prior to any activities, a pre-work validation team, known as the Preparation Team, working under the approved permits system will confirm known hazardous materials locations and validate that all other equipment is hazard free for each designated work area. The objective of the Preparation Team is to identify, as far as is practicable, all hazardous materials so that it can be removed prior to demolition works.

## Demolition Activity Preparation

During the site inspection it was confirmed that where activities occur within the defined boundaries of the worksite, a second internal chain mesh fence needs to be installed, which defines the Active Demolition Zone work area.

As described above, safe defined Active Demolition Zones (ADZ) will be established and maintained for each segment of works, within the site boundaries to prevent unauthorised access and to protect all personnel associated with the tasks. ADZ's will be defined using barrier fencing and signage.

This will allow multiple work crews to operate within defined areas across the site, whilst maintaining safe egress and exclusion zones between each work area. This process will maximize efficiency of the work group without compromising safety. The photos below show this approach being adopted on the recent Adelaide Oval Demolition project.



**Track Record - Adelaide Oval Project**

The below photo shows McMahon Services working efficiently and safely in three Active Demolition Zones. Active Demolition Zone 1 is the processing of scrap, from the Demolition of the Bradman Building, Active Demolition Zone 2 shows the salvaging of the roof structure of the Clem Hill stand and Active Demolition Zone 3 shows the processing of footings to the Chappel stands area.





## Demolition of Structures

The majority of structures on site are of steel framed and reinforced concrete construction and are ideally suited to a mechanical means demolition procedure. McMahon services will adopt this approach using our 150 ton and 80 ton demolition excavators. These machines can be fitted with a range of demolition pulverisers, shears and grapples and can handle structures up to 45m in height.

As the structures to be demolished are around 30m in height, the significant capacity of the machines to be employed, allows them to sit well back from the structures to be demolished. This ensures the operators and machines are out of the line of fire of the felling zone as buildings are progressively demolished. For a 30m high structure, the PC1250 Ultra Reach Excavator will sit back some 36m from the operating shear. The capacity of the machine and the process to be utilised will provide significant enhancement in levels of safety for the works.

This procedure and methodology was successfully employed at the Rundle Place Project, utilising our PC1250 Longreach Excavator and a range of machines from 80-22 ton. See photos below.





## Scrap Processing

It is our intention to process all nonferrous structural steel, tanks and pipework metals to export size within the defined site boundaries.

Processing will be carried out by 2 x Komatsu PC450 excavators, fitted with Labounty MSD 4500 scrap shears. These units are high capacity and have the ability to pierce and shear plate steel up to 28mm.

Scrap processing activities will be carried out in a segregated area, which will be fenced off within the ADZ Hot Zone. This is to ensure that at all times, there is a minimum 25m exclusion zone around the operational shear, due to the potential risk of a high tensile piece of scrap being present. This type of material, which breaks when processed, can become a projectile. Our demolition and processing operators are highly experienced and should they identify any items which may potentially be high tensile steel, these items will be segregated from the low tensile bulk scrap stockpile.

The shearing process will progressively move across the site, following the tank and pipe demolition teams.

Once processed into export size, the scrap will be loaded into shipping containers for direct transport to wharf and loading for export. This process is known as Free Alongside Ship or FAS. The FAS system, combined with our onsite processing, eliminates double handling and transport costs associated with traditional transfer to third party scrap traders processing yards.

To facilitate and maximise the efficiency of the FAS process, McMahon Services will utilise 20 foot shipping containers to transport the scrap. To expedite the loading of the containers, we will provide our 90 Degrees Container Tilter system. This unit (refer to photos 1 and 2 below) has the ability to cradle 20 foot shipping containers and the capacity to elevate them to 90 degrees to enable rapid, efficient loading. This unit features a digital weight scale system to maximise container weights, is fully automated and is controlled by a radio remote system, which is managed by the excavator operator.

The loading operations will be carried out using a Komatsu PC220-8 excavator mounted Smag five finger scrap handling grab (refer to photo 2 below), loading direct from stock pile to the container.

Once the container is filled to the desired weight, the hydraulic container door closer will close the container doors and lock them in place. The machine operator will then access the unit, via the secure walkway, and engage the container locking pins. The container is then lowered to the horizontal position and is ready for transfer.

Our permanently site based 35 ton capacity forklift will then move the full container to the shipping lay down area. The container will be loaded onto waiting transport for offsite transfer.

This system of scrap handling and processing eliminates 'boots on the ground' and the risks associated with personnel and plant interaction.

Scrap presented in this containerised FAS system will generate maximum market price from receivers.

This process is highly efficient, eliminating double handling and will ensure full utilisation of dedicated project plant and personnel.



## 90 Degree Container Tilter System

**Photo 1**  
Container at 90 Degrees



**Photo 2**  
Loading Container at 45 Degrees





## Heavy Lift and Demolition Engineering

Aztec Engineering has been chosen to carry out design and review of our demolition methodology and the critical lift crane works.

McMahon Services have worked closely with Aztec Engineering and their parent company Walbridge & Gilbert for over 20 years, and we have full confidence in their ability to assist us with our procedural and structural design and reviews. Aztec Engineering, Project Engineer, Peter James, will be present on site from our establishment. Peter will work through each of the various proposals as they develop and will be supported by Aztec Engineering staff as defined in their proposal and overseen by the Director in charge, Mark Gilbert.

### **Track Record - Adelaide Convention Centre Development**

The photo below shows McMahon's 250 ton Liebherr crane, operating off the suspended Convention Centre loading dock. Aztec Analysis and McMahons worked jointly to develop the procedures to safely demolish the 400mm thick tensioned slab, whilst ensuring the structural integrity of the remaining slab, Convention Centre and railway operations.





## Inductions

In addition to the City of Mount Gambier site induction processes, McMahon Services will develop a site specific safety induction for all personnel undertaking activities for the project. Site inductions will be conducted and delivered by a trained and competent HSE inductor.

The intention of the safety induction is to provide relevant information and training that will assist employees to understand the specific project risks associated with our works.

## Site Services

The disconnection of the site services including electricity, wet and dry fire system, domestic water, sewer stormwater and gas will be required to allow demolition works to proceed.

All existing services associated with the structures to be demolished are to be isolated, terminated and diverted prior to McMahon Services commencing the works within the building, except for temporary water runs (to remain operational at all times) this system will be protected where required and maintained. We will require detailed services sign off from the applicable contractors, detailing the works completed and confirming that the building has no live services running through it.

Provision will be made within our bid to establish temporary site services to facilitate demolition works including temporary power supply (by generator if necessary) and water runs for dust suppression. Provision has been made to provide heavy duty 20mm steel plate protection to protect in-ground services.

## Fire Protection

McMahon Services will have fire hoses able to be connect to the fire mains and a water cart if necessary, fitted with portable fire hoses. Water will be sourced from the water mains for dust suppression.

## Dust Control

Dust control measures will be established and implemented throughout the course of the works. During mechanical demolition water from temporary water hoses and water truck if necessary, water will be sprayed onto the work face to minimize dust emission. The same dust control method will be used while loading out of demolition debris. Portable dust monitoring will be available and set up if required.

## Vibration / Noise

Developing a system, which ensures that the integrity of the adjoining stakeholders structures is not compromised, whilst also providing flexibility with the methodology of demolition to be utilised, will be a key element to the success of the project.

A regular visual inspection procedure would also be established to ensure that the impact of demolition is continually monitored and reviewed.

McMahon Services will take all measures possible throughout the project to minimize noise emissions during the project.

Our Health, Safety & Environmental Management Plan will pay particular attention to noise emissions and all works will be carried out in accordance with the OHS and Welfare Act 1986 and Regulations 1995, National Code of Practice for Noise Management & Protection of Hearing at Work; and EPA and ACC requirements.

Our plant and associated attachments are modern and well maintained and fitted with the most up to date silencing and noise suppression systems.

### Traffic Management / Vehicle Movement

The management of vehicle access to and from site will be crucial to the success of the project. Detailed traffic management plans will be developed and implemented to ensure that pedestrians are protected and any impact to the surrounding traffic flow is minimized. All vehicles transporting waste on and off site shall be tarped to prevent loads becoming dislodged.

At all times McMahon Services will keep road surfaces clean.

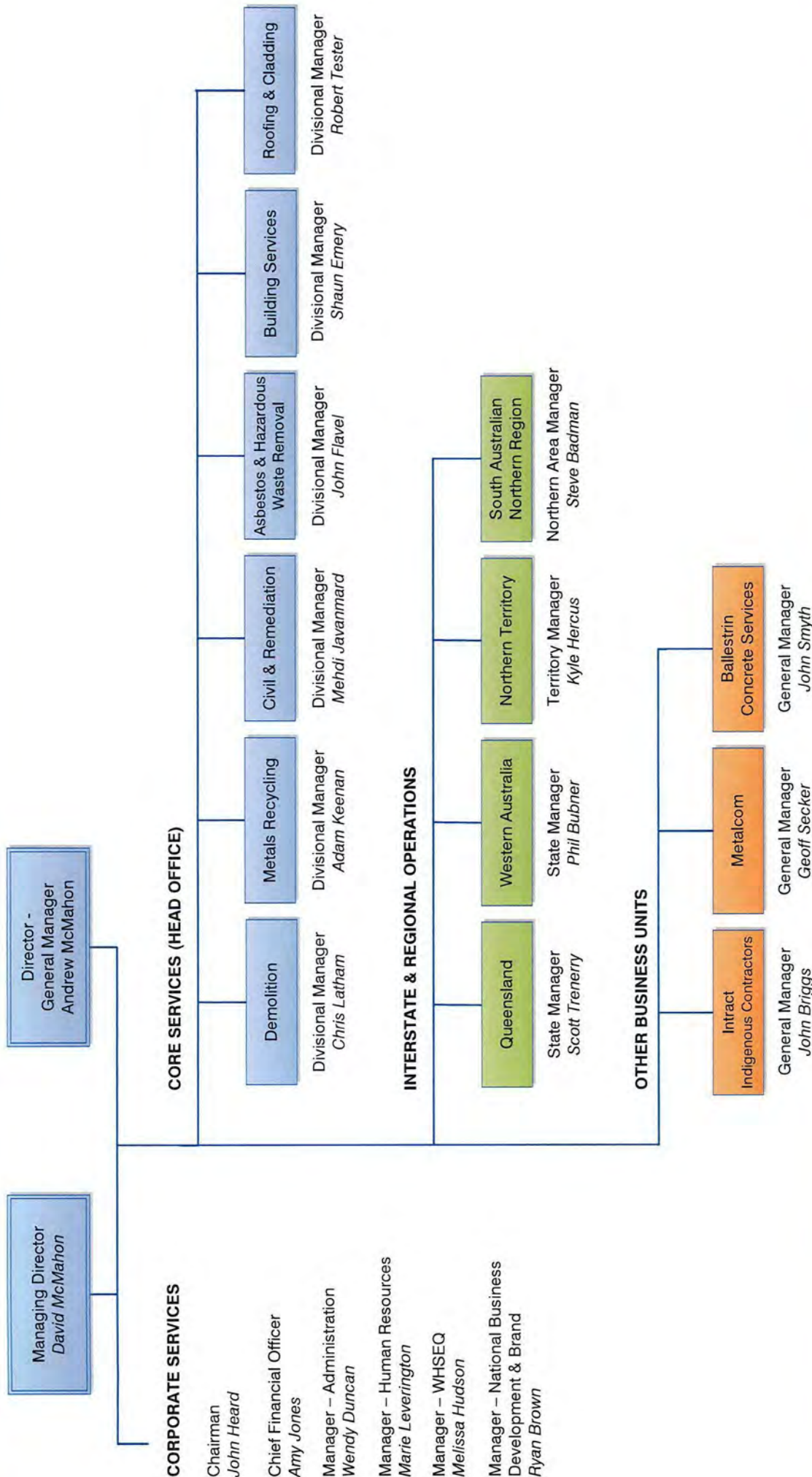
Each load of demolished material that leaves site will be weighed and recorded with appropriate documentation for the material being disposed of provided in a detailed project summary.



Appendix C  
**Organisational Chart**



## MANAGEMENT STRUCTURE



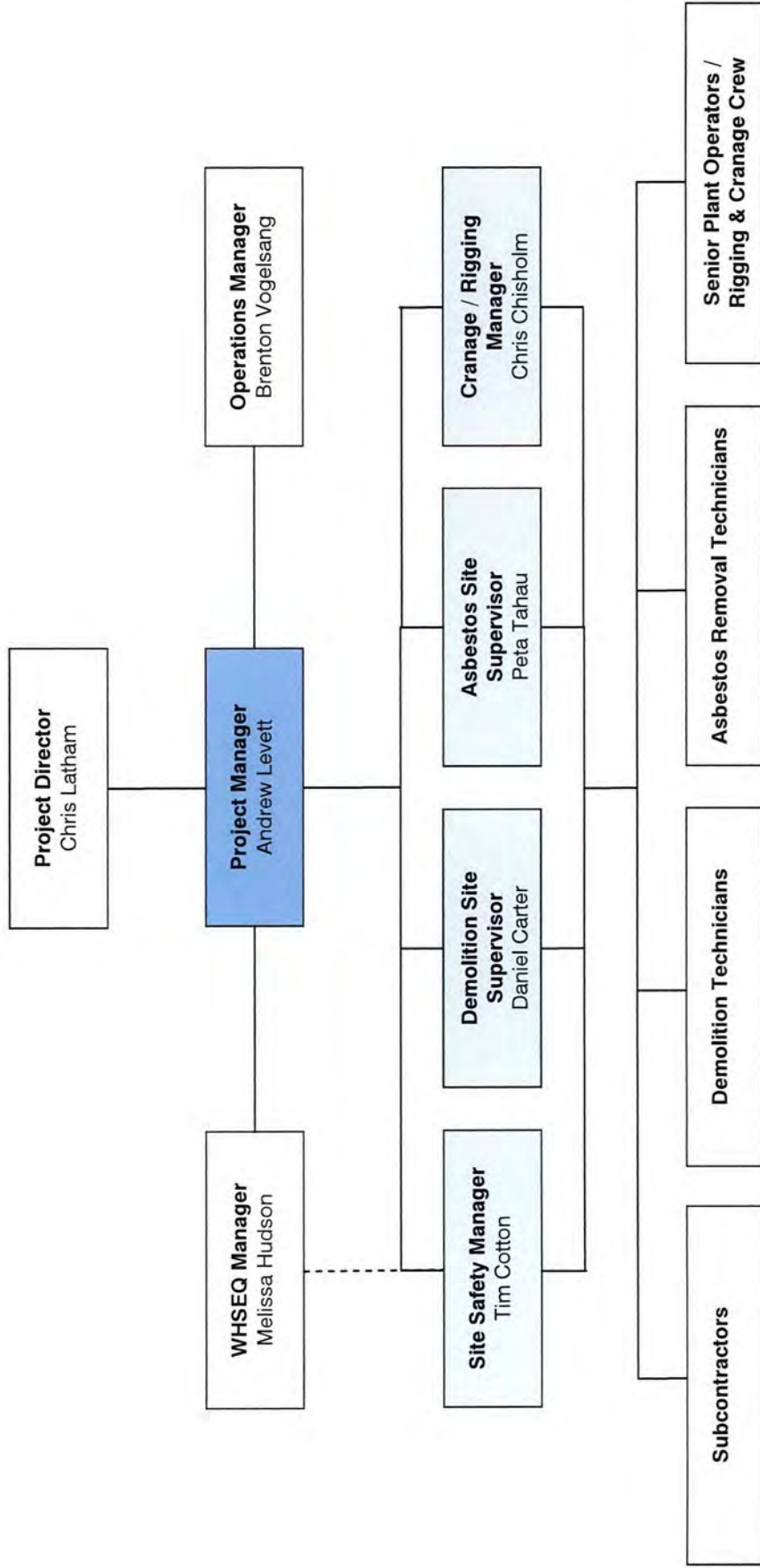


Appendix D  
**Proposed Resources**



**PROPOSED PROJECT MANAGEMENT**

**Demolition of the Mount Gambier Old Hospital Site  
City of Mount Gambier**





Chris joined McMahon Services in 2005 as Manager of Demolition & Operations in South Australia following a highly successful career in the demolition and civil construction industry.

As a key member of the Company Executive Team, Chris has been instrumental in guiding company growth, which now exceeds \$150 million annually.

Chris has developed major partnerships with leading contractors in South Australia's construction industry, including Hansen Yuncken, Built Environs and Baulderstone. Chris regularly advises on important project issues such as asbestos contamination, including the \$1.3 billion HNA Federal Government Defence Project. Similarly, multi-national corporations such as BHP Billiton, Rio Tinto and SKM regularly seek Chris's advice on demolition and remediation activities within their major projects.

Similarly, Chris is called on regularly by Government Departments to provide project advice and develop strategies for major infrastructure projects.

As part of the on-going development of the business Chris regularly attends industry forums, such as the Asia Pacific Annual Off Shore Decommissioning Conference and is a key member of the team developing ship-breaking facilities in Adelaide.

Rail Infrastructure projects are a core component of the business and Chris has overseen recent projects in excess of \$10 million for key clients including Genesee & Wyoming, TransAdelaide and ARTC.

With a staff of 90 and equipment value over \$35 million under his direct control, Chris's key focus is the development and retention of staff through an ongoing commitment to training and self-improvement; and by providing cutting edge plant, equipment and resources which provide his team with the tools to deliver marquee industry projects.

Chris is recognised in the industry for his drive, energy and innovation. He is a confident communicator and his safety leadership and personal skills make Chris an ideal Project Manager.



#### Qualifications

- TAFE Building Works Supervisor
- Licenced Builder
- Licenced Building Work Supervisor
- 21 years industry experience

#### Referees

**Mr. Chris Leopold**  
 Building Manager  
 Baulderstone  
 Ph 8202 8888

**Mr. Ben Yates**  
 Manager – Major Projects  
 Aspen Group  
 Ph 8211 7799

**Mr. Adrian Esplin**  
 Director  
 Brookfield Multiplex Constructions  
 Ph 8218 0800

**Mr. Scott Penhall**  
 Divisional Manager  
 Built Environs  
 Ph 8232 1882

#### Project Experience

Chris has an outstanding track record with an ability to lead and deliver the most challenging of projects. His track record of high profile demolition, asbestos removal and remediation projects for key clients includes:

- Mobil Spotswood – Terminal Site
- Advertiser Building – City Central Tower 2
- Former GMH - Charles Sturt Industrial Estate Redevelopment
- Former Hills Industries – Demolition and Remediation
- Former Sheridan's Site – Asbestos Removal, Demolition & Remediation
- No 1 Angas Street
- Department of Defence Projects – Totalling \$20M +
- Woomera Precinct Redevelopment – Totalling \$35M +
- BHP Billiton – Totalling \$10M +
- Rio Tinto – Totalling \$8M +
- Baulderstone – Totalling \$50M +
- Hansen Yucken – Totalling \$35M +



### Career Overview

Safety is at the forefront of our operations. Melissa commenced with McMahon Services in 2010 and has since been instrumental in developing and maintaining a strong safety culture within the organisation. In 2012, her strong commitment resulted in her progression from WHSEQ Advisor to WHSEQ Manager.

Melissa played a critical role in gaining Federal Safety Re-Accreditation in 2012. Melissa worked hard to review and maintain McMahon Services' Business Management System as well as System Manuals, Procedures, Forms and all WHSEQ documentation company-wide. This ensured the achievement of safety best practice in line with the new legislative standards.

As WHSEQ Manager, Melissa conducts internal audits to ensure that McMahon Services is fulfilling the highest standards across Occupational Health & Safety, Quality and Environmental Management, along with the management of external audits including SAI Global (AS/NZS 4801:2001, ISO 9001:2008 & ISO 14001:2004).

In her previous employment, Melissa was an influential player in obtaining ISO 14001, ISO 9001, AS/NZS 4801 and OHSAS 18001, and self-insurance for several sites.

Melissa works closely across all levels of the business to ensure policies and procedures are being met. This includes establishing emergency response plans and Health Safety Environment (HSE) Plans for projects, reviewing risk assessment and safe work method statements for the works to be completed as well as conducting daily inspections and onsite audits.

### Project Experience

#### Mobil Spotswood – Terminal Site

**Value:** Confidential

**Position:** WHSEQ Manager

Complex vermiculite / friable asbestos removal and mechanical demolition works at Mobil Spotswood Terminal Site. All McMahon Services' site personnel trained in ExxonMobil's Loss Prevention Systems (LPS). Demolition of 3-storey building and 4<sup>th</sup> level plant room was undertaken using PC450 excavator with purpose-built Long Reach attachment.

#### Queensland Alumina Limited – Gladstone

**Value:** \$2.5 million

**Position:** WHSEQ Manager

Shutdown of a five-storey boiler including complete removal of asbestos, SMF lagging and removal of sheet metal cladding. To ensure the safe removal of large amounts of asbestos, multiple asbestos enclosures were built on each boiler floor for the safe removal of the redundant lagging/cladding.

#### ExxonMobil – Spotswood

**Value:** \$885,000

**Position:** WHSEQ Manager

Asbestos removal and demolition of administration buildings on-site. This was considered a high risk job with the presence of friable and bonded asbestos.



### Qualifications

- Grad. Cert. in Occ. Health & Safety Management - *University of Adelaide & University of SA (2008)*
- Professional Management Program – University of Adelaide
- Committee Member training – OHS – Business SA
- Contractors – Manage the Contract – Business SA
- Accredited OHS Auditor - Minerva Consulting Group
- Health, Safety & Environmental Lead Auditor – Chisholm Institute
- Emergency Control Organisation – MSS Product & Training Specialist
- LPS training – ExxonMobil (Train the Trainer)

### Referees

**Mr. David Lynch**  
Project Safety Manager  
Hansen Yuncken  
Mobile 0417 482 749

**Mr. Mark Evans**  
HSEQ Manager  
Boulderstone, SA  
Mobile 0400 981 924



## Project Experience (continued)

**Amcor – Botany NSW****Value:** \$5.4 million**Position:** WHSEQ Manager

Demolition of sections of the paper manufacturing plant requiring decommissioning in some areas. Removal of asbestos, both friable and bonded as well as redundant pipework, tanks and roofing.

**Harris Scarfe – Rundle Place, Adelaide CBD****Value:** \$5.3 million**Position:** WHSEQ Manager

Demolition of the former Harris Scarfe, including propping detail and bracing, asbestos removal and use of the Ultra High Reach Demolition Excavator with shears to deconstruct the building up to seven storeys high.

**BHP Billiton – Roxby Downs****Value:** \$350,000**Position:** WHSEQ Manager

High risk-stack demolition. Scaffolding was erected and the stack removed with precision oxy cutting in two metre sections beginning at the top and working downwards. Once cut, each section was lifted out using a 250 tonne crane and brought to ground for the client to dispose of on-site.

Tim joined McMahon Services in 2009 as a Demolition Labourer. He has showed aptitude and leadership qualities, which have been reflected in his disciplined approach to his work and duties. Tim has climbed through the ranks from a Demolition Site Safety Supervisor to a WHSEQ Site Manager, becoming a true asset to the McMahon Services Group.

Tim has received the State Government SafeWork SA Award for achieving outstanding safety outcomes in his key management role of the Adelaide Oval Redevelopment. He is recognised for his best practice standards, with particular attention to OHS procedures and protocols. He has gained further experience through establishing, auditing and reviewing site systems for projects nationally.

Tim has showed a high degree of commitment and application in this important aspect of his work, where he has constantly maintained the highest standards required to meet the demands of his position.

Tim's professional experience within OHS work includes; implementing, maintaining and reviewing safe systems of work. Through consultation, advising methods of safe work practices. Liaising with contractors to ensure OHS requirements are met prior to and during execution of tasks. He also develops Health Safety Environment (HSE) Plans for projects and reviews tender safety documentation for new projects.

#### Recent Project Experience

##### **Mobil Spotswood – Terminal Site**

**Value:** Confidential

**Position:** WHSEQ Site Manager

Complex vermiculite / friable asbestos removal and mechanical demolition works at Mobil Spotswood Terminal Site. All McMahon Services' site personnel trained in ExxonMobil's Loss Prevention Systems (LPS). Demolition of 3-storey building and 4<sup>th</sup> level plant room was undertaken using PC450 excavator with purpose-built Long Reach attachment.

##### **Adelaide Oval Redevelopment**

**Value:** \$1.7 Million

**Position:** Safety Supervisor

Demolition of 3 major grand stands including the 5 story Bradman stand, Clem Hill and the Chappell stand. Deconstruction of overhead canopies with the use of cranes. Protection of existing structures during works.

##### **Amcor – Botany NSW**

**Value:** \$5.4 million

**Position:** Safety Supervisor

Demolition of sections of the paper manufacturing plant requiring decommissioning in some areas. Removal of asbestos, both friable and bonded as well as redundant pipework, tanks and roofing.

##### **Harris Scarfe Demolition – Rundle Place Redevelopment**

**Value:** \$7 Million

**Position:** Safety Supervisor

Demolition of the former Harris Scarfe building in the CBD including asbestos removal, basement retention systems, internal strip out of combustible items, crane works and mechanical demolition of 6 stories of several buildings linked together to form one.



#### Qualifications

- SafetWork Australia Finalist
- SafeWork SA Award
- Occupational Health & Safety Course
- Certificate IV OHS
- Rail Safety & Environmental Awareness
- First Aid
- Asbestos Awareness Training
- White Card
- Safety Focused Program
- Spotless Contractor induction

#### Referees

**Mr. Darrell Muldoon**  
 Boulderstone  
 Mobile 0409 043 615

**Mr. Michael Mappas**  
 Hansen Yuncken  
 Phone 08 8229 7300

**Mr. Peter Baker**  
 Boulderstone  
 Phone 08 8202 8888





**Tim Cotton**  
WHSEQ SITE MANAGER

#### Recent Project Experience (continued)

##### **Adelaide Convention Centre Redevelopment**

**Value:** \$1.6 Million

**Position:** Safety Supervisor

Various demolition works to allow an extension of the current Convention Centre including, pre-cast panel removal via crane, mechanical demolition of cooling towers and delivery ramp structure. Carrying out tasks within a live rail environment, working under the guidance of track protectors.



Andrew Levett joined the McMahon Services team in 2007, as a Specialist Project Manager. During his 30 years in the industry, Andrew has gained extensive experience, effectively directing major infrastructure projects from inception to completion in urban, regional and remote areas.

Prior to working for McMahon Services, Andrew was the Manager of Defence Infrastructure (later Manager Technical Services) in the Department of Defence for nine years in several regions. Andrew is especially valuable for his understanding and experience in Defence facility operations including engineering, infrastructure, construction and maintenance.

He was instrumental in shaping the Defence Form of Contract and the business model for the delivery of Facilities Operations Maintenance Contracts, particularly the Defence Estate Management System. A large computer based maintenance and infrastructure management system to monitor the extensive Defence property, infrastructure and plant and equipment portfolio.

Andrew has wide experience within the construction industry including a 6 month industry secondment and intimate involvement of Parliamentary Works Committee (PWC) hearings, Government Reviews and Project Control Group meetings. This involved taking on the role of Defence Project Manager for significant Public Works projects including RAAF Base Scherger (\$137m) and DSTO Salisbury new Laboratories Complex (now Knowledge Systems Building) (\$51m).

Andrew has undertaken consultancy work with Parsons Brinckerhoff and was part of the consultancy team for the EDP Zone and Precinct Plan, Force Disposition Tranche 1 costing and costed options for Defence Joint Logistic Groups future Strategic Explosive Ordnance Infrastructure.

Andrew also has strong experience in organisational and cultural change gained through the formation of a single Defence Estate Organisation and merging two regional estate offices in Sydney Central and Sydney West/South. Andrew has demonstrated ability to review and implement action plans in Defence regions where the works program and budget required strategic development and rejuvenation.

#### Project Experience

##### **Mobil Spotswood – Terminal Site**

**Value:** Confidential

**Position:** Project Manager

Complex vermiculite / friable asbestos removal and mechanical demolition works at Mobil Spotswood Terminal Site. All McMahon Services' site personnel trained in ExxonMobil's Loss Prevention Systems (LPS). Demolition of 3-storey building and 4<sup>th</sup> level plant room was undertaken using PC450 excavator with purpose-built Long Reach attachment.

##### **Edith River Freight Train Derailment**

**Value:** \$4 Million

**Position:** Project Manager

Urgent recovery of a freight train and debris from up to 3 kilometres down Edith River, Northern Territory, resulting from damage caused by Cyclone Grant. Challenges included mobilising and operating machinery in deep floodwaters, site remoteness, and the maintaining a 24/7 shift.

##### **Edith River Rail Bridge Repairs**

**Value:** \$4 Million

**Position:** Project Manager

Additional works awarded to repair Edith River Bridge following train derailment clean-up. A crane pad was constructed in the flowing river bed to remove and replace existing girders. Rebuilding the track formation, soil remediation works and concrete repair works completed the project.



#### Qualifications

- Bachelor of Engineering in Mechanical Engineering 1983
- Indentured Toolmaker 1972
- GWA Basic Rail Safety Awareness

#### Referees

##### **Mr. Jim Smith**

Manager of Technical Services  
 Department of Defence  
 Mobile: 0419 818 491

##### **Mr. David Coyle**

Business Development Manager  
 Capability By Design  
 Phone: (02) 9760 2726  
 Mobile: 0400 887 480

##### **Mrs. Natalie Heise**

Special Projects Manager  
 NSW Government Crown Lands  
 Division – Land & Property  
 Management Division  
 Phone: (02) 4920 5058  
 Mobile: 0448 101 047

##### **Mr. Colin Best**

Senior Project Manager  
 Energy Mining & Industry Group  
 Parson Brinckerhoff  
 Phone: (08) 8405 4331  
 Mobile: 0418 476 931



## Project Experience (continued)

**South Australian Defence Region****Value:** \$400 million**Position:** Project Manager

Re-tendering of the 2006 incentive based performance contract for the South Australian Defence region, being a comprehensive maintenance and services contract with a value of \$400 million over five years, potentially up to nine years with incentives.

**Queen Elizabeth Hospital Maternity Wing****Value:** \$4 million**Position:** Project Manager

Demolition of the seven storey maternity wing, along with the deconstruction of a boiler house and the associated 40 metre high chimney stack.

**Ex HMAS Adelaide Artificial Reef Project****Value:** \$7 million**Position:** Project Manager

This nine-month project commissioned by the NSW Land and Property Management Authority (formerly NSW Department of Lands) involved ship preparation and scuttling.

Brenton is a highly valued employee having worked in various areas of the construction industry for over 20 years and joining the McMahon Services' Demolition team in 2000.

Brenton immediately proved to be a team leader, demonstrating a wide variety of skills and expertise, as well as his ability to effectively liaise with clients and subcontractors.

During his employment with McMahon Services, Brenton has successfully managed numerous high-profile industrial and commercial demolition projects, receiving several commendations from clients and building strong relationships within the industry.



### Project Experience

#### Port Adelaide Viaduct Development

**Value:** \$800,000

**Position:** Project Manager

This high profile infrastructure project involved removal of 700hm of elevated track sections, 150hm of suspended nation sections, 400m3 of contaminated ballast from elevated ballast trough sections and various sundry works.

#### Islington Railways Workshop Remediation

**Value:** \$5 Million

**Position:** Project Manager

Demolition and remediation contract of a 12 hectare rail-yard site, which was extensively contaminated over a long period of time through numerous end users. This site was located adjacent residential housing, posing potentially long term health risks to the residents without consolidation of the full remediation. A landscaped public park now occupies this site.

#### Advertiser Building – City Central Tower 2

**Value:** \$4.5 Million

**Position:** Project Manager

Total demolition of 14 storey CBD building, including asbestos removal, bulk earthworks, structural modifications and sub-basement concrete works. Demolition took place whilst the construction of basement and sub-basement structure was being erected simultaneously. This award winning project was recognised by Master Builders Association and Civil Contractors Federation for its complexity and outstanding outcomes.

#### Woomera 27 Tonne Explosives Trial

**Value:** \$2 Million

**Position:** Project Manager

The project involved the construction of four residual buildings, three Singaporean structures and two commercial building sites with a total of six commercial buildings and one complete Norwegian house. The site of the explosion was covered extensively with multiple sensors and cameras to measure the blast's pressure. The trial was sponsored by the United Kingdom's Ordnance Safety Group and Defence Ordnance Safety Group.

#### Kimberly-Clark Project Marvel

**Value:** \$1.9 million

**Position:** Operations Manager

Deconstruction of three large tissue buildings and storage silo, utilising the Ultra High Reach Demolition Excavator. A total of 1,400 tonnes of demolition materials was removed for processing.

### Qualifications

- MC, HC licence
- Heavy Plant licence
- GWA Basic Rail Safety Awareness
- Road transport – Dangerous Goods Certificate
- WA Demolition Ticket
- Driver Accreditation
- Elevated Work Platform Certification
- Confined Space Permit
- First Aid Certificate
- Safety Supervisor
- Green Card

### Referees

**Mr. Fess Parker**  
Department of Defence  
Mobile 0408 801 158

**Mr. Graeme Coppock**  
Kellog Brown Root  
Ph (08) 8301 1234

**Mr. Fred Arias**  
Project Manager  
Hansen Yuncken  
Mobile 0411 752 423



Chris has worked in the construction industry for 30 years with most of his time spent working on steel erection and crane activities. Since joining McMahon Services in 2007, Chris has been able to transfer his knowledge and experience of crane activities into demolition work taking on the role of Crane & Rigging Supervisor.

Chris is a natural leader and communicator with a strong attitude towards safety in the working environment. He has taken the opportunity to assume a key role within the Safety Committee, offering a wealth of on-site knowledge and brings innovation to the table. Chris is an outstanding mentor, encouraging his fellow colleagues to take on McMahon Services 'zero harm' attitude. Chris has demonstrated his exceptional people skills in developing strong rapport with clients and industry authorities.

Chris has been involved in numerous high profile demolition and construction projects throughout Australia and has an outstanding track record of delivering projects on time and on budget. Having three sons working within the industry, Chris puts a strong emphasis on making sure everyone goes home safe.



### Qualifications

- Boilermaker / Welder
- Advanced Riggers ticket
- Crane Operators ticket C6 C2 CN CV
- Dogman
- HR Truck Licence
- WP over 11 metres
- Site Safety Supervisor
- OH&S Committee Representative
- Certificate IV Training & Assessing

### Project Experience

#### Ex-HMAS Adelaide Artificial Dive Reef

**Value:** \$7 Million

**Position:** Site Manager

Contracted by NSW Land & Property Management Authority to prepare and scuttle the Ex-HMAS off the NSW mid coast. This required complete stripping of the ship to virtual skeleton and all environmental hazards.

#### Queen Elizabeth Hospital – Former Nurses Quarters Demolition

**Value:** \$1.5 Million

**Position:** Crane & Rigging Supervisor

Demolition of an 11-storey structure linked to an occupied building, within a fully operational hospital precinct. Works included the removal of friable asbestos and construction of a 5000m<sup>2</sup> car park.

#### Place on Brougham Redevelopment

**Value:** \$1.3 Million

**Position:** Crane & Rigging Supervisor

Asbestos removal, demolition, and structural modifications of former nine-storey hotel for a new high class apartment building in the North Adelaide precinct.

#### Royal Adelaide Hospital

**Value:** \$7 Million

**Position:** Crane & Rigging Supervisor

Various projects completed over a 10 year period involving asbestos removal, structural demolition, structural modifications whilst working within the operating confines of the existing hospital.

#### Flinders Hospital

**Value:** \$1.5 Million

**Position:** Crane & Rigging Supervisor

The staged demolition and asbestos removal of the Flinders Medical Centre for the current upgrade. The project is being carried out whilst the hospital remains fully operational and the coordination of works and communication with the project team and hospital representatives is crucial to the continued successful completion of this long-term project.

### Referees

**Mr. Noel Grinham**  
Safety Manager  
Thiess / Leighton  
Mobile 0428 951 623

**Mr. Clinton Johnson**  
RC & ML Johnson  
Mobile 0411 597 244

**Mr. Mick Sherlock**  
Trainer / Assessor  
CITC  
Mobile 0430 057 451



Daniel has worked in the construction industry for 13 years and has been employed with McMahon Services for the last five years. Daniel is a qualified Demolition Supervisor with a wide range of plant operation qualifications.

In 2000 Daniel completed Certificate III in frontline management and throughout his time at McMahon Services has worked on various projects further developing these skills.

Daniel has excellent communication skills and is highly regarded by his peers and within the industry. He is highly recommended by clients, having much success completing projects within deadline and budget restraints.



### Project Experience

#### Mobil Spotswood – Terminal Site

**Value:** Confidential

**Position:** Project Supervisor

Complex vermiculite / friable asbestos removal and mechanical demolition works at Mobil Spotswood Terminal Site. All McMahon Services' site personnel trained in ExxonMobil's Loss Prevention Systems (LPS). Demolition of 3-storey building and 4<sup>th</sup> level plant room was undertaken using PC450 excavator with purpose-built Long Reach attachment.

#### Islington Railways Workshop Remediation

**Value:** \$5 Million

**Position:** Project Manager

Demolition and remediation of a 12 hectare rail-yard site extensively contaminated and located adjacent residential housing.

#### HNA 3 RAAF Base Training Facility Development – Edinburgh, SA

**Value:** \$500,000

**Position:** Project Supervisor

Daniel was the demolition supervisor for this project that saw the demolition and waste removal of over 100 buildings and various other structures.

#### Lead Contaminated Shed Removal – Esperance, WA

**Value:** \$1.5 million

**Position:** Demolition Supervisor

Demolition of a large lead-processing shed, awarded due to extensive experience on similar lead contamination projects. Daniel was instrumental in the safe management of this project.

#### Former Sheridan Site Redevelopment – Woodville, SA

**Value:** \$7,770,000

**Position:** Safety Officer

The former Sheridan Site Redevelopment project involved the remediation of a 15 hectare industrial precinct into a site suitable for medium density residential use. The project encompassed site clearance including asbestos removal, along with demolition and removal of all improvements.

#### Department of Defence – Radioactive Waste Relocation – Edinburgh, SA

**Value:** \$350,000

**Position:** Project Supervisor

Sorting and relocation of radioactive waste, requiring extra sensitivity due to the hazardous nature and high media attention. Client impressed by professional manner Daniel and his team completed the project.

### Qualifications

- Excavator
- Front End Loader
- Forklift
- Skid Steer
- MR truck
- Traffic Management
- White Card
- Work at heights
- Scissor lift / Boom lift
- Senior First Aid
- Safety Supervisor Certificate
- AC sheet removal (WA)
- Basic Demolition (WA)
- OH&S for frontline managers

### Referees

**Mr. Fess Parker**  
Regional OH&S Manager  
Defence Department  
Mobile 0408 801 158

**Mr. Esmond Ernstzen**  
Project Manager  
ABI Group  
Mobile 0406 428 891

**Mr. Steven Ubergang Kalgoorlie**  
Project Manager  
(Business Optimisation)  
Nickel Smelter  
Mobile 0448 973 066



## Project Experience (continued)

**BHP Nickel Smelter – Kalgoorlie, WA****Value:** \$3 million**Position:** Project Supervisor

Daniel received written acknowledgement from BHP Billiton management for his assistance on the acid tank demolition and disposal project, which was carried out safely and adhered to relevant environmental standards.

**Central Hotel Redevelopment – Port Pirie, SA****Value:** \$450,000**Position:** Project Supervisor

Daniel was involved with both Stages 1 and 2 of the redevelopment project, which included extensive internal and external demolition works.

### Career Overview

Peta began working for McMahon Services for the asbestos division in 2006. Peta has a sound knowledge of all aspects of the asbestos industry and the application he shows each day demonstrates his commitment to a high standard of work.

Peta has completed a number of projects for the Department of Defence and is particularly experienced with their procedures and protocols.

### Project Experience

#### Fertilizer Facility Roof Re-Instatement

**Value:** \$2.2 Million

**Position:** Asbestos Supervisor

14,000 square metres of asbestos roof removal and a new roof reinstated on a operational superphosphate storage facility in Bunbury, Western Australia.

#### Incitec Pivot Asbestos Pipe Lagging Re-insulation

**Value:** \$5.8 Million

**Position:** Asbestos Supervisor

Complete removal of all friable asbestos pipe lagging on Gibson Island plant prior to 2011 shutdown.

#### Royal Adelaide Hospital

**Value:** \$7 Million

**Position:** Asbestos Supervisor

Various projects completed over a 10-year period involving asbestos removal, structural demolition, structural modifications.

#### RAAF Base

**Client:** Department of Defence

**Value:** \$1 Million

**Position:** Project Manager – Asbestos Removal

Contracts spanning over 5 years - removal of asbestos from roofs, eaves, ceilings and linings, walls and floors and reinstatement of the same. Asbestos removal from approximately 200 Telecom pits and reinstatement of the pits.

#### HNA 3 RAAF Base Training Facility Development – Edinburgh, SA

**Value:** \$500,000

**Position:** Asbestos Supervisor

Alan was an asbestos supervisor for this project that saw the asbestos removal, demolition and waste removal of over 100 buildings and various other structures.

#### Kimberly Clark – Millicent Mill

**Client:** Kimberly Clark

**Value:** \$1.2 Million

**Position:** Asbestos Supervisor

Asbestos removal from digester tanks and No. 2 paper machine.

#### Port Augusta Power Station, Playford B – Boiler Refurbishment Works

**Client:** ESTA Utilities

**Value:** \$3 Million

**Position:** Asbestos Supervisor

Removal of friable asbestos and insulation from boiler, drums and associated pipe work.

#### Osbourne Power Station

**Client:** ESTA Utilities

**Position:** Asbestos Supervisor

Removal of friable asbestos from 6 boilers and turbines. Removal of friable asbestos from pipework. Demolition of boiler house, turbine building, 6 boilers, turbines and concrete stack



### Qualifications

- "A" Class Friable Asbestos Removal Training Certificate, SA
- Cert 4 OHS
- First Aid
- Traffic Management
- Working at Heights
- Spotless Inducted
- White Card
- Police Clearance

### Referees

#### Jeff Pash

Flinders Medical Centre

Ph: 0414 190 052

#### Ted Carlaw

RAH Building Services

Ph: 0415 618 495



## Relevant Plant & Equipment

Manufacturer	Model	Age
<b>Dozers</b>		
Caterpillar	D9T	<12 mths
Caterpillar	D9	6 years
Caterpillar	D8	6 years
Caterpillar	D7	7 years
Caterpillar	D7	4 years
Caterpillar	D7	8 years
Caterpillar	D6	5 years



<b>Excavators</b>		
Caterpillar	336DL	<12 mths
Caterpillar	336DL	2 years
Komatsu	PC50	4 years
Komatsu	PC78	10 years
Komatsu	PC130	1 year



Komatsu	PC130	1 year
Komatsu	PC130	2 years
Komatsu	PC130	3 years
Komatsu	PC130	3years
Komatsu	PC130	3 years
Komatsu	PC130	7 years
Komatsu	PC220	New
Komatsu	PC220	2 years
Komatsu	PC220	2 years
Komatsu	PC220	3 years
Komatsu	PC220	3 years
Komatsu	PC220	3 years
Komatsu	PC220	3 years
Komatsu	PC220	4 years
Komatsu	PC220	4 years
Komatsu	PC220	4 years
Komatsu	PC220	4 years
Komatsu	PC220	4 years
Komatsu	PC220	5 years
Komatsu	PC220	7 years
Komatsu	PC220	8 years
Komatsu	PC300	1 year
Komatsu	PC300	1 year
Komatsu	PC300	2 years
Komatsu	PC450	2 years
Komatsu	PC450	2 years
Komatsu	PC450	5 years
Komatsu	PC450	9 years
Komatsu	PC800	12 years
Komatsu	PC1250	2 years
Doosan	DX190W	3 years
Kubota	KXH41	3 years
Kubota	KXH41	4 years
Kubota	KXH41	10 years
Kubota	KX71	5 years
Bobcat	323	4 years
Bobcat	323	4 years
Bobcat	331	3 years
Bobcat	331	3 years



Bobcat	331	3 years
Bobcat	331	7 years
Bobcat	331	9 years
Bobcat	337	3 years
Bobcat	334	8 years
Bobcat	E50	2 years
Bobcat	E60	1 year
Bobcat	E60	2 years
Bobcat	E80	New



<b>Graders</b>		
Caterpillar	140M	< 12 mths
Caterpillar	140M	< 12 mths
Caterpillar	120M	< 12 mths
Komatsu	GD555	7 years





<b>Rollers</b>		
Caterpillar	CS56 (with pad shells)	<12 mths
Caterpillar	CP64	3 years
Bomag	BW120 AD	7 years
Bomag	BW120 AD	7 years
Bomag	BW138 AD	7years
Bomag	BW211	7 years
Bomag	BW226	7 years
Dynapac	CA134	6 years





<b>Skidsteer Loaders</b>		
Bobcat	753	4 years
Bobcat	S100	3 years
Bobcat	S150	4 years
Bobcat	S150	4 years
Bobcat	S150	6 years
Bobcat	S185	2 years
Bobcat	S185	3 years
Bobcat	S185	3 years
Bobcat	S185	5 years
Bobcat	S185	5 years
Bobcat	S185	8 years
Bobcat	S185	8 years
Bobcat	S185	10 years
Bobcat	S185	10 years
Bobcat	S205	1 year



Bobcat	S205	2 years
Bobcat	S250	<12 mths
Bobcat	S250	5 years
Bobcat	S650	2 years
Bobcat	T320	2 years
Bobcat	T650	1 year



<b>Wheel Loaders</b>		
Caterpillar	660	8 years
Caterpillar	924G	5 years
Caterpillar	972H	< 12 mths
Caterpillar	972	5 years
John Deere	TC54H	11 years
Komatsu	WA65	3 years
Komatsu	WA65	8 years
Komatsu	WA180	10 years
Komatsu	WA250	2 years



Komatsu	WA250	3 years
Komatsu	WA380	7 years
Komatsu	WA320	12 years
Komatsu	WA420	7 years
Komatsu	WA420	12 years
Komatsu	WA480	7 years
Komatsu	WA480	10 years
Komatsu	WA500	5 years
Komatsu	WA600	7 years
Komatsu	WA600	10 years
Volvo	L90F	< 12 mths



<b>Scrapers / Carry Grader (Land Plane)</b>		
Caterpillar	623G	7 years
Caterpillar	623G	6 years



John Deere	9630 (tractor) JNR2400 EH (carry grader)	5 years
John Deere	9630 (tractor) JNR2400 EH (carry grader)	6 years



<b>Dump Trucks</b>		
Caterpillar	740B	< 12 mths
Caterpillar	740B	<12 mths
Volvo	A40D	6 years
Volvo	A40D	7 years





<b>Service Trucks</b>		
Isuzu	NPS300 4x4 service truck	<12 mths
Isuzu	FVZ1400 Fuel /Service Truck	<12 mths
Isuzu	DMAX Site Service Vehicle	1 year
Isuzu	NPS300 Service Truck	1 year
Toyota	Landcruiser Field Service )	5 years
Toyota	Landcruiser (Field Service)	5 years
Hino	Service Truck	3 years





Water Trucks		
Caterpillar	740 B (37000 l)	< 12 mths
Caterpillar	740 B (37000 l)	< 12 mths
Terex	TA 27 (27000 l)	4 years
Action Trucks	33000l semi-trailer	<12 mths





<b>Quick Fill Water Tankers</b>		
Thies	35000 (on legs)	4 years
Thies	35000 (on legs)	4 years
Thies	35000 (on legs)	4 years

<b>Pumps</b>		
Sykes	CP150ic (6")	<12 mths
Sykes	CP150ic (6")	<12 mths
Sykes	CP150ic (6")	<12 mths
Standpipes	McM	< 12 mths

<b>Prime Movers</b>		
Caterpillar	CT630	3 years
Volvo	FM13	4 years
Volvo	FH16	1 years
Volvo	FH16	2 years





<b>Semi Tipper Trailers</b>		
Freightmaster	Tri Axle	1 years
Freightmaster	Tri Axle	1 years
Freightmaster	Tri Axle	5 years
Freightmaster	Tri Axle	5 years
Parsons	Tri Axle	10 years
Parsons	Tri Axle	10 years
Rockwheeler	Side Tipper (Tri Axle)	3 years



<b>Low Loaders / Drop Deck Trailers</b>		
Drake	3 x 8 Low loader	10 years
Drake	4 x 8 Low Loader	4 years
Drake	4 x 4 Low Loader	18 years
Southern Cross	Quad Low Loader	3 years
TRT	4 x 4 Low Loader	12 years
Liberty Freighters	Drop Deck	3 years
Maxitrans	Drop Deck	10 years
Southern Cross	Drop Deck	12 years



<b>Site Accommodation</b>		
Crib rooms (Various x 30)	Various sizes	2-12 years
Amenity Blocks (Various x 10)	Various configurations	3-12 years



<b>Generators and Compressors</b>			
Kaeser M56 Compressor	195 cfm	4-6 years	4
Kaeser M120 Compressor	285 cfm	4 years	3
Atlas Copco GA 122 comp	120 cfm	6 years	2
Atlas Copco GA355 comp	320 cfm	4 years	2
Dunlite	35kva	8 years	1
Dunlite	50kva	10 years	1
ESAB	40 kva	6 years	3
Denyo	70kva	5 years	2
Olympian	88 kva	3 years	1
Central Diesel	43 kva	1 year	2

<b>Access Equipment</b>			
JLG 1930ES Scissor lift	19 foot	8 years	4
JLG 2646 ES scissor lift	26 foot	8 years	4
JLG 4394RT Scissor	43 foot	8 years	4
JIG 450AJ knuckleboom	45 foot	6 years	3
JLG 660AJ knuckleboom	66 foot	6 years	2



JLG 800AJ knuckleboom	80 foot	6 years	1
JLG 1350 boomlift	135 foot	7 years	1
Aluminium Mobile Scaffold	Various	1-3 years	



<b>Cranes</b>			
Liebherr	LTM 1250	2 years	1
Grove	GMK 4100	6 years	1
Tadano	TR500M	7 years	1
Franna	MAC25	6 years	1



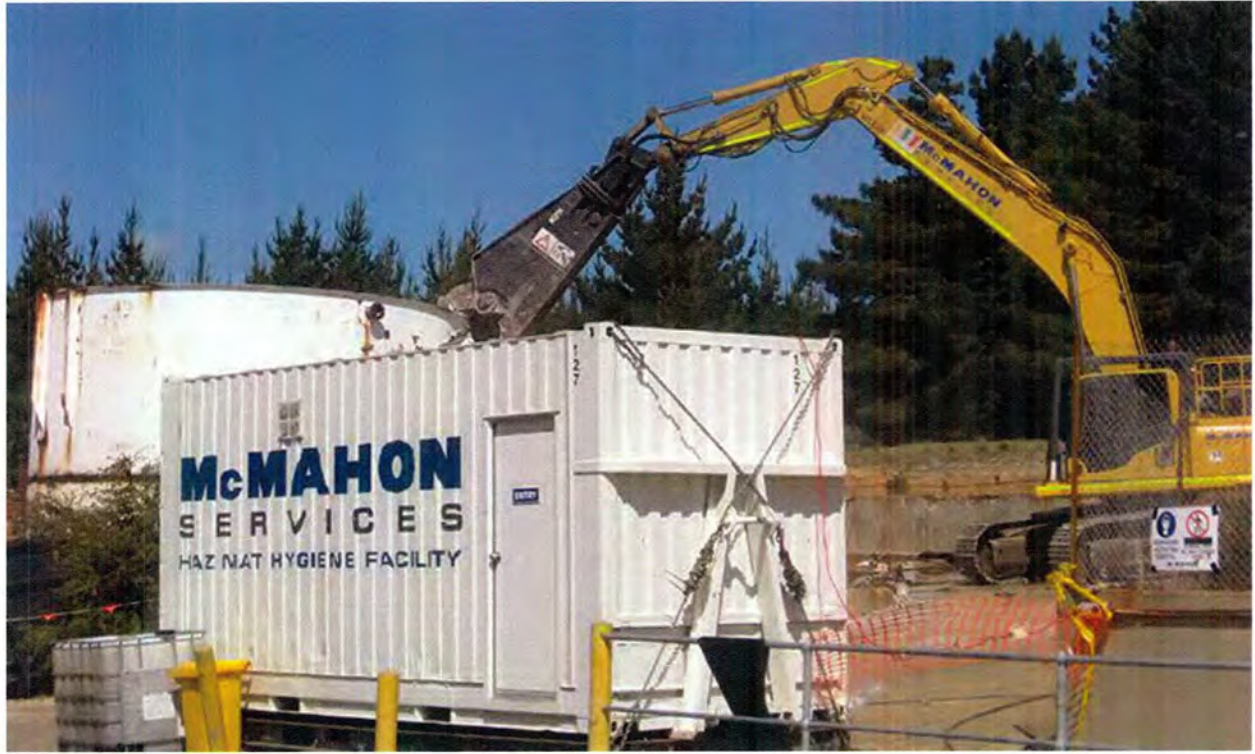


<b>Excavator Attachments</b>			
La Bounty Shears	Various	2-4 years	7
La Bounty Grapples	Various	2-6 years	6
Genesis Concrete Pulverisers	Various	2-6 years	4





<b>Hammer Attachments</b>			
City	Various	1-6 years	6
Indeco	Various	1-8 years	8



<b>Asbestos / Hazmat Equipment</b>			
<b>Decontamination Units</b>			
Decon	5 Stage Wet (modular)	12 mths	10
Decon	5 Stage Wet (Trailer)	12 mths	4
Decon	5 Stage Hazmat (20 x 8 container)	2 years	2

<b>Breathing Air</b>			
Kaeser Compressor	ASD57	2 years	1
Atlas Copco	GS81	4 years	1
Frigematic Air Driers/Chillers	Various	4 years	4





<b>Vacuum/HEPA</b>			
Nilfisk Vacuum	Large	2 years	6
Nilfisk	Wet vac	3-4 years	10
Spitwater	Wetvac	3-4 years	10
Vecloader	HEPA Vac (Trailer mount)	12 years	1

<b>Air Filtration</b>			
AMS	2000 cfm neg air 240v	1-3 years	20
Richardson	3000 cfm neg air 3 phase	5 years	15



Appendix E  
**Track Record**



## Project Profile

# Adelaide Oval Redevelopment



<b>Locations</b>	Adelaide, South Australia
<b>Client</b>	Boulderstone
<b>Contract</b>	Adelaide Oval Redevelopment Demolition
<b>Cost</b>	\$1.7 million
<b>Duration</b>	Eight weeks

### Demolition and salvage works for the highly anticipated Adelaide Oval Redevelopment

#### [CHECK OUT AMAZING TIME LAPSE FOOTAGE OF THE DEMOLITION HERE](#)

McMahon Services showed their strength, demolishing the iconic Adelaide Oval Grandstands to ground level and recovering all salvage items in just 18 days.

Engaged by Head Contractor Boulderstone, McMahon Services was responsible for all demolition and salvage works for the \$350.2 million Adelaide Oval Redevelopment in the heart of Adelaide's CBD.

Making way for a new world class stadium, McMahon Services deconstructed the Bradman Stand, Chappel Stands, Clem Hill Stand, Indoor Cricket Centre, SACA offices and various other structures within the precinct.

Through a highly accelerated eight week program with three simultaneous work fronts, the demolition team ripped through structures mounting up to 18000 tonnes of concrete, 1500 tonnes of bricks, 700 tonnes of steel and 15 tonnes of non-ferrous metals.

The Ultra High Reach Demolition Excavator performed at its peak, deconstructing the 25 metre high Bradman Stand, Indoor Cricket Centre and Chappel Stands.

The machine's incredible hydraulic shear brought down the enormous structures in a synchronised performance with a fleet of eight excavators ranging from 22 to 150 tonne. McMahon Services also self-delivered cranes and rigging using the 250 tonne Liebherr, 100 tonne Tadano and 25 tonne Franna cranes.

#### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)



The team of 30 worked tirelessly on a seven-day shift rotation to get the job done and were further assisted by McMahon Services' Indigenous contracting division - Intract. A team of nine Intract personnel completed a wide range of jobs from deconstructing seats in the stands, removing internal fixtures and carpet, wet down duty, dust suppression and gate security to training on excavators and bobcats under the supervision of McMahon Services personnel.

To complete the project, McMahon Services sorted, processed and loaded out the demolished material with over 50 truck load out movements per day. The materials were either sent directly to the recycled materials stream or further processed off-site into re-usable products.

Utilising the ResourceCo facilities at Wingfield, McMahon Services successfully recycled 98% of demolition materials on site, exceeding the 95% target.

---

**McMahon Services**

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)





## Project Profile

# Former Harris Scarfes Building Redevelopment



Locations	Adelaide, South Australia
Client	Hansen Yuncken
Contract	Asbestos removal, demolition & civil works
Cost	\$7 Million
Duration	April 2010 - November 2011

### High profile inner-city asbestos removal, demolition and civil project

In early 2011, McMahon Services were engaged to undertake the challenging demolition of the former Harris Scarfe site in the heart of Adelaide's CBD.

With more than 60 people working around the clock it took almost two months to complete the mechanical demolition of the site, which included buildings up to seven storeys high.

At any one time, we had personnel working on propping detail and bracing, asbestos removal and mechanical demolition, meaning our team was working immediately next to buildings that were in the process of being demolished.

Safety procedures and evacuation plans were revised daily to account for the constantly changing access points. Site personnel were also required to attend regular briefings to ensure everyone had the latest information and were aware of any changes.

The project called for the latest addition to the McMahon Services' extensive fleet of company-owned plant and equipment – the Komatsu PC 1250 Ultra High Reach Demolition Excavator.

At full configuration, the machine has a reach of 45 metres and the capacity to operate a 2.5 tonne demolition shear at this height. Structures up to 15 storeys high can be deconstructed from ground level and the unit is readily transportable for use at any location across Australia.

McMahon Services also completed the construction of 503 retention and building piles, and excavated 7,000 square metres of soil to five metres below street level.

### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmahonservices.com.au](mailto:adelaide@mcmahonservices.com.au)

W [mcmahonservices.com.au](http://mcmahonservices.com.au)



Further work included underpinning the adjacent transformer substation, construction of the rubble platform beneath the new basement slab, and detailed excavation for pile caps, footing, ground and edge beams, and pits.

The project also received a significant boost to its green credentials, with original materials from the demolished site being reused by McMahon Services to lay the foundations of the new building.

This precision deconstruction process generated more than 25,000 tonnes of materials, including heavy items such as concrete and steel, as well as some lighter fractions such as wood and plastic.

The material was removed from the site and taken to ResourceCo's Wingfield premises where it was crushed and recycled into base material and aggregate for 3,500 cubic metres of concrete to construct the 503 building and retention piles for the redevelopment.

The recycling and re-use process dramatically reduced the \$385 million Harris Scarfe project's carbon footprint and prevented several tonnes of material from going to landfill.

#### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)





## Project Profile

# Fisher Street Building Demolition



Locations	South Australia
Client	Living Choice
Contract	Demolition Works
Cost	\$950,000
Duration	February 2011 - March 2011

### Demolition of dilapidated former Julia Farr Building and recycling scrap metal.

McMahon Services were contracted by Living Choice to demolish dilapidated Fisher Street Building in Adelaide's inner south-east. The demolition, which took 4 weeks to complete, made way for a new 189-unit luxury retirement village.

The works utilised the new Ultra High Reach Demolition Excavator which had just arrived from America, and is currently the largest piece of demolition equipment in Australia. The giant hydraulic shear attachment deconstructed the buildings piece by piece.

Demolishing large structures is traditionally labour intensive and involves a combination of cranes, small machinery and hand held oxy cutting tools. Buildings have to be slowly taken apart level by level which is time consuming, expensive and potentially dangerous.

The capabilities of the Ultra Reach Demolition Excavator made works extremely cost effective and minimised the risk to our site personnel, the public and adjoining properties. Utilising the new equipment also meant less noise and dust emissions, making it ideal for the confined suburban project.

All scrap metal was collected and removed from site for recycling.

### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)





## Project Profile

# Kimberly-Clark Project Marvel



Locations	Millicent Mill, South Australia
Client	Kimberly-Clark Australia
Contract	Deconstruction of Tissue Machine Buildings T1, T2 & T3
Cost	Confidential
Duration	December 2011 - June 2012

### Project Marvel involved deconstruction of three large tissue machine buildings and storage silo.

"Project Marvel" at the Kimberly-Clark Millicent Mill in South Australia required McMahon Services to deconstruct three large tissue machine buildings, T1, T2 and T3, along with the North Chip Storage Silo.

The demolition of the large concrete silo proved to be a complex task, with newly built structures surrounding the storage facility limiting the flexibility of the work space.

The project called for scaffolds to bridge existing structures including live transformers and other adjacent buildings that were still in active use.

In line with SafeWork SA's requirements for all structures over six metres, a full risk assessment and work methodology was completed prior to work commencing.

The renowned company-owned Ultra High Reach Demolition Excavator, with a 45 metre reach capability, enabled the structures to be deconstructed from the top down, without placing personnel at heights.

The Excavator was used in tandem with the PC450 LaBounty shear and a PC 300 excavator with a grapple and hammer, efficiently bringing down the structures with minimal risk to the surrounding environment.

A three-way tipper was then used to transport around 1,400 tonnes of deconstructed materials from Millicent to Adelaide, with around 120 tonnes of material transported per week for processing.

#### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)





## Project Profile

# Queen Elizabeth Hospital Demolition



Locations	Adelaide, South Australia
Client	DTEI / Hansen Yuncken
Contract	QEH Demolition Works
Cost	\$3.2 Million
Duration	September 2011

### **This challenging project involved hospital and boiler house demolition works for the Queen Elizabeth Hospital.**

McMahon Services were contracted to complete the \$3.2 million of demolition works for Adelaide's Queen Elizabeth Hospital. The final phase of this challenging project was the demolition of the boiler house and the associated 40 metre high chimney stack. The concrete stack was internally lined with masonry fire brick and was situated in a highly confined location, immediately adjacent to an operating research facility and the adjoining boundary residential properties.

Demonstrating innovation at its best, the team tackled the tallest mechanical demolition project ever completed in Australia using the \$3 million Ultra-High Reach Demolition Excavator.

The mammoth excavator deconstructed the colossal chimney working around the circumference of the stack from top to bottom using a fully rotating cutter-crusher attachment fitted to the excavator. The attachment can process both concrete and steel reinforcement in the one operation. High volume water spray nozzles located on the end of the excavator boom also provided full dust suppression.

The successful demolition of the challenging structure in such a sensitive location was a testament to the capabilities of the demolition team. An eight week risk assessment, planning and engineering review fully established our methodology, and enabled the dedicated team of eight to complete the deconstruction within a 10 hour period.

The project proved that the Excavator is ideal for confined suburban projects, as there is less noise and significantly less dust emissions. The machine is not only faster, but also much safer than other demolition methods.

#### **McMahon Services**

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)



## Project Profile

# Nyrstar Emergency Shutdown



Locations	Port Pirie, South Australia
Client	Nyrstar
Contract	Emergency Shutdown at the Nyrstar Lead Smelter
Cost	
Duration	November 2012 (4 weeks)

### Port Pirie Lead Smelter calls for emergency shutdown works

A team of 80 full-time personnel led a major emergency shutdown at the local Nyrstar Lead Smelter, including the dig out of the Blast Furnace and several pans laden with lead, along with extensive industrial cleaning using specialist hydro blasters and vector units.

The project also called for cladding removal and replacement, as well as concrete and brick removal.

The team worked around the clock for two weeks on 24-hour shifts to complete majority of the works, with an additional two weeks on-site to finish the job.

To tackle the challenging shutdown, the Port Pirie office joined forces with personnel from the Civil and Demolition divisions in Adelaide, along with workers from Intract and subsidiary concrete construction company Ballestrin.

The project demanded concrete remediation works to be completed in highly contaminated areas of sulphuric acid, with the team of 10 proving their strength working in chemical suits and respirators in extreme heat.

The most difficult challenge for the team was the Precious Metals Refinery works running simultaneously to the shutdown. This on-going project involves the extraction of silver oxide, which has leached into the ground over the past 30 years.

Work was also completed in the acid plant, a high risk environment working with highly concentrated acidic liquor and sludge. The potential for structural failure was also high, calling for the team to brace the walls due to ground movement causing the brick walls to crack which were supporting a suspended concrete roof.

### McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)

W [mcmservices.com.au](http://mcmservices.com.au)





During this time, the Ultra High Reach Demolition Excavator was also put to work, demolishing a four storey refinery building. The team had to work carefully, with buildings containing liquid oxygen and nitrogen tanks situated only five metres away from the demolition site.

The team successfully completed the shutdown with zero impact on the PMR and with zero MTIs and LTIs.

A contract held for over 27 years, McMahon Services continues to deliver solid results on difficult shutdown works at the smelter and with the highest safety standards.

---

**McMahon Services**

Head Office

T (08) 8203 3100 F (08) 8260 5210

E [adelaide@mcmservices.com.au](mailto:adelaide@mcmservices.com.au)W [mcmservices.com.au](http://mcmservices.com.au)

Appendix F  
**Financial Capacity**



## Finance Manager Summary

### McMahon Services Group

The McMahon Services Group is owned jointly by David and Andrew McMahon, who have been at the helm for more than 20 years, and who are still actively involved in the on-going operations of the group.

The core McMahon Services operating group comprises the following entities:

- McMahon Services Australia Pty Ltd
- D & A McMahon Investments Pty Ltd
- McMahon Services Plant Pty Ltd
- Distinct Management Services Pty Ltd
- McMahon Services Australia (NT) Pty Ltd

These core entities work seamlessly together and provide the complete service offering which has been outlined in the preceding tender documents.

McMahon Services is also a founder and has a controlling interest in one of Australia's largest and leading construction materials recycling companies, Resourceco. The Resourceco group have an annual turnover in excess of \$40 million, and the complimentary nature of the operations provide significant synergies and efficiencies to both the McMahon Services and Resourceco Groups.

As a privately held company, there is no requirement to prepare general purpose financial statements, however special purpose financial statements are subject to an external audit (or review as applicable) by Ernst & Young each year.

Although McMahon Services Australia Pty Ltd is the only entity which requires an annual audit to be conducted, to ensure the integrity of the financial information for the group, Ernst & Young are engaged to perform specific audit procedures in relation to each of the remaining group entities. While no audit opinion is expressed, Ernst & Young engage in a detailed review of the financial information for these remaining entities, and any risk areas identified are raised with management for further review and action (if required).

Accordingly, the audited financial statements attached do not reflect the position of the McMahon Services Group as a whole.

The group has seen significant growth in recent years and is well placed to capitalise on this growth and consolidate its position in the market, as highlighted by some of the key financial indicators which are summarised below:

Financial Indicator	30 June 2010	30 June 2011	30 June 2012
Turnover	\$105 million	\$168 million	\$158 million
Net Assets	\$22 million	\$30 million	\$36.5 million
EBITDA	\$15 million	\$25 million	\$20 million
Interest Coverage	22.56 times	28.90 times	21.65 times



Appendix G  
**Sustainability**



## Safety and Sustainability

Safety and sustainability are at the forefront of our operations across Australia. Our Management Systems, exemplary safety record and comprehensive internal structures and processes in this area demonstrate our commitment.

McMahon Services shows an unwavering commitment to our workforce, safety culture, the environment around us, and communities in which we work.

We are proud to be recognised as industry leaders for our initiatives, achieving third party accreditation from SAI Global and the Federal Safety Commission as listed below.

## Management Systems



### Occupational Health & Safety Management System

Requirements	AS/NZS 4801:2001
Certificate No	OHS20284
Originally Certified	23 December 2008
Expiry Date	31 October 2013



### Quality Management System

Requirements	AS/NZS ISO 9001:2008
Certificate No	QEC7809
Originally Certified	11 June 1998
Expiry Date	2 July 2016



### Environmental Management System

Requirements	AS/NZS ISO 14001:2004
Certificate No	C10081
Originally Certified	5 March 1999
Expiry Date	2 July 2016

## Health & Safety Management



Health &  
 Safety  
 AS 4801



**Our Mission:** To foster a safety culture that positions us as industry leaders, where we work together as a team to ensure a zero harm environment for our workers, stakeholders and the wider community.

Safety is at the forefront of our operations across Australia, demonstrated by our Occupational Health and Safety Management Systems being certified to AS/NZS 4801:2001, our exemplary safety record and comprehensive internal structures and processes.

Furthermore, we were the first multi-disciplinary construction services company in Australia to achieve Federal Safety Accreditation.

### Our health and safety initiatives include:

- Ongoing identification, assessment and control of risks
- Increased training and supervision
- Improved communication that welcomes feedback and initiative
- Emphasising health and safety issues in daily Site Safety Toolbox Meetings and through workshops and staff newsletters
- Detailed and effective incident investigation
- Comprehensive rehabilitation programmes for injured employees



Our objective is to continually review our safety record and improve our safety performance to achieve a standard that is above industry requirements. As an organisation, we implement a Health, Safety and Environmental Management Plan for every project. The purpose of the HSEP is to identify and describe potential safety and environmental risks, analyse the level of risk, and outline measures that will be used to minimise or eliminate the hazard.

We are proud to be recognised as industry leaders for our safety initiatives. Our staff know that their actions, as individuals, promote an injury free environment and that everyone has responsibility for maintaining our safety culture.

### Safety Focused Behavioural Program



Our "Safety Focused" behavioural program is designed to build a strong safety culture throughout our organisation. To implement changes in attitudes and behaviours we work closely with our site personnel by utilising a mix of workshops, training materials, on site mentors and behavioural prompters. We encourage open communication with the aim of creating greater awareness to help reduce injuries and improve our safety performance.

We recognise that the involvement of managers in the safety management process is critical, particularly at the site manager and supervisor level. Our Safety Focused Program is aimed at developing skills in safety leadership and influencing attitudes and behaviours surrounding best safety practice.

### Safety Performance

A key element in the management of our safety program is the continuous review of our performance, enabling the setting of goals for driving improvement. McMahon Services seek to create a mindset and an environment where people believe it is possible to work injury free.



<b>Company Safety Statistics</b>			
These tables are tabulated in accordance with AS 1885.1 – 1990 (Workplace Injury and Disease Recording Standard).			
	2012	2011	2010
Man-hours worked	1,114,260	1,160,265	1,173,047
Lost Time Injuries (LTI)	3	3	3
Medically Treated Injuries (MTI)	14	15	14
LTI Frequency Rate (per 1,000,000 M/H)	2.7	2.6	2.6
MTI Frequency Rate (per 1,000,000 M/H)	12.6	12.9	11.9

## Quality Management



**Our Mission: To deliver quality project outcomes through the highest standards of performance, professionalism, and customer service.**

McMahon Services strives to consistently deliver the highest quality standards across all service areas. We are committed to providing quality products and engaging with our customers to understand their specific needs. Our third party accreditation to AS/NZS ISO 9001:2008 Quality Management Systems underlines this commitment.

Our quality assurance approach is managed by company-wide policies and procedures, with the aim of continually improving customer satisfaction. To measure, analyse and improve our performance, we seek feedback from our clients, reflecting on our services, staff, safety standards and communication.

### Our quality management approach includes:

- A Business Management System Manual
- Clear procedures outlining our approach and operations
- Detailed Safe Work Instructions
- Regular training and refresher training
- Project specific Health, Safety and Environmental Plans
- Customer Satisfaction Surveys

### The implementation of this system for each project shall assure;

- The project is well planned prior to commencement;
- All contractual obligations will be met;
- There will be evidence of compliance with the specific contract requirements;
- There will be evidence all McMahon Services personnel working on the job site will adhere to the HSEP; and
- There will be evidence that all subcontractors and suppliers engaged by McMahon Services have complied with the direction and policy of the company's Quality System.

McMahon Services project specific HSEP addresses the goals, objectives and organisation of the project, including a project background and relevant procedures and SWIs. This covers all administrative and operational aspects of the project, assuring the client that works undertaken by us will be to first class standards.



## Environmental Management



**Our Mission: To protect and preserve the environment around us, by continually refining our methods and reducing our carbon footprint.**

Environmental management planning is an integral part of our overall project approach, embedding environmental considerations into every aspect of our operations and activities.

Our commitment to the protection and preservation of the environment is best demonstrated by our certification to AS/NZS ISO 14001:2004 Environmental Management Systems.

**Our internal Health, Safety and Environmental Management Plan (HSEP) addresses how we will manage environmental impacts such as:**

- Construction noise
- Vibration and dilapidation
- Air quality
- Soil and groundwater quality and conservation
- Water quality
- Protection of flora and fauna
- Visual impacts
- Aboriginal and natural heritage
- Hazardous waste and other dangerous materials

The intent of our EMP on each project is to ensure potential design and construction related impacts upon the environment are avoided. Where environmental impacts cannot be avoided they will firstly be minimised, within the guidelines and legal requirements, and then controlled. This is achieved through pro-active environmental management planning prior to carrying out particular elements of work. Accordingly, emphasis is placed upon integrating EM planning with design planning and construction method planning.

McMahon Services understands its obligations to avoid waste generation and enable the recycling and reuse of waste generated by our operations and activities. We have adopted a 0% waste target for our company operations and we are continuously refining our methods of waste processing to achieve this goal.

### Our Environmental Footprint

As part of our commitment to sustainable development and to build on our existing environmental management initiatives, McMahon Services are annually monitoring energy consumption and greenhouse gas emissions, and are continually working to reduce our environmental footprint.

*McMahon Services environmental footprint is audited annually by Balance Carbon Pty Ltd.*



# Health Safety Environmental Plan



HSE Plan V04.00

Page 1 of 63

ISSUE DATE: AUGUST 2012

## HEALTH SAFETY AND ENVIRONMENTAL PLAN



Project Version: V 00	Name	Signed	Date
Prepared by:	Tim Cotton		
Reviewed by:	Melissa Hudson		
Approved by:	Chris Latham		



**1 CONTENTS**

2	PROJECT TEAM CONTACTS.....	5
3	EMERGENCY CONTACT NUMBERS.....	5
4	SENIOR MANAGEMENT COMMITMENT.....	6
5	INTRODUCTION.....	7
6	PURPOSE.....	7
7	SCOPE.....	7
8	PROJECT DESCRIPTION.....	8
9	PLANNING.....	8
10	PROJECT KEY HAZARDS.....	8
11	LEGISLATIVE REQUIREMENTS.....	9
12	McMAHON SERVICES HSEQ SYSTEM REQUIREMENTS.....	10
14	DEFINITIONS.....	14
15	PROJECT SAFETY OBJECTIVES, TARGETS AND KPI'S.....	16
•	PROJECT SAFETY OBJECTIVES AND KPI'S TABLE.....	17
16	ROLES AND RESPONSIBILITIES.....	18
•	ORGANISATIONAL STRUCTURE.....	18
•	PROJECT HEALTH SAFETY AND ENVIRONMENTAL PLAN (HSEP) ROLES AND RESPONSIBILITIES.....	19
•	McMAHON SERVICES MANAGING DIRECTOR.....	19
•	McMAHON SERVICES HSEQ MANAGER.....	19
•	<b>McMAHON SERVICES DIVISIONAL MANAGER</b> .....	20
•	<b>McMAHON SERVICES PROJECT MANAGER</b> .....	21
•	<b>McMAHON SERVICES SITE PROJECT SUPERVISOR</b> .....	22
•	SITE SAFETY Supervisor.....	23
17	INDUCTION AND TRAINING.....	24
•	HSE INDUCTION REQUIREMENTS.....	24
•	COMPETENCY FOR PRESCRIBED OCCUPATIONS AND ACTIVITIES.....	24
•	<b>RAIL SAFETY INDUCTION</b> .....	25
•	RAIL SAFETY WORKER RISK ASSESSMENT.....	25
•	VISITORS.....	25
18	EMERGENCY MANAGEMENT.....	26
•	EMERGENCY RESPONSE.....	26



19	COMMUNICATION AND CONSULTATION.....	27
•	SAFETY FOCUSED GROUND RULES .....	27
•	HAZARD IDENTIFICATION AND REPORTING .....	27
•	HSE ISSUE RESOLUTION PROCESS.....	28
•	HEALTH SAFETY AND ENVIRONMENTAL COMMITTEE MEETINGS .....	28
•	HEALTH SAFETY REPRESENTATIVES (HSR) .....	28
•	TOOLBOX MEETINGS .....	29
•	DAILY PRE-START MEETINGS .....	29
•	RAIL CORRIDOR ACCESS PRE-START CHECKLIST / MEETING.....	29
20	RISK MANAGEMENT.....	30
•	THE RISK ASSESSMENT PROCESS .....	30
•	MONITORING EFFECTIVENESS OF RISK CONTROLS .....	32
•	HIERARCHY OF CONTROLS.....	32
•	PROJECT RISK ASSESSMENT and Register.....	33
•	PLAN DEVELOPMENT.....	33
•	JOB SAFETY ANALYSIS (JSA) / SAFE WORK METHOD STATEMENT (SWMS).....	33
•	SAFE ACT OBSERVATIONS (SAO's) .....	34
•	SAFETY IN DESIGN.....	34
21	SUBCONTRACTOR MANAGEMENT.....	35
22	HEALTH AND SAFETY MANAGEMENT .....	36
•	SITE MANDATORY PERSONAL PROTECTIVE EQUIPMENT (PPE).....	36
•	EQUIPMENT TERMINATION AND LOCK OUT / TAG OUT (LOTO) .....	36
•	ELECTRICAL SAFETY.....	37
•	OVERHEAD POWER LINES.....	37
•	PLATFORM LADDERS .....	37
•	EXCAVATION AND TRENCHING.....	38
•	CRANES AND MATERIAL HANDLING .....	39
•	ELEVATING WORK PLATFORMS (EWP) .....	40
•	WORKING IN EXTREME WEATHER CONDITIONS .....	41
•	HEAT STRESS.....	42
•	SIGNS OF HEAT STRESS .....	42
•	AVOIDING HEAT STRESS .....	43
•	TREATMENT OF HEAT STRESS.....	43
•	SAFETY DATA SHEETS (SDS) .....	44
•	EMERGENCY MANAGEMENT, FIRST AID AND MEDICAL SERVICES.....	44
•	HAZARDOUS MANUAL TASKS .....	45
•	FITNESS FOR WORK AND BEHAVIOUR.....	47
•	CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT.....	47

	<p align="center"><b>HEALTH SAFETY AND ENVIRONMENTAL PLAN</b></p>
--	---

HSE Plan V04.00	Page 4 of 63	ISSUE DATE: AUGUST 2012
-----------------	--------------	-------------------------

- PLANT AND EQUIPMENT OPERATION ..... 47
- 23 ENVIRONMENTAL MANAGEMENT ..... 48
- SMOKE FREE ENVIRONMENT ..... 48
- NOISE CONTROL ..... 48
- DUST CONTROL ..... 48
- STORMWATER MANAGEMENT ..... 48
- PLANT AND EQUIPMENT SERVICING AND REFUELLING ..... 48
- FIRE PREVENTION ..... 49
- WASTE TRACKING ..... 50
- EMEX AUSTRALIS (THREE CORNERED JACK / WEED) ..... 50
- 24 ACCIDENT AND INCIDENT REPORTING, NOTIFICATION AND INVESTIGATION ..... 51
- ACCIDENT AND INCIDENT REPORTING ..... 51
- NON CONFORMANCE CONTROL ..... 51
- 25 WORKPLACE AUDITS AND INSPECTIONS ..... 51
- VISITING MANAGER’S INSPECTIONS ..... 51
- HSE REVIEW ..... 51
- WORKPLACE AUDITS, INSPECTIONS AND MEETINGS ..... 52
- MONITORING AND MEASUREMENT OF HSE PERFORMANCE ..... 52
- 26 APPENDICES ..... 53
- APPENDIX 1 ..... 53
- Safety Policy ..... 53
- APPENDIX 2 ..... 54
- Quality Policy ..... 54
- APPENDIX 3 ..... 55
- Environmental & Community Policy ..... 55
- APPENDIX 4 ..... 56
- RESOLUTION OF AN WHS PROBLEM ..... 56
- APPENDIX 5 ..... 57
- REPORTING GUIDELINES ..... 57
- APPENDIX 6 DIAGRAM 1 – SITE EMERGENCY, GROUP EMERGENCY AND CRISIS FOR mCmAHOH sERVICES60
- 27 HEALTH SAFETY AND ENVIRONMENTAL PLAN CHECKLIST ..... 61
- 28 HSE PLAN INDUCTION REGISTER ..... 62



## 2 PROJECT TEAM CONTACTS

Position/Title	Name	Contact Details
Divisional Manager	Chris Latham	
Project Manager		
Site Project Supervisor		
Safety Supervisor	Tim Cotton	

## 3 EMERGENCY CONTACT NUMBERS

- Fire / Police / Ambulance - 000 or 112 from mobiles
- Police assistance - 131 444
- SafeWork SA reportable incidents - 1800 777 209
- Environmental Protection Agency reportable Incidents - (08) 8204 2004
- Site First Aid -
- Crisis / Traumatic Assistance - Marie Leverington - 0432 985 798 / (08) 8203 3100

### HOSPITAL / MEDICAL CENTRE

#### Pt Pirie Hospital

Corner The Terrace and Alexander Street Port Pirie South Australia  
Ph - (08) 8638 4500

#### Pt Augusta Hospital

71 Hospital Road Port Augusta South Australia  
Ph - (08) 8648 5500

#### COMPANY NOMINATED MEDICAL PRACTITIONER (South Australia)

*For company personnel medical reference*

DR Jonathan COOK  
Trinity Medical Centre  
Adelaide  
101 Port Wakefield Road,  
Cavan, SA - (08) 8260 7044

**McMahon Services Rehabilitation Coordinator - Marie Leverington 0432 985 798**

#### 4 SENIOR MANAGEMENT COMMITMENT

The essence of the McMahon Services Safety Policy is to "Conduct its business in a manner that protects the safety of employees and others involved in its operations. "To ensure that customers and the public are not placed at risk through its operations and to "strive to prevent all accidents injuries and occupational illness through the active participation of every employee"

The Managing Director shall:-

- Conduct regular meetings to review safety, quality, environmental, plant & equipment, with regards to the current project.
- Conduct audits and inspections on project sites

The HSEQ Manager in conjunction with the Managing Director:-

- Will carry out Management Review Meetings to assess the Business Management System and ensure compliance with the Standard ISO 9001 and ISO 14001 and AS/NZS 4801.
- Arrange and organise internal audits on the Business Management System; prepare audit programmes and monitor progress.
- Collate and review all non-conformance reports and discuss any perceived corrective or preventative actions with the Managing Director, Divisional Managers and Project Supervisors.

McMahon Services is committed to identifying, eliminating and managing safety risks by using the continuous improvement process.

McMahon Services will:

- Comply with applicable legislation
- Provide safety management systems
- Provide training
- Establish safety performance targets and performance monitoring
- Adopt a consultative process between management, employees and contractors
- Conduct reviews and evaluations of its operations to measure compliance

Senior Management fully supports and endorses this Policy.

(Refer to Appendix 1 McMahon Services Safety Policy)



## 5 INTRODUCTION

This document outlines the responsible persons, procedures and requirements for the implementation and execution of the Health Safety and Environmental Management System for the project.

The Health, Safety and Environmental Plan (HSEP), in conjunction with McMahon Services System Procedures (SP) and Safe Work Instructions (SWI) shall form the HSE System for this project.

## 6 PURPOSE

McMahon Services is committed to striving for zero harm and to executing its operations in a safe, responsible and professional manner.

McMahon Services has prepared this plan in order to manage the HSE risks associated with its activities on this project. The management of risk is based on the identification of hazards, assessing the risk associated with those hazards, implementing effective controls and reviewing those controls to ensure effectiveness is maintained.

- The purpose of this plan is to provide clear, detailed instructions to ensure that McMahon Services complies with its obligations to the law, its employees, its contractors, visitors and its systems.

The ongoing management of the project will be undertaken using the Health, Safety, Environmental and Quality System (HSEQ) and these documented management plans will be updated on an annual basis to reflect any changes to the HSEQ in the preceding period.

The purpose of this Health Safety and Environmental Plan is to describe the manner that safety and environmental risks are identified through the hazard identification and risk control process (HIRAC). McMahon Services aims to ensure that the protection of human safety is maintained, and the environmental impact is minimised without any complaints and all National, State and Territory legislative requirements are met. Integral to the plan is the identification of the HSE Plan management organisation, its associated roles and responsibilities, implementation of systems and procedures, performance measurement, management and reporting to facilitate the successful execution of the Project resulting in zero harm. This plan has been prepared in accordance with McMahon Services HSEQ System.

## 7 SCOPE

The scope of the HSEP includes:

- Consideration of, and compliance with, relevant legislative, regulatory and statutory obligations
- Corporate Governance requirements including due diligence and duty of care
- Hazard identification, risk assessment and risk control requirements for routine and non-routine activities
- Implementation of incident prevention initiatives to eliminate workplace injury and illness and environmental impacts.
- Training, awareness, communication and consultation requirements.

## 8 PROJECT DESCRIPTION

Used rail and rail clips shall be recovered along the East West rail system between Port Augusta and Crystal Brook which has been left behind as part of the re-railing productivity project. Lengths of rail have been stockpiled in various places within the rail corridor which require retrieval and recycling while the train line remains live. Utmost importance shall be focused on the live rail risks with detailed controls implemented to mitigate this risk.

## 9 PLANNING

The planning process requires that a Pre-Contract Start up Meeting (F602) be conducted and a Project Risk Assessment and Register (PRAR) is developed as per the procedure for Risk Management (SP 211). This risk assessment is based on the identified construction process steps as detailed in the project scope of work and the Gantt chart (If applicable). It is at this stage that the project specific issues are discussed such as, (but not limited to), Emergency Management and Response, Neighbour and Community Interaction and Project Key Hazards. Once these issues have been identified the required controls are selected and agreed.

(Refer procedure (SP 211) Risk Management)

## 10 PROJECT KEY HAZARDS

The Project Risk Assessment and Register (PRAR) for this project will identify key risks and controls to implement. The major key risks to be addressed are;

- Live railway
- High speed trains
- Mobile Plant and Equipment
- Demolition of structures
- Hot works
- Environmental hazards
- Personnel access and movements



## 11 LEGISLATIVE REQUIREMENTS

This project recognises the legislative requirements of the relevant statutory authority.

The following statutory legislation directly applies to the activities for this project in regard to workplace health and safety aspects (not limited to):

- WHS Act 2011
- WHS Regulations 2011
- Code of Practice - Demolition Work
- Code of Practice - Plant
- AS 2601 Demolition of Structures
- AS 2294.1:1997 Earthmoving Machinery – Protective Structures – General
- AS 4292 1:6 Rail safety management
- Rail Safety National Law (South Australia) Act 2012
- Rail Safety Act 2008 (NSW)
- Rail Safety Regulations 2008 (NSW)

The following legislation directly applies to the activities for this project in regard to Environmental Management (not limited to):

- EPA Act 1993
- EPA Regulations 2009
- EPA Policy 2010 (Waste to Resources)
- EPA Policy 2007 (Noise)
- EPA Policy 2003 (Water Quality)
- EPA Policy 2003 (Air Quality)
- Guidelines;
  - Bunding and spill management
  - Storm water pollution prevention

These legislative requirements impose a statutory obligation on all employers, employees, subcontractors, designers and manufacturers. It is the responsibility of each to ensure that the legislative requirements are strictly adhered to as the minimum standard to apply on this project.

McMahon Services will ensure employees and contractors can access copies of the above legislation at all times. Current copies of the above legislation, and any amendments that may arise during the project, shall be maintained by McMahon Services HSEQ Manager and be made readily available through QHSE and relevant web links to all employees on an as required basis to ensure compliance with the relevant legislation.

The HSEQ Manager has the overall responsibility to ensure these legislative documents are current as described in the Position Description for that role.

(Refer Procedure SP 209 Documents and Data Control)

<b>McMAHON SERVICES</b>	<b>HEALTH SAFETY AND ENVIRONMENTAL PLAN</b>	
HSE Plan V04.00	Page 10 of 63	ISSUE DATE: AUGUST 2012

## 12 McMAHON SERVICES HSEQ SYSTEM REQUIREMENTS

The system procedures relevant to the project activities are:-

*(SP's, SWI's and F forms are available from McMahon Services site office upon request).*

WHS Topic	Document Number	Document Title
<b>Risk Management</b>	SP 211	Risk Management
	SP 202	Management Responsibility
	SP 204	Planning
	SP 205	Communication
	SP 220	Sub-Contractor Management
	SP 609	Health Surveillance for Asbestos
<b>Audits Inspection and Review</b>	SP 206	Management Review
	SP 207	Internal System Audits
	SP 208	Corrective and Preventive Action
	SP 209	Document and Data Control
	SP 212	Safety and Design
	SP 213	Visiting Managers Inspection
	SP 223	WHS Performance and Reporting Guidelines
	SP 603	Inspection and Testing
	SP 604	Control of Non-conformances
	SP 605	Control of Inspection, Measuring and Test Equipment
<b>Emergency Management</b>	SP 301	Environmental Aspects
	SP 303	Emergency Preparedness and Response
	SP 222	Crisis and Emergency Management
	SP 402	Training
	SP 403	Accident/Incident/Near Miss Reporting and Investigation
	SP 404	Claims and Rehabilitation

The system Safe Work Instructions relevant to the project activities are:-

WHS Topic	Document Number	Document Title
<b>Risk Management</b>	SWI 0001	Completing Risk Assessment Forms
	SWI 0002	Completing Job Safety Analysis Form
	SWI 0003	Constant Familiarisation with the Work Area
	SWI 0010	Identification & Accessing legal & Other Requirements
	SWI 0100	Manual Handling
	SWI 0116	Noise in the Workplace
	SWI 0204	Oxy cutting welding
	SWI 0801	Traffic & Pedestrian Control
	SWI 1205	Noise & Vibration Management
	SWI 1600	Sub-Contractor Management



WHS Topic	Document Number	Document Title	
Emergency management	SWI 0005	First Aid in the Workplace	
	SWI 0006	Emergency Planning	
	SWI 0007	Fire Fighting Equipment & Precautions	
Working at Height	SWI 0101	Working at Heights	
	SWI 0104	Floor Penetrations & Edges	
	SWI 0107	Removal of Ceilings	
	SWI 0113	Ladders – Safe use of Ladders	
	SWI 0117	Removal of Ductwork and Overhead Fittings	
	SWI 0118	Safe Work on Roofs	
	SWI 0211	Scaffolds	
	SWI 0414	Elevated Working Platform	
Plant and equipment	SWI 0201	Portable Electric Power Hand Tools	
	SWI 0213	Quick Cut	
	SWI 0400	Plant & Machinery	
	SWI 0402	Forklift	
	SWI 0404	Bobcat	
	SWI 0407	Equipment Safety	
	SWI 1100	Cranes & Lifting	
	SWI 1103	Tackle & Ancillary Equipment Inspection	
	SWI 1105	Cranes Working on Tyre	
	SWI 0408	Refuelling Vehicles or Plant	
	SWI 0419	Equipment Loading and unloading	
	SWI 0501	Excavation & Trenches	
	Electrical	SWI 0604	Checking & Testing of Electrical Equipment
		SWI 0608	Residual Current Devices in the Workplace
SWI 0702		Service Isolations & Terminations	
SWI 0704		Lockout/Tag out (LOTO)	
Chemicals and Hazardous Substances	SWI 0900	Hazardous Substances Safety	
Asbestos	SWI 0302	Removal of asbestos pipe lagging	
	SWI 0303	Removal friable asbestos packing	
	SWI 0304	Removal of asbestos cement products	
	SWI 0305	Removal of asbestos gasket material	
	SWI 0306	Removal of asbestos floor vinyl	
	SWI 0307	Removal of asbestos containing floor tile	
	SWI 0309	Removal of asbestos containing fire doors	
	SWI 0324	Equipment decontamination	
	SWI 0325	Removal of friable asbestos malthoid	
	SWI 0326	Removal of asbestos mastic material	



The system forms relevant to the project activities are;

Form number	Document title
F 002	WORKSITE AUDIT SCHEDULE
F 003	WORKPLACE AUDIT SCHEDULE
F 007	SAFE ACT OBSERVATION
F 009	MONTHLY HSEQ REPORT CARD
F 054	RAIL CORRIDOR ACCESS PRE-START CHECKLIST / MEETING
F 218	RISK ASSESSMENT REPORT
F 223	INTERNAL AUDIT SCHEDULE (BASED ON PROJECT RISK ASSESSMENT AND REGISTER)
F 230	JOB SAFETY ANALYSIS (JSA) & SAFE WORK METHOD STATEMENT (SWMS)
F 230-1	SAFE WORK METHOD REVIEW
F 235	DAILY JOB START CHECKLIST/MEETING
F 239	RISK ASSESSMENT TEMPLATE
F 242	PROJECT SURVEILLANCE AUDIT
F 243	DESIGN REVIEW MEETING AGENDA
F 245	VISITING MANAGER CHECKLIST
F 246	DESIGN HAZARD CHECKLIST
F 249	EMERGENCY EVACUATION EXERCISE FORM
F 250	REHABILITATION - SUITABLE DUTIES PLAN
F 251	REHABILITATION WORK ACTIVITY SCHEDULE
F 253	FIRE FIGHTING EQUIPMENT REGISTER
F 254	WORKSITE TRAFFIC MANAGEMENT CHECKLIST
F 257	TRAFFIC CONTROL CHECKLIST
F 258	JSA SWMs REGISTER
F 259	RISK ASSESSMENT REGISTER
F 309	SDS REGISTER
F 400	PERSONAL PROTECTIVE EQUIPMENT REGISTER (PPE)
F 400-1	ASBESTOS PPE CHECKLIST
F 400-2	VISUAL INSPECTION REPORT FOR HEIGHT SAFETY EQUIPMENT
F 401	ELECTRICAL REGISTER



Form number	Document title
F 406	ACCIDENT/INCIDENT/NEAR MISS REPORT & INVESTIGATION
F 409	TRAINING EVALUATION
F 412	SCAFFOLD INSPECTION CHECKLIST
F 509	PROCESS CONTROL CHECKLIST
F 510	GOODS AND SERVICES CHECKLIST
F 511	CONTRACTOR WHS CHECKLIST
F 605	ASBESTOS REMOVAL DAILY LOG CHECK LIST
F 610	NON-CONFORMANCE REPORT
F 619	SITE INDUCTION FORM
F 627	TOOL BOX / SAFETY CULTURE MINUTES
F 630	HOT WORK PERMIT
F 633	LIFTING GEAR REGISTER
F 643	ASBESTOS EQUIPMENT REGISTER
F 669	DECONTAMINATION OF PLANT
F 674	VISITOR REGISTER

## 14 DEFINITIONS

<b>ALARP</b>	Referring to the need to mitigate, manage and maintain risk exposure levels to as 'As Low As Reasonably Practicable'
<b>Chemical/Hazardous Material</b>	A substance which has the potential, through being used in the workplace, to harm the health and safety of personnel.
<b>Risk</b>	The probability and consequences of injury or illness
<b>Hazard</b>	The potential to cause injury or illness or harm.
<b>Risk Management</b>	The process of hazard identification, risk assessment and control and the tools developed and implemented to achieve this process eg Project Risk Assessment and Register, JSA's, SAO's Visiting Managers' Inspections, Audits etc.
<b>Health &amp; Safety Representative (HSR)</b>	An employee appointed as a representative by the workers for the purposes of safety and health representation to the employer as per legislative requirements. This may be an elected position or by other agreed arrangement.
<b>Sub-Contractors</b>	Any company, body or person who is contracted to McMahon Services for the purpose of supplying goods or services in relation to the Project. This definition extends to subcontractors who may be contracted to the 'Contractor'
<b>Environment Surroundings</b>	In which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interaction
<b>Environmental Aspect</b>	Element of an organisation's activities, products or services that may interact with the environment
<b>Environmental Impact</b>	Any change to the environment, whether adverse or beneficial, wholly or partially arising from an organisation's activities, products or services
<b>HSEP</b>	Health Safety and Environmental Plan
<b>HSEP Audit</b>	Detailed documented inspection and assessment of the HSEP management system requiring documentary evidence of compliance and implementation
<b>HSE Inspection</b>	Documented check of the actual project Health Safety and Environment activities
<b>PRAR</b>	Project Risk Assessment and Register.
<b>WMS</b>	Work Method Statement. This document sets out the work activities.
<b>SAO</b>	Safe Act Observation Audit – a process to ensure work tasks are carried out safely
<b>Job Safety Analysis (JSA)</b>	A documented task specific analysis of job steps the hazards involved and the controls to be implemented to eliminate or lower the hazard to ALARP



KPI	Key Performance Indicators measure the success of the HSE implementation throughout the project
SDS	Safety Data Sheet
Near Miss	An incident that has the potential to cause harm or damage although no harm or damage actually occurred
Notifiable Incident	Under the Work Health and Safety Act a <b>Notifiable incident</b> means: <ul style="list-style-type: none"> <li>· the death of a person;</li> <li>· a serious injury or illness of a person; or</li> <li>· a dangerous incident.</li> </ul> Refer to Incident notification section of this plan for further detail
PPE	Personal Protective Equipment
ARTC	Australian Rail Track Corporation

EXAMPLE

## 15 PROJECT SAFETY OBJECTIVES, TARGETS AND KPI'S

The HSEP objectives, targets and KPI's will be endorsed and agreed to by the project management team and the onsite project Health and Safety Representative (HSR).

The project management team will provide direction to organise activities and resources to achieve HSE objectives. The targets and objectives will be kept current and reflective of the project specific hazards and risks by regular reviews conducted by the HSEQ Manager.

These objectives are;

- Zero Harm to persons on the project
- No equipment or property damage
- Compliance with legal requirements
- Compliance with the HSEQ system
- Compliance with McMahons procedures and instructions.

The targets are:

- No injuries or incidents on the project
- No equipment or property damage
- Full compliance with legal and McMahon system requirements

The following procedures and SWI's will be measured to help the project team and site employees achieve the agreed safety objectives:

- SP 204 Planning
- SP 205 Communication
- SP 206 Management Review
- SP 207 Internal System Audits
- SP 208 Corrective and Preventive Action
- SP 211 Risk Management
- SP 213 Visiting Managers Inspection
- SP 220 Sub-Contractor Management
- SP 403 Accident/Incident/Near Miss Reporting and Investigation
- SP 604 Control of Non-conformances
- SWI 0001 Completing Risk Assessment Forms
- SWI 0002 Completing Job Safety Analysis Forms



These measurements form the project Key Performance Indicators (KPI's)

These KPI's are:

- All Job Safety Analyses (JSA's) are developed as identified by the PRAR. The JSA's are completed to a defined standard and reviewed by the site team
- Safety consultation and project review meetings occur as scheduled. (Refer to Section 56. Workplace Audits, Inspections and Meetings)
- Daily pre job start-up meetings are conducted, reviewed and all identified corrective actions are closed out.
- Weekly toolbox meetings are reviewed and all identified corrective actions are closed out.
- Safe Act Observations are conducted as per schedule. Contractors are involved in the process. Monthly report cards completed.
- HSE audits and inspections and Visiting Manager Inspections programs occur as scheduled. Contractors are involved in the process.

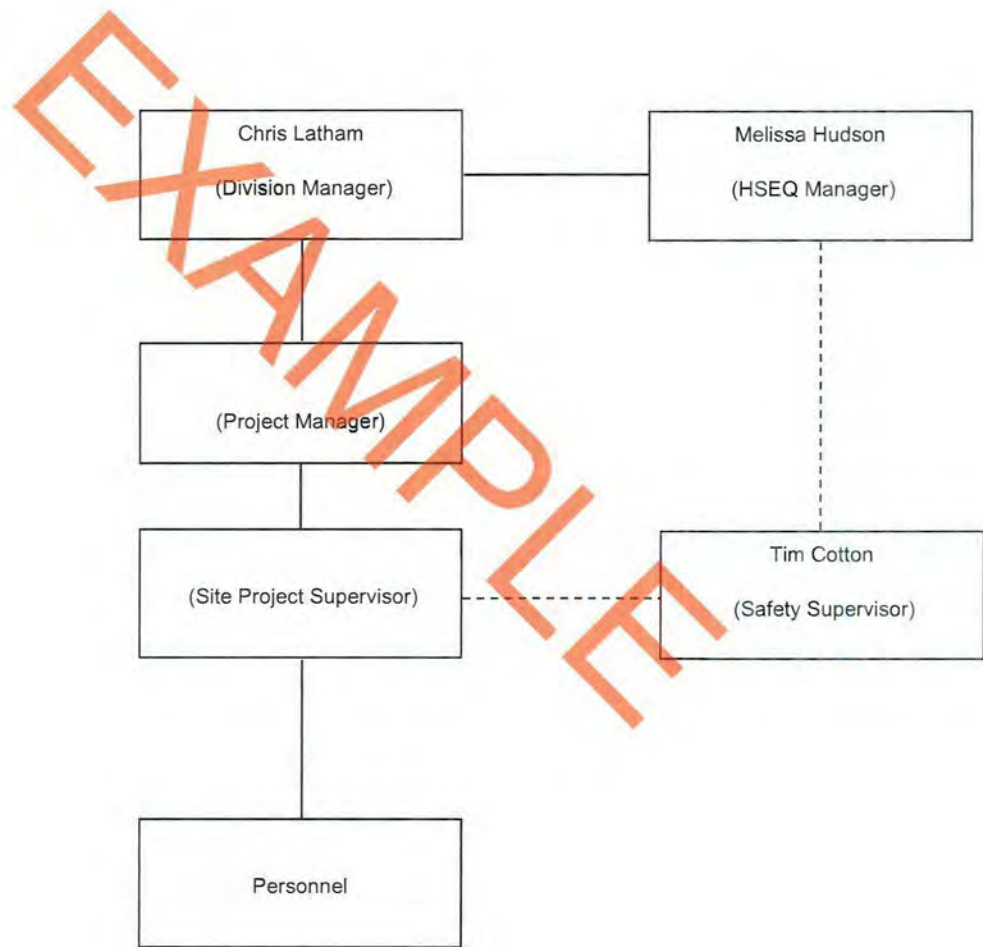
**PROJECT SAFETY OBJECTIVES AND KPI'S TABLE**

OBJECTIVES	STRATEGY	KPI
<b>Zero Harm to persons on the project.</b> <b>No equipment or property damage.</b> <b>Compliance with legal requirements</b> <b>Compliance with the HSEQ system.</b>	All Job Safety Analyses (JSA's) are developed as identified by the PRAR. The JSA's are completed to a defined standard and reviewed by the site team.	100% compliance with PRAR requirements.
	Safety consultation and project review meetings occur as scheduled.	100% compliance with schedule.
	Daily pre job start-up meetings are conducted, reviewed and all identified corrective actions are closed out.	Review confirms Pre-start meetings are conducted daily.  All corrective actions are included in Register and closed out by due date.
	Incident reports are completed as required and within specified timeframes.	Review of incident reports confirms compliance.
	Safe Act observations are conducted and involve contractor representatives.	Safe Act Observations are conducted as per schedule.
	Visiting Manager Inspections are conducted and involve contractor representatives.	Visiting Manager inspections are conducted as per schedule

**16 ROLES AND RESPONSIBILITIES**

**ORGANISATIONAL STRUCTURE**

McMahon Services will maintain an organisational structure with sufficient personnel and appropriate skills to manage the activities and workplace in a healthy, safe and environmentally sound manner during normal, abnormal and emergency situations. Training requirements will be identified and included in the training plan.





**PROJECT HEALTH SAFETY AND ENVIRONMENTAL PLAN (HSEP) ROLES AND RESPONSIBILITIES**

The HSEP and general duties and responsibilities of each McMahon Services employee are defined in Position Descriptions as listed in this plan. The HSE specific duties and responsibilities of all project personnel are as detailed in this section within this plan. Each person engaged on site shall be required to read and acknowledge by signing his or her name and signature on the induction register.

Detailed in the following sections are the specific responsibilities of each person on the project, which shall not in any way detract from the individuals' basic obligation to display due diligence in all matters relating to Health, Safety and Environment.

**MCMAHON SERVICES MANAGING DIRECTOR**

The Managing Director:

- As a matter of good corporate governance retains overall WHS responsibility
- Conducts regular Divisional Manager meetings to review safety, quality, environmental, plant & equipment with regards to the current project
- Conducts audits and inspections on project sites
- In conjunction with Divisional Managers, allocates appropriate personnel to projects
- Maintains frequent contact with all clients and ensures that they are kept informed with the status of their projects and ensures that the work is being undertaken to the client's expectations

**MCMAHON SERVICES HSEQ MANAGER**

The HSEQ Manager in conjunction with the Managing Director:

- Implements and monitors the performance of WHS management systems across all projects.
- Carries out Management Review Meetings to assess the Business Management System and ensure compliance with the Standard ISO 9001 and ISO 14001 and AS/NZS 4801.
- Arranges and organises internal audits of the Business Management System; prepares audit programmes and monitor progress.
- Collates and reviews all non-conformance reports and discusses any perceived corrective or preventative actions with the Managing Director, Divisional Managers and Project Supervisors.

	<p align="center"><b>HEALTH SAFETY AND ENVIRONMENTAL PLAN</b></p>
--	---

HSE Plan V04.00	Page 20 of 63	ISSUE DATE: AUGUST 2012
-----------------	---------------	-------------------------

**McMAHON SERVICES DIVISIONAL MANAGER**

The McMahon Services Divisional Manager and has the overall on site responsibility for Health and Safety of all persons involved in the project. The Divisional Manager will liaise with the project manager and the client to establish the necessary policies, procedures, and resources for implementing effective accident prevention process to meet the HSE plan and production needs of the entire project.

The McMahon Services Divisional Manager must exhibit strong leadership and absolute commitment to safety throughout all phases of the Project and shall:

- Display 'Due Diligence' in all HSE matters and champion the implementation of this project plan
- Appoint and allocate sufficient resources, trained and competent persons as may be required to assist with the effective management of the key aims and objectives of this project plan
- Together with the management team lead by example, modelling the behaviour expected from all employees toward performing work in a safe manner
- Communicate to the project team and contractors that cost, schedule, and quality will not diminish the importance of implementation of the project HSE Plan
- Actively promote HSE performance objectives to the entire project team and contractors
- Actively promote a HSE culture that will mitigate the risk of injury to personnel and damage to plant, equipment, environment and heritage aspects of the Project
- Establish and maintain clear responsibility and accountability for implementation of the project HSE Plan

Sign: \_\_\_\_\_

McMahon Services Divisional Manager Acknowledgement



**MCMAHON SERVICES PROJECT MANAGER**

The McMahon Services Project Manager has the overall responsibility for the Health and Safety of all persons involved in the project. The McMahon Services Project Manager shall liaise with the Divisional Manger to establish the necessary policies, procedures, and resources for implementing effective accident prevention process to meet the HSE Plan and production needs of the entire project.

The McMahon Services Project Manager must exhibit strong leadership and absolute commitment to safety throughout all phases of the Project and shall:

- Display 'Due Diligence' in all HSE matters and champion the implementation of this Project HSE Plan
- Appoint sufficient trained and competent persons as may be required to assist with the effective management of the objectives of this Project Plan
- Allocate sufficient resources required to successfully implement the Project Plan.
- Together with the management team lead by example, modelling the behaviour expected from all employees toward performing work in a safe manner
- Communicate to the project team and contractors that cost, schedule, and quality will not diminish the importance of implementation of the project HSE Plan
- Actively promote HSE performance objectives to the entire project team and contractors
- Actively promote a HSE culture that will mitigate the risk of injury to personnel and damage to plant, equipment, environment and heritage aspects of the project
- Establish and maintain clear responsibility and accountability for implementation of the Project HSE Plan
- Be actively involved with HSE Auditing and reports
- Review and revise the Plan as required.
- "Walk the Talk" approach by conducting site audits and inspections

Sign: \_\_\_\_\_

McMahon Services Project Manager Acknowledgement

#### McMAHON SERVICES SITE PROJECT SUPERVISOR

McMahon Services Site Supervisor has the overall responsibility for the construction at the site and for implementation of the Project HSE Plan. Supervisors are seen as the group that will greatly impact safety on any project through consultation, documentation and ongoing monitoring. The McMahon Services Site Supervisor shall:

- Display "Due Diligence" in all HSE matters and lead by example to ensure the successful implementation of the Project HSE Plan
- Promote open communication, cooperation, and trust between its customers, contractors, employees, and suppliers
- Ensure HSE Risk Assessments and Job Safety Analyses are undertaken for every major site activity
- Participate in HSE audits and inspections and interact with all personnel and organisations concerning improving safe work practices on the site
- Ensure team members of the construction team, including contractors and their subcontractors and employees working on site, are informed of hazards associated with work assignments, and that there is compliance with HSE requirements
- Actively support contractors to maintain the HSE objectives and desired outcomes of the project
- Ensure that a practical HSE interface is established between the employees & contractors, enabling them to individually function in a safe productive and harmonious manner
- Ensure that regular monitoring and assessment of the various contract areas is carried out in relation to on-site health, safety, environmental and community activities
- Ensure that there is not any adverse environmental or heritage impact.
- Mitigate the risk of personal injury, equipment and property damage and prevent recurrences to as low as reasonably practicable (ALARP)
- Ensure all employees and contractors are made aware of the site First Aid facilities and emergency procedures
- Report all accidents, incidents and near miss to the project manager in a timely manner
- Ensure monthly HSE Reports are submitted promptly to the Project Manager

Sign: \_\_\_\_\_

McMahon Services Site Supervisor Acknowledgement



**SITE SAFETY SUPERVISOR**

McMahon Services Site Safety Supervisor are regarded as line management representatives of their respective employer and accordingly share the due diligence requirements of management and statutory accountabilities. Safety Supervisors are seen as the point of contact to advise on Health and Safety issues arising from the project. Consequently McMahon Services places a clear obligation on Safety Supervisors to lead by example and set the standard for safety in every activity. They will be held accountable for each and every one of the following responsibilities.

Safety Supervisors shall:

- Be thoroughly familiar with the Project Plan with their individual responsibilities regarding implementation and enforcement of these plans
- Be directly involved in implementing the HSE procedures applicable to their areas of responsibility
- Participate in hazard evaluations and facilitate a HSE Risk Assessment for all work activities requiring their input
- Ensure JSA's are performed where required
- Mitigate the risk of personal injury, equipment and property damage and prevent recurrences to as low as reasonably practicable (ALARP)
- Implement and review site emergency procedures
- Actively promote a HSE culture that will mitigate the risk of injury to personnel and damage to plant, equipment, environment and heritage aspects of the project
- Facilitate and support the toolbox and pre-start meetings, and communicate and review the information necessary for employees to work in a safe manner
- Document toolbox and pre-start meetings and provide copies to the Managers on request.
- Implement immediate action to correct reported or observed unacceptable environmental, safety, and health conditions and/or behaviours
- Conduct ongoing assessments of the work areas and take necessary corrective actions to eliminate substandard practices, conditions, and/or behaviours
- Assist in first aid treatments, accident/incident investigations and preparation of required reports
- Enforce HSE related work rules and take action as required to ensure compliance
- Comply with Project Fitness for Work Policy and procedural requirements
- Evaluate the safety performance of assigned employees and report findings to their Site Manager

Sign: \_\_\_\_\_

Site Safety Supervisor Acknowledgement

## 17 INDUCTION AND TRAINING

### HSE INDUCTION REQUIREMENTS

All personnel, including contractors, subcontractors and labour hire employees who work on this project will be inducted to the project before commencing work.

The induction process is as follows:

- All personnel shall hold a General Construction Induction Training Card (e.g. White Card)
- All personnel shall possess an ARTC rail safety workers card and have undertaken appropriate category medical in line with the tasks they shall perform.
- McMahon Services Project Site Induction including A Power Point Presentation.
- McMahon Services Site Induction Form and Questionnaire (Form F619)

The Project Site Induction will cover the following topics:

- Establishing competency and qualifications (copies of tickets required)
- Emergency requirements for the site (assembly points, evacuation routes, Medical/First Aid facilities, contact details of Emergency Personnel and services, first aiders, fire fighting equipment, Health and Safety Representatives)
- Site facilities (toilets, crib sheds, water supply etc.)
- Railway Safety
- General task specific hazards
- Site and company procedures (Incident, Injury and hazard reporting, JSA's, SAO's, audits and inspections, Issue resolution, site security)
- Personal Protective Equipment requirements for the site as well as for tasks to be performed.
- McMahon's permit system e.g. the Hot Work permit and controls implemented during such works.
- Relevant JSA's for the task to be performed by the new inductee.
- Any specialised equipment for the task
- Further details required by the new inductee to ensure that they understand the requirements of the site
- Complete site induction questionnaire (F619)

### COMPETENCY FOR PRESCRIBED OCCUPATIONS AND ACTIVITIES

All personnel involved with the project shall possess the required nationally recognised statutory certificates of competency (ticket) for the tasks they are to perform on the project (e.g. rigging, dogging, cranes, elevated work platforms, scaffolding, work at heights, etc.).

Copies of these competencies shall be provided and copies shall be taken before work commences. These copies shall be filed on site.

The Project Site Manager in conjunction with the Divisional Manager will assess the required resources for the project and ensure that sufficient qualified personnel are available.



### RAIL SAFETY INDUCTION

All personnel shall have undertaken the ARTC rail safety worker induction and acquired the Rail Safety Workers card as proof of attainment. The Rail Safety Worker card allows all contractors to carry out rail safety work for the roles they have submitted when applying for the card. Personnel are not to perform roles they have not provided evidence for.

A track protector shall be provided by Momentum and present during works within the rail corridor who will have access to train control via radio communication and documentation to notify the work group of train movements.

### RAIL SAFETY WORKER RISK ASSESSMENT

All personnel nominated to work within the rail corridor shall be Risk Assessed against what tasks they will be performing in the rail corridor to determine what type of medical shall be undertaken. This mitigates potential risk of sudden incapacity during works within the rail corridor and risk to surrounds.

### VISITORS

All site visitors are required to report to the site supervisor and sign in on the visitor register located in the site office to obtain permission for access to site. Any personnel who have not undertaken a site induction will be required to be escorted at all times while on site. Site mandatory PPE must be worn at all times by all personnel on site as depicted under Site Mandatory Personal Protective Equipment (PPE) (Section 22)

## 18 EMERGENCY MANAGEMENT

### EMERGENCY RESPONSE

McMahon Services will establish an emergency plan to ensure that there will be appropriate management of and response to an emergency situation. McMahon Services will establish and shall include where appropriate consideration of the following:

- A documented process to ensure that potential emergency situations have been identified and site-specific emergency procedures/plans are documented and regularly reviewed.
- accidental and potential emergency site situations,
- accidental discharges to water and land,
- specific environment and ecosystem impacts from accidental releases,

Emergency plans shall include but not be limited to the following site specific requirements:

- site emergency contact list,
- emergency services contact list,
- muster point locations,
- emergency retrieval provisions which must be planned before the commencement of works when working at heights using height safety equipment.

After the occurrence of an accident or emergency situation, existing procedures and work instructions shall be reviewed and where necessary revised in order to ensure continuing suitability and effectiveness. During the project life there must be at least one practice evacuation drill performed to ensure emergency plans are effective to the site environs.



## 19 COMMUNICATION AND CONSULTATION

### SAFETY FOCUSED GROUND RULES

The McMahon Services Safety Focused Program is designed to build a strong safety culture throughout its organisation. To implement changes in attitudes and behaviours it will work closely with its site personnel, utilising training materials and on-site mentors. It encourages open communication with the aim of creating greater safety awareness to help reduce injuries and improve its safety performance.

It recognises that the involvement of managers in the safety management process is critical, particularly at the site manager and supervisor level. Its Safety Focused Behavioural Program is aimed at developing skills in safety leadership and influencing attitudes and behaviours surrounding best safety practice.

McMahon Services has prepared a set of ground rules based on the "Safety Focused" safety program.

These ground rules are:

**MIND ON THE JOB** - Safety starts as soon as you arrive on site. It is your duty of care to look after the well-being of yourself and your work mates.

**EVERY SITE IS DIFFERENT** - Identify all potential risks and hazards prior to work. As the job progresses, remain alert for unsafe conditions that may arise.

**SUITED UP FOR SAFETY** - Appropriate PPE must be worn and cared for all times in accordance with your JSA / SWM.

**SPEAK OUT AND RESPOND** - Protect yourself and your mates. Always promptly point out and respond to acts or conditions that may compromise safety.

**REWARD SAFE BEHAVIOUR** - Discuss and acknowledge safe acts within your team to ensure a safe working environment.

### HAZARD IDENTIFICATION AND REPORTING

The intent of hazard identification is to be pro-active in identifying, evaluating and controlling hazards that may result in incidents involving WHS, environmental issues, equipment, product damage, nonconforming or failed supplied goods or human injury.

Persons identifying any hazard shall firstly:

- Attempt to eliminate or control the hazard, and then
- Report the hazard / problem immediately to the responsible site supervisor using (F 402) Hazard Report form.

Risk assessments identify the potential hazards for the associated tasks for the project, and recommend suitable hazard controls to mitigate the residual risks to as low as reasonably practicable. (ALARP)

Refer (SP 604) Control of Non-Conformances, (F 402) Hazard Report form

### HSE ISSUE RESOLUTION PROCESS

The Communication Procedure (SP 205) describes the HSE issue resolution process for the project. In essence the process shall be:

- The employee raises the HSE issue with the Site Supervisor in the first instance.
- If the issue is not resolved to the satisfaction of both parties then the Project Manager is consulted.
- If the issue is not resolved to the satisfaction of both parties then the Divisional Manager is consulted.
- If the issue is not resolved to the satisfaction of both parties then advice from external parties is sought.
- The advice of the external party is considered final.

Refer to Appendix 5 Resolution of an WHS problem.

### HEALTH SAFETY AND ENVIRONMENTAL COMMITTEE MEETINGS

McMahon Services has formed a Health Safety & Environmental Committee from HSE representatives of the business divisions and senior management.

This Committee has been formed to discuss matters relating to health, safety and the environment for each division's projects and McMahon Services.

The Committee holds meetings every six weeks and the minutes of the committee meeting are clearly communicated to all personnel in a timely manner as soon as possible after the meeting.

All contractors and subcontractors and labour hire personnel are encouraged to raise any issue they may have with the representative for their division.

### HEALTH SAFETY REPRESENTATIVES (HSR)

A Health and Safety Representative (HSR) shall be nominated by vote for the work group and trained by an RTO.



### TOOLBOX MEETINGS

Toolbox meetings (“Toolbox / Safety Culture Meetings”) shall be conducted weekly by the site supervisor responsible or delegated person. The following shall apply to all toolbox meetings:

- All relevant health and safety topics, review current safe work instructions and any pertinent HSE matters are to be presented by McMahon Service site supervisor, site safety supervisor or HSE Representative
- Accidents, hazards, incidents, and near misses which have occurred in McMahon Services scope of work, general WHS performance and any future areas of HSE concern are to be raised and discussed at the meeting.
- The minutes of the toolbox meeting shall be recorded on a Toolbox / Safety Culture Meeting Form (F 627) which shall be distributed to McMahon Services Management and a copy to be posted. Attendance is to be recorded and attached to the report.
- Employees shall be given the opportunity at the conclusion of the meeting to voice opinions and raise any HSE issues.
- Other personnel related to the site may be requested to attend a toolbox meeting to discuss or clarify matters and shall allocate time to attend as many toolbox meetings as practicable each week.

### DAILY PRE-START MEETINGS

A pre-start meeting shall be held daily by the site supervisor before commencing work, or prior to a shift commencing. This meeting will inform all personnel of any changes to or new hazards, and inform employees of work requirements for that day (e.g. JSA’s are current for the day’s tasks and site issues, etc.). Meetings are to be recorded Daily Pre-start up Meeting Form (F 235) and records made available when requested by McMahon Services Management.

During the pre-start meeting all relevant JSA’s covering the daily work shall be reviewed and modified as necessary with each person re-signing onto the JSA to acknowledge any changes if they are made.

(Refer Communication Procedure SP 205)

### RAIL CORRIDOR ACCESS PRE-START CHECKLIST / MEETING

Before any personnel can enter a rail corridor they must undertake a Rail Corridor Access Pre-start Checklist / Meeting (F 054) to ensure mandatory controls are implemented and communicated throughout the work group. Due to the projected works encroaching within the “Danger Zone” (3 meters from the rail), a Track Protector shall be present to monitor rail movements and instruct personnel to move to a safe location prior to trains passing. An area or refuge shall be nominated each pre-start prior to works commencing for personnel during trains passing or when required to clear the track.

The track protector shall issue the site Supervisor with a Worksite Protection Plan which is included within the pre-start meeting. After the pre-start meeting the Track Protector will take out Working Authorities with Train Control to ensure it is noted on the train graph that a work crew is working in the specified area as well as obtaining train running times.



## 20 RISK MANAGEMENT

### THE RISK ASSESSMENT PROCESS

The risk assessment process revolves around the consistent assessment of risk. This is achieved by the use of a Risk Matrix. This matrix assesses risk by determining the consequence and likelihood of a hazard to cause harm.

The risk is assigned a rating using the Consequence and Likelihood as follows:

Consequence x Likelihood = Risk Rating

#### TABLE A. Consequence

The consequence descriptors below are applied to the task or activity to be assessed based on the maximum reasonable consequence (How bad could the outcome be?)

LEVEL	DESCRIPTOR	EXAMPLES
1	Insignificant	No injuries, low financial loss, limited damage to area
2	Low	First aid treatment, on-site release immediately contained, medium financial loss
3	Moderate	Medical treatment required, on-site release contained with outside assistance, high financial loss.
4	Major	Extensive injuries, loss of production capability, off-site release with no detrimental effects, major financial loss.
5	Extreme	Fatality/ Multiple fatalities, toxic release off-site with detrimental effect / long term environmental effects, huge financial loss

#### TABLE B. LIKELIHOOD

The likelihood descriptors below are applied to the task or activity to be assessed based on the probability of an incident occurring. (How often have things gone wrong?)

LEVEL	DESCRIPTOR	EXAMPLES
A	Very Likely	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Moderate	Might occur at some time
D	Unlikely	Could occur at some time
E	Rare	May occur only in exceptional circumstances



TABLE C. QUALITATIVE RISK ANALYSIS MATRIX LEVEL OF RISK

	CONSEQUENCE	INSIGNIFICANT	LOW	MODERATE	MAJOR	EXTREME
		Level 1	Level 2	Level 3	Level 4	Level 5
LIKEHOOD	Very Likely (A)	H (11)	H (16)	E (20)	E (23)	E (25)
	Likely (B)	M (7)	H (12)	H (17)	E (21)	E (24)
	Moderate (C)	L (4)	M (8)	H (13)	E (18)	E (22)
	Unlikely (D)	L (2)	L (5)	M (9)	H (14)	E (19)
	Rare (E)	L (1)	L (3)	M (6)	M (10)	H (15)

Refer to SP 211 Risk Management, SWI 0001 Complete risk assessment, Form 230-1 SWMS review

TABLE D: RISK LEVEL DEFINITIONS

RISK LEVEL	NUMBER	REQUIRED RESPONSE
Low	1-5	Review controls to ensure continued effectiveness and look for improvements.
Moderate	6-10	Introduce additional controls to reduce the risk to as low as reasonably practicable
High	11-17	Risk must be reduced before work commences. Contact Site Safety Supervisor for approval for work to proceed.
Extreme	18-25	Must reduce risk immediately – highest priority Work is not to commence until appropriate controls

### MONITORING EFFECTIVENESS OF RISK CONTROLS

Risk assessment involves the identification of hazards (potential to cause harm), the assessment of the risks posed by those hazards, the development of controls to eliminate and minimise risks, and the ongoing management of the risk controls.

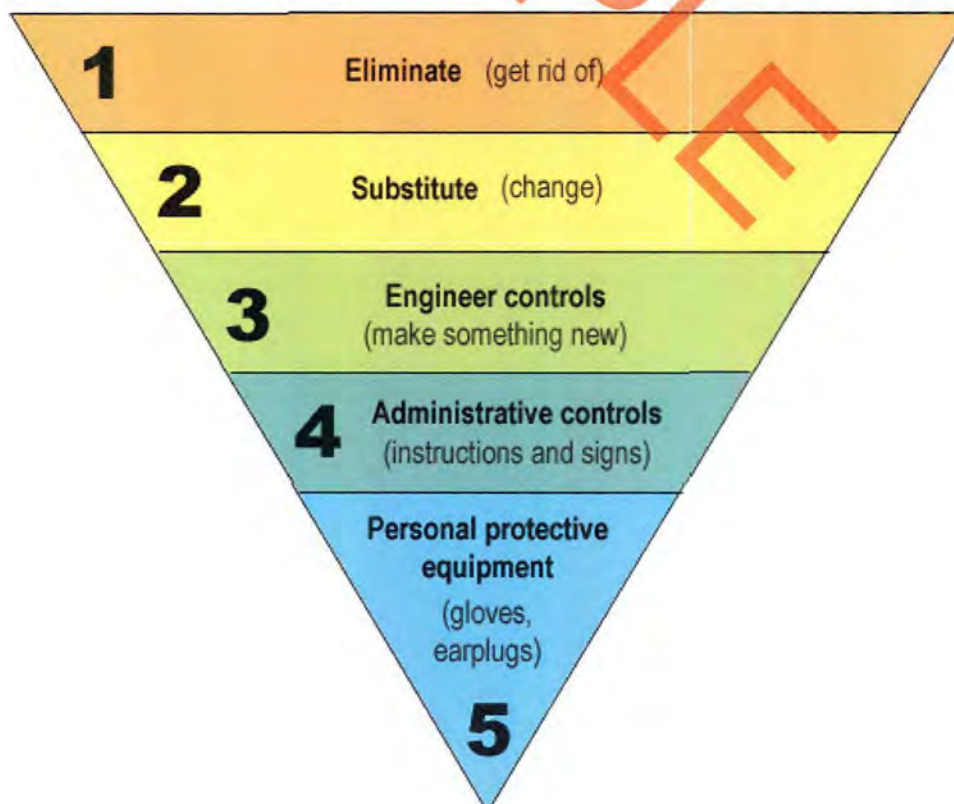
Audits will be scheduled throughout the project life that will include the following:

- Risk assessment reviews
- Project plan reviews,
- Project surveillance audits,
- Safe Act Observation Audits
- Workplace audits and inspections.

The Project Manager and Site Project Supervisor are responsible for ensuring that HSE related risk controls are implemented and monitored for effectiveness. The McMahon Services Divisional Manager is responsible for providing sufficient resources to ensure that risk controls are implemented.

### HIERARCHY OF CONTROLS

McMahon Services recognises that the "Hierarchy of Control" is a legislative requirement for the selection of controls and incorporates this into the selection of controlling identified hazards. The first option is to eliminate the hazard however where this is not practicable the aim is to minimise the risk to as low as reasonably practicable. (ALARP)





### PROJECT RISK ASSESSMENT AND REGISTER

The process of risk management begins at the planning stage and requires that at the Pre-Contract Start up Meeting (F602) be conducted and a Project Risk Assessment and Register (PRAR) is developed as per the procedure for Risk Management (SP 211). This risk assessment is based on the identified construction process steps as detailed in the project scope of work and the Gantt chart (If applicable). This process is to determine the specific activities, timing and associated risk involved with the delivery of the project. The Project Risk Assessment and Register document will form the Risk Register for the project.

(Refer procedure (SP 211) Risk Management)

The Project Risk Assessment and Register will be reviewed and amended as part of the scheduled review process or in the event that:

- A change in the design occurs
- A change in the work scope occurs
- A change in the work method occurs
- A serious incident occurs

### PLAN DEVELOPMENT

This Project Risk Register will identify the site requirements relating to the development of specific plans for the project. The Project Risk Register will be utilized for the production of site documentation with intent of mitigating identified hazards and risks.

### JOB SAFETY ANALYSIS (JSA) / SAFE WORK METHOD STATEMENT (SWMS)

Task specific job safety analyses (JSA's) / safe work method statements (SWMS's) for the project will be developed for all tasks identified in the PRAR as requiring a JSA/SWMS or as determined by the Site Project Manager or Site Safety Supervisor.

All JSA/SWMS will be reviewed and approved for use by the by the Site Project Manager or Site Safety Supervisor Using Form F 230-1). A register of all JSA's/SWMS's will be kept on site using form (F258).

All JSA's/SWMS's shall be developed with the input of the persons who are to perform the task (or a representative sample)


All JSA's/SWMS's shall comply with McMahon Services requirements including legislative obligations.

The Project Manager has overall responsibility to ensure that the JSA/SWMS is developed and identifies the relevant hazards, is risk assessed and has effective controls selected and implemented.

Contractors and Subcontractors are required to submit JSA's to the project team for review prior to commencing any task. (As per subcontractor terms and agreement and HSE specification)

McMahon Services will demonstrate a proactive approach to prevent unsafe acts and risk taking behaviour. All employees have the authority to stop, or not start any work which he or she considers unsafe. If identified McMahon Services will immediately rectify the situation to make safe or explain, to the person for the work to stop, the reason why the work is unsafe and what consequences that can arise if the work proceeds.

When rectified a hazard report must be completed and the Project Manager must be notified.

	<b>HEALTH SAFETY AND ENVIRONMENTAL PLAN</b>
--	---

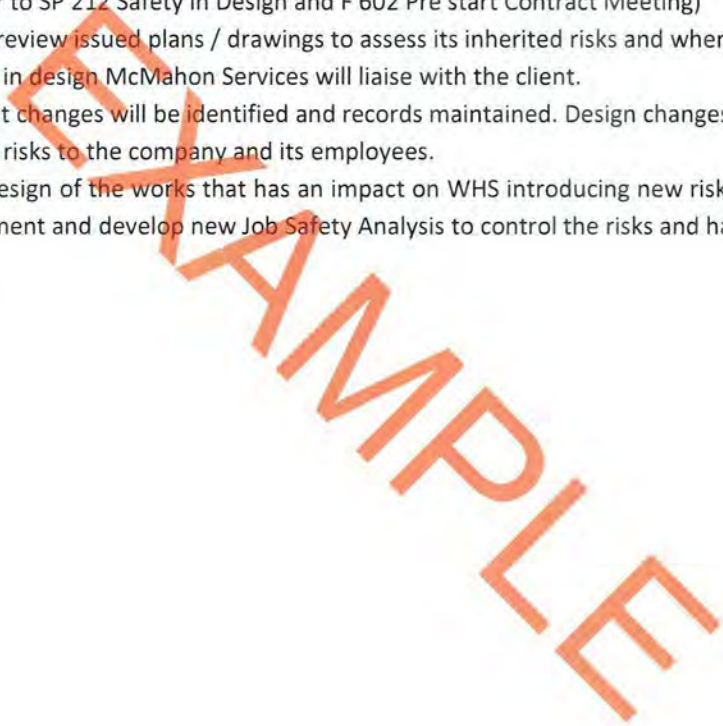
HSE Plan V04.00	Page 34 of 63	ISSUE DATE: AUGUST 2012
-----------------	---------------	-------------------------

**SAFE ACT OBSERVATIONS (SAO'S)**

This is an audit conducted by the Site Project Supervisor or his nominee to evaluate the performance of a particular task being completed on the project site. Outcomes from this audit are to be discussed with Senior Management and at the weekly toolbox meeting. A copy of this audit is to be forwarded to the QHSE department to be added to the existing ONLINE excel spread sheet within the QHSE folder. Follow-up will occur between the relevant Division and the QHSE Department. (F 007 Safe Act Observation Form)

**SAFETY IN DESIGN**

(For further details refer to SP 212 Safety in Design and F 602 Pre start Contract Meeting)  
McMahon Services will review issued plans / drawings to assess its inherited risks and where there is an opportunity for safety improvement in design McMahon Services will liaise with the client.  
Design and development changes will be identified and records maintained. Design changes must be reviewed and assessed to capture key risks to the company and its employees.  
If there is a change in design of the works that has an impact on WHS introducing new risks McMahon Services will undertake a risk assessment and develop new Job Safety Analysis to control the risks and hazard prior to that change being implemented.





## 21 SUBCONTRACTOR MANAGEMENT

McMahon Services objective is to only engage Subcontractors that promote and demonstrate excellent safe work standards as reflected in SP211 Risk Management. This requires McMahon Services Project Managers to formally assess Subcontractor safety performance before and while the Subcontractor performs work on site. The Project Manager will review the subcontractor WHS documentation using F 414 Subcontractor Tender Checklist. This will be completed prior to work commencing on site.

The standards set by SP211 Risk Management specify accountabilities for sub-contractor safety management relating to:

- the requirements of McMahon Services Subcontractor management.
- the minimum safety requirements of a contractor management system.
- a process guide for contractor safety management.

McMahon Services will ensure that subcontractors have the necessary systems, resources and capabilities meet project requirements

All subcontractor personnel will attend a site specific safety induction. All subcontractors must have submitted a signed copy of their terms and conditions of agreement and HSE specification to the Project Manager to ensure it is verified by signatures before an order is issued.

Subcontractors working and or participating in activities for McMahon Services must provide relevant WHS documentation to suit the tasks assigned. This includes but is not limited to the following:

- Job Safety Analyses
- Risk Assessments
- HSE Plan and Policies
- Verification of training and competency skills
- Verification of relevant insurances
- In addition subcontractors must participate in and attend HSE inspections and toolbox meetings

The Project Manager or Site Project Supervisor must review the subcontractor documents to ensure that they meet relevant McMahon Services and Legislative requirements by using the criteria on the Safe Work Method Statement (SWMS) / Job Safety Analysis (JSA). If the subcontractor is working under McMahon Services umbrella, the subcontractor must be inducted into the HSE Plan, receive a site specific safety induction and Job Safety Analysis induction in line with section 11 of this plan.

McMahon Services Subcontractor Model.



(For more details see McMahon Services SP 211 Risk Management, SWI 1600 Subcontractor Management, Subcontractor terms and agreement and HSE Specifications, F 509, F510 & F511.)



## 22 HEALTH AND SAFETY MANAGEMENT

### SITE MANDATORY PERSONAL PROTECTIVE EQUIPMENT (PPE)

All personnel working on the project site will be required to wear mandatory PPE as project site signs indicate.

This includes the following;

- Hardhat
- Steel capped safety boots
- Eye Protection
- Orange Hi-visibility vests / clothing (No yellow within rail corridor)
- Long sleeved collared shirt
- Long pants

Additionally, personnel performing works on site must wear;

- Gloves when performing manual tasks
- Hearing protection during excessive noise
- Any other specific and suitable PPE requirements must be worn as per task specific JSA or SDS

All PPE must meet the relevant Australian Standard.

For specific tasks additional PPE may be required as determined by the JSA/SWMS or SDS for a chemical involved in the task or activity. Personnel are required to comply with the instructions and requirements of any JSA/SWMS and SDS when handling any substance.

Any clothing or PPE must not be worn or used if it is torn or defective.

### EQUIPMENT TERMINATION AND LOCK OUT / TAG OUT (LOTO)

McMahon Services will liaise and coordinate with the relevant service to verify that all relevant equipment is identified, isolated or terminated, stored energy is released, flammable vapours and fumes are not present and the area/ equipment is tested to ensure effective isolation prior to the commencement of work.

Isolation and or termination procedures are used to protect personnel and equipment prior to and during the work being undertaken. Personnel conducting any isolation or termination on the project will be required to complete the McMahon Services Isolation Certificate and the site Permit To Work requirements to verify work can proceed. Isolation and terminations must be carried out and confirmed by a qualified and competent person.

Excavation work shall be undertaken in conjunction with SWI 0501 excavation and trenches and SWI 0500 excavation permit to identify underground services and controls to implement before work commences.

(For further details see McMahon Services SWI 0700 Services Identification Certificate, SWI 0702 Services Isolations and Terminations, SWI 0704 Lock Out/Tag Out, SWI 0500 excavation permit and SWI 0501 excavation and trenches).



### ELECTRICAL SAFETY

McMahon Services is to ensure all electrical equipment is safe to use and that all electrical work is undertaken in an approved safe manner and work is only undertaken by certified electricians. Site power will be sourced from temporary feeds or portable diesel generators as required.

Site feeds must be identified as live by means of signs and or tags attached to the relevant wiring. For any electrical failure the delegated electrician must be contacted and work is only to be carried out by a qualified person/s. Relevant underground services must be located and marked.

Electrical works shall comply with all applicable Australian Standards for electrical safety and installations.

All portable, emergency access lighting, semi portable and transportable electrical power tools and plant, equipment, leads, earth leakage boxes etc. must be correctly inspected and certified as safe by a qualified electrician. Electrical devices must be fitted with the appropriate quarterly colour coded inspection tag when they arrive on site, and then inspected thereafter (in accordance with legislation). A register of all electrical equipment is to be maintained on using form F 401 by McMahon Services and each contractor must provide a register of its electrical equipment to the Site Project Supervisor before commencing work.

Specific electrical requirements include but are not limited to the following:

- All portable power sources must be provided with residual current protection (RCD)
- Lengths of leads are to be minimised wherever possible
- Electrical leads should not exceed 25 metres.
- Electrical hand tools shall all be double insulated
- Leads shall be kept above ground and out of walkways.

### OVERHEAD POWER LINES

Where work is to be carried out near live overhead power lines, a separate SWMS / JSA must be instigated to ensure appropriate controls are established.

### PLATFORM LADDERS

Ladders are not considered work platforms and may only be used for access and egress e.g. Scaffold access. If work is to be performed a platform ladder shall be used.

Ladders are used as means of accessing / egressing work positions only  
This applies to all site personnel (Including Contractors and Subcontractors)

- A platform ladder is the only ladder on which work can be performed.
- Platform ladders and conventional ladders must meet AS 1892 and/or any other relevant standard.



### EXCAVATION AND TRENCHING

The location of underground services – such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work will be determined prior to opening an excavation. For any excavation or trench in excess of 1.5 meters in depth, the following shall apply:

- Dial Before You Dig (DBYD) shall be contacted by calling 1100 and an underground services plan shall be developed.
- An Excavation Permit shall be issued by the Site Project Supervisor or Site Safety Supervisor before starting the excavation
- Barricades or flags shall be installed around any trenching or excavation prior to commencing work
- Warning signs and flashing lights shall be used for poor visibility areas
- Any excavation, trench or pit in excess of 1.5 metres deep shall be benched, battered or shored
- Equipment, plant and soil shall not be placed within 1 metre of the edge
- Special care shall be taken when working in previously dug soil as collapse or cave-ins are more likely
- Surrounding soil shall be checked for fretting, water, slump, cracking or ground swelling before entering the trench or excavation
- Don't enter a trench where there is a possibility of contaminants, gas leak, exhaust vapours, ground water etc.
- Regularly test for contaminants and ventilate trenches and excavations
- Take care when moving loads in or out of a trench or excavation to avoid damaging shoring struts or walling
- Corners shall be battered back or shored when 2 or more trenches cross
- Plant and vehicle traffic shall be well back from trenching or excavation edges and only allowed in close vicinity with appropriate engineer support and / or recommendations.
- Ladders shall be at intervals not less than 30 metres along the trench
- Don't work alone in a trench or excavation unless help is nearby

Protective systems (shoring) shall have the capacity to resist, without failure, all loads that are intended to or are applied.

Employees shall be protected from falling or rolling into open excavations or from materials or equipment that could pose a hazard by falling or rolling into excavations. Protection will be provided by placing and keeping such materials or equipment at least 1 metre from the edge of excavations, or by using retaining devices that are sufficient to prevent materials or equipment from failing or rolling into excavations, or by a combination of both if necessary.

A competent person will conduct daily inspections of excavations, the adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions. The competent person will conduct an inspection prior to the start of work on each shift and as needed throughout the shift. Inspections will also be made after every rainstorm or other hazard-increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated. Where a competent person finds evidence of a situation that could result in a possible cave-in, failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees will be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

(Refer COP Excavations, SWI 0405 Excavator, SWI 0501 Excavation and Trenches, SWI 0500 Excavation Permit)



## CRANES AND MATERIAL HANDLING

McMahon Services and its Contractors shall ensure the safe operation of cranes (including hoists and winches) in accordance with Australian Standard AS 1418.9-1987 Cranes (known as the SAA Crane Code) and AS 2550 Cranes-Safe Use.

### General Requirements

- Any crane brought to site by contractors shall be inspected for safety and have the Certification of Compliance for the crane confirmed prior to use.
- Personnel operating cranes shall be competent to operate such equipment and copies of qualifications shall be recorded on the site training register at the time of site induction.
- Tag lines shall be used when lifting materials with any cranes or other lifting device when required to control a load.
- Cranes and other lifting equipment shall be inspected daily by the operator and recorded in a Daily Inspection Log. All defects or repairs shall be recorded in the log.
- The supervisor in charge of equipment shall review the logs daily.
- A JSA/SWMS shall be conducted for lifting tasks. This document shall outline all steps involved in the task, the relevant hazards and the selected controls.
- There shall be a documented and approved method for communication between crane operators and those in control of the lift.
- The swing radius of cranes and other lifting equipment shall be properly barricade to warn personnel of the hazard.
- As required, the project shall develop a register of critical lifts and a documented lift plan for each critical lift, which includes hazards and risks associated with the lift. As a minimum, all multiple crane lifts, lifts over operating facilities, lifts involving person-boxes, power lines or lifts at maximum rated loads shall be considered critical lifts. Lift plans shall cover the following elements:
  1. Lift data: equipment weight, rigging weight, total weight, height of lift, and radius of lift and equipment surface area.
  2. Equipment data: manufacturer, model, size, boom length, jib length, load block, material size etc.
  3. Rigging data: sling diameter, length, sling configuration, capacity, hook type, shackle size and capacity
  4. Lift computation: boom length, radius of lift, equipment capacity, mat size, and wind speed.
  5. Proximity to power lines and process areas: all mobile cranes required to work in proximity to energised power lines shall operate under a proximity permit. The permit must define exclusion zones and spotter duties
  6. Local hazards and their controls: including the route for the crane, ground stability, and proximity of people / equipment in the area.
- Loads must not swing over people or occupied buildings. Where there is a risk of a load falling and striking a person, barricading or a similar control to prevent access shall be in place.
- Any person shall not place themselves under a suspended load.
- Current annual inspection reports shall be located on the project for all cranes in use.
- Maintenance, service and repair to cranes and other equipment shall be completed in accordance with manufacturer's instructions and schedules.
- Records of contractor equipment maintenance, service and repair shall be made available to McMahon Services.



### Lifting Equipment

McMahon Services and its Contractors shall ensure that all cranes and lifting equipment have been thoroughly inspected and certified as being in a safe condition before use on site.

There shall be a system to ensure that:

- Each rigging connection is correct prior to commencing a lift.
- The load being hoisted is within the safe working limits of the crane and is also with the limits set out in the lift plan.
- Safety devices or overload limiters are not overridden or cut out.

All rigging equipment shall be inspected by a competent person and the details of the equipment shall be recorded on a Lifting Equipment Register F633.

### ELEVATING WORK PLATFORMS (EWP)

All personnel who use any EWP must be trained and demonstrate competency in its safe operation and/or possess an acceptable operator's Competency for High Risk Work. Copies of this documentation shall be held on the QHSE Training Register and kept on file on site.

### General Requirements

- Maintenance shall be conducted and recorded in a log book at regular intervals.
- Each log book entry shall be signed by the responsible person making the entry. The logbook shall also contain details of the person's identification and qualifications.
- Visual and functional safety checks shall be conducted prior to each work shift. Results are to be recorded in the logbook.
- Operators shall report any defects that are identified to a responsible maintenance representative.
- Operating instructions shall be legible, clear and permanently displayed at the operating position.
- Persons shall wear a full body harness positively secured to the EWP at all times when elevated.
- Access and egress shall be minimised whilst elevated.
- If persons need to climb out of the EWP, they must be positively attached to the separate structure by way of a second lanyard before climbing out of the EWP. See section 5.4 below.
- Keep away from overhead electrical equipment. Observe electrical clearance recommendations

### Travelling with the platform elevated

- Travelling shall be limited to firm level surfaces where possible.
- Extreme caution shall be exercised when travelling down a slope as this produces potential for greater hazards and increased loading on the braking system.
- Limit switches shall not be altered to permit operation outside safe working limits under any circumstances.



#### Safe working load

- Consideration shall be given to the amount of weight being placed in the EWP.
- Keep all material within the confines of the platform or not more than 200mm from the outside the guardrail.
- The maximum height shall not be more than 2 metres above the platform floor.
- Make sure all material is securely fastened or lashed down.
- Loads shall not be carried on the handrails unless specifically designed for that purpose.

#### Barricades

- If persons are likely to walk into the radius of the EWP position, visual barricades shall be placed at a sufficient distance from the EWP to prevent injury to pedestrians and collision from vehicles.

#### Warning signs

- Signs shall be displayed at ground level warning persons of work above.

#### Working above access areas

- When work above personnel cannot be avoided, action shall be taken to prevent objects falling.
- Where practicable, all tools and loose objects shall be secured with lanyards.

#### Access & egress from EWP's

- Personnel shall not enter or leave the EWP of an elevated work platform when elevated except in an emergency.
- Personnel entering or exiting an EWP (lowered all the way to the ground) shall use 3 points of contact during climbing the access steps.
- Personnel shall ensure the gate closes and latches by itself. This shall be checked during each pre-start.

#### WORKING IN EXTREME WEATHER CONDITIONS

McMahon Services and its Contractors shall ensure adequate controls are implemented to suitably protect people who work in extreme temperatures.

McMahon Services shall consult with employees to identify extreme temperature sources and implement appropriate hazard control measures as required.

Where an environment of extreme temperature exists, McMahon Services shall use means of control that include, but are not limited to the following:

- Ensuring that people who have to work in such conditions are in good physical condition,
- Providing shelter and cool drinking water,
- Using power tools, lifting aids and/or other devices to reduce physical exertion,
- Planning work regimes to minimise personnel exposure to extremes of temperature,
- Providing sufficient rest periods for rehydration.

## HEAT STRESS

Heat stress is the total heat burden to which the body is subjected by both external and internal factors such as:

### External

- Temperature
- Humidity
- Amount of air movement
- Radiant temperature of surroundings
- Clothing

### Internal

- Physical activity (metabolic heat load)

Heat stress occurs when the body cannot sufficiently cool itself. For example heat is absorbed from the environment faster than it can be lost via the body's cooling mechanisms.

The term 'heat stress' is not a medical condition, however it may be used to describe a range of adverse health effects from heat cramps to heat exhaustion and heat stroke.

The body can be cooled by the following means:

- Convection (heat loss to air)
- Radiation (heat loss to surrounding objects)
- Evaporation of sweat

In very hot conditions, sweat evaporation is the only means by which the body can maintain its temperature within the narrow range necessary for healthy functioning. The large amounts of fluid that can be lost by this mechanism must be replaced to prevent dehydration.

## SIGNS OF HEAT STRESS

If the cooling mechanisms are insufficient several conditions, of varying severity, may occur:

- Weakness, dizziness, fainting (heat syncope)
- Heat cramps
- Heat exhaustion
- Heat stroke



### AVOIDING HEAT STRESS

Heat stress can be avoided by decreasing the level of heat exposure, or improving the efficiency of the body's cooling mechanisms. It is important to train workers in the recognition of heat stress symptoms and the mechanisms by which this may be minimised. Risk reduction may be achieved by:

- Altering work schedules so that heavier work is done during cooler periods
- Reducing the radiant heat load by providing shaded areas for outdoor work and shielding from sources of radiant heat for indoor work, such as furnaces
- Increasing convective heat loss by improving air circulation
- Promoting evaporation of sweat by reducing humidity, increasing air movement and wearing suitable clothing
- Providing access to cool drinking water
- Preventing dehydration by ensuring that workers maintain adequate fluid replacement. Salt may be added to fluids but is only required in small amounts when sweating is heavy and continuous. Salt tablets are unnecessary and not recommended as most diets already contain sufficient salt intake.
- Ensuring employees are fit, acclimatised and not taking medication that will impair their ability to cope with heat stress
- Allowing rest periods, if possible, in air-conditioned spaces. This helps in three ways:
  1. lowering metabolic heat production
  2. decreasing environmental body heat
  3. providing an opportunity to increase fluid intake
- Allowing self-regulation of work if fatigue, discomfort or other symptoms occur.

### TREATMENT OF HEAT STRESS

Some adverse effects such as heat stroke are very serious and must be regarded as medical emergencies. If a person appears to be suffering from heat exhaustion the following measures shall be undertaken:

- Remove the affected person from the heat
- Have the affected person rest in a cool area
- Encourage the affected person drink cool (not cold) fluids
- Obtain medical assistance.

If heat stroke is suspected (decreased sweating, high temperature, dry hot skin, confusion and loss of consciousness) medical attention is required urgently. First aid may consist of cooling the body by soaking the victim's clothing in cool (not cold) water and promoting gentle air movement by fanning the victim.



### SAFETY DATA SHEETS (SDS)

The SDS provides a range of information about the substance being used. Relevant information obtained from the SDS, such as, first aid measures, PPE requirements, handling, storage and disposal recommendations will be nominated in the task specific JSA/SWMS to reduce the risk. McMahon's Services shall keep and maintain a Chemical/Hazardous Substances Register for each substance used or produced in the workplace and will ensure there is an accompanying SDS provided for each substance. The employer shall also identify the likelihood of injury or harm to employees as a consequence of exposure to each hazardous substance. The register will be accessible to those employees who have the potential to be exposed to hazardous substances. The employer shall provide adequate information about training regarding the potential risk to health, the control measures to be applied, the correct use of PPE and the need for health surveillances.

Employees must use the Hazardous Substance Register and the SDS's as a source of information to ensure that whenever they handle hazardous substances they manage the risk correctly.

Although only a small amount of incoming substances is expected a SDS for each type shall be provided.

Additionally, site operatives shall have general awareness training into the SDS prior to handling hazardous substances as well as relevant SDS referenced within SWMS's / JSA's.

### EMERGENCY MANAGEMENT, FIRST AID AND MEDICAL SERVICES

The project management team shall identify and assess the emergency and first aid requirements for the site. This assessment shall ensure the emergency and first aid requirements have been assessed for the project, and the systems in place are appropriate to the worksite and organisational risks.

The assessment shall include:

- Potential emergency situations
- Methods of communication
- Signage
- Hazardous substances
- Location and type of fire fighting equipment required for the site
- Location and type of first aid equipment required for the site
- Appropriate numbers of Emergency and First Aid personnel
- Provision of appropriate training
- Routes of access and egress

McMahon's Services first aid personnel shall promptly attend to all injuries in accordance with their level of training. Only qualified medical personnel shall attend to serious injuries, eye injuries (foreign bodies outside the competence of a qualified Occupational First Aider), or any injury requiring diagnosis. Emergency first aid assistance will be immediately and readily available to all personnel by McMahon Services at all times whilst the site is in operation. An Emergency Management Plan to ensure employee safety in the event of fire and other emergencies will be prepared in writing and reviewed with employees during induction. The plan will include the following elements: Emergency procedures and routes, critical plant operations, accounting for employees following an emergency evacuation, rescue and medical duties, means of reporting emergencies, and persons to be contacted for information or clarification.



### HAZARDOUS MANUAL TASKS

A hazardous manual task is considered to be any activity by a person to lift, lower, push, pull, carry, hold or restrain something. The risk of injury comes not just from the characteristics of the object being handled but from the way it is handled, the work environment and the repetitiveness or frequency of the manual handling. Hazardous manual tasks may involve risk factors outlined as follows:

#### Actions and movements

- Sudden, jerky or hard-to-control movements
- Lifting unevenly or with one hand
- Extremes of joint movement
- Bending, twisting, over-reaching
- Repetitive movement
- Frequent forceful movement
- Frequent actions requiring extremes of reach, bending or twisting
- Maintaining the same posture or position for a long time
- Frequent or prolonged bending and twisting of the wrist, and
- Using poorly designed tools.

#### Working posture and position

- Maintaining one posture for prolonged periods without the opportunity for variation, and
- Prolonged or repetitive bending and/or twisting of the spine.

#### Location of the load and distances moved

- Located above shoulder height
- Located below mid-thigh height
- The need to be manoeuvred into position, and distance: weight of load.

#### Work environment

- Poor lighting
- Slippery or rough ground
- Inappropriate climate
- Untidy workplace, and
- Confined or restricted spaces

There are a number of controls that can be implemented to prevent injuries arising from hazardous manual tasks. The use of mechanical methods, team lifting and splitting the load are all effective methods. Contractors must provide sufficient manual handling details in their respective JSA/SWM so where practicable manual handling is reduced.

### A Ten Step Guide for Safe Manual Lifting

The following Ten Step Guide contains general principles for the safe manual lifting of objects:

#### 1. Assess the load and plan the lift

To do this, assess what you are lifting, deciding where and how you are going to move it. Ideally, lifting should occur at mid-thigh to shoulder height. Avoid unnecessary bending, twisting or reaching. Ensure that there is a clear path to your destination and a suitable place to put down the load.

#### 2. Get close to the load

Position yourself as close to the centre of the load as possible. If the load is on a bench, pull it closer towards you. This will minimise strain on the back while lifting, and enable you to use your strongest arm muscles to hold the load.

#### 3. Place feet apart for balance

Place your feet apart to make sure your body posture is evenly balanced. If the load is positioned below waist height, straddle it if possible before lifting.

#### 4. Relax the knees

To begin the lift, gently relax your knees to get down close to the load.

#### 5. Lower your body and bend your knees

Lower your body, bending at your knees. Preferably, your knees should not be bent beyond right angles. Bend your back slightly, if necessary.

#### 6. Lower your head

Lower your head to look at the load you are lifting.

#### 7. Get a firm grip on the load

Grip the load securely and comfortably with both hands. Use your whole hand, rather than just your fingers. A firm grip should help pull the load closer, as well as support its weight. Pull the load as close to your body as possible.

#### 8. Raise your head

Gently raise your head upwards (look outwards). This will help you position your back correctly, and ensure that your arm and leg muscles take most of the load.

#### 9. Straighten your legs

Straighten your legs and lift slowly and smoothly, minimising the use of your lower back. Keep the load close to your body while lifting.

#### 10. Lift and turn your feet

After lifting the load, turn your feet, then your body in the direction you wish to walk. Avoid twisting your body while carrying out the lift.



### FITNESS FOR WORK AND BEHAVIOUR

Fitness for Work includes a wide range of effects due to illness, disease, injury, drugs and alcohol that may inhibit an individual's ability to work in a safe manner. Any person who is feeling the effects of ill health should seek medical assistance and refrain from entering the work site. This is to avoid the spreading of illness, and to ensure the fitness of the individual does not impair their ability to carry out their work in a safe manner. The distribution, sale, consumption or possession of alcohol or illegal drugs on site is strictly prohibited.

Prescription drugs may affect an employee's fitness for work and ability to work safely. Employees who are on medication shall advise the Site Supervisor and duties may be adjusted accordingly.

All personnel shall be required to comply with the fitness for work Policy and Procedure whilst on site. Persons appearing to be affected by alcohol or other drugs will not be allowed access to site and are to be encouraged to self-test to ensure compliance with a zero alcohol limit prior to entering the work site.

Persons appearing to be affected by alcohol or other drugs, persons involved in any incident on site and any personnel directly involved shall be tested in accordance with the Fitness for Work Procedure, and removed from site if a positive reading is recorded. Refusal to submit to a test shall be deemed to be a positive result and will start the disciplinary process.

Refer to Fitness for Work Policy (HR0002), Alcohol and Other Drugs (SP 201)

### CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT

The McMahon Services project team shall maintain calibration equipment and ensure that test results are recorded. Calibration methods shall be based on the equipment manufactures written instructions and standards as appropriate. The Site Project Supervisor is responsible for ensuring that incoming goods and materials are inspected for accuracy to the project requirements. The inspection and test equipment used on the project shall be handled and stored in a manner that prevents damage.

### PLANT AND EQUIPMENT OPERATION

Only plant and equipment maintained in safe operating condition shall be allowed on the Project. All personnel operating vehicles and plant shall observe the established road traffic rules and observe all site HSE requirements. All vehicle drivers and operators shall possess a current driving license appropriate to the class of vehicle being driven. All plant operators shall possess the appropriate permit and certificate of competency.

Site specific conditions are as follows:

- Site traffic movement and traffic management plans shall be establish to clearly define plant movements.
- Plant inspection reports as applicable shall be completed in accordance with the manufacturer's specifications.
- Construction traffic shall always give way to pedestrians.
- All plant shall have audible reversing as well as a flashing beacon.
- Suitable safe work zone definition must be established by McMahon Services.
- Roadways and access to fire protection equipment shall not be blocked.
- Personnel shall not be permitted to ride on moving equipment, i.e. cranes, loads being lifted, fork lift trucks, front end loaders, trailers, trucks or the back of utilities. Employees shall only sit on the provided seats.
- Speed limits and traffic signs shall be obeyed by all personnel.
- Instructions issued from the track protector shall be followed.
- Vehicles/Plant shall be maintained in accordance with the manufacturers' recommendations and the maintenance records retained.
- Daily pre-start checks shall be undertaken prior to operation of the plant to ensure correct working order.
- Any issues with any plant are to be recorded in the daily pre-start log book and reported to the supervisor.



## 23 ENVIRONMENTAL MANAGEMENT

### SMOKE FREE ENVIRONMENT

Smoking is prohibited in all buildings, crib rooms & lunch areas, confined spaces, hazardous substance and lubricant / fuel areas and designated restricted areas. Smoking in McMahon Services vehicles is prohibited.

### NOISE CONTROL

McMahon Services will work in accordance with state and territory environmental noise policy. Moreover, McMahon Services and its Contractors shall be required to reduce and/or control exposure to noise hazards by using the following **Hierarchy of Controls**:

- Reduce the noise level at the source,
- Change the process or procedure to eliminate the noise,
- Isolate the noise source,
- Maintain plant and equipment as per manufacturers specifications,
- Reduce exposure by reducing the amount of time the worker and public is exposed to the noise,
- Place clear signage to indicate a noise hazard and PPE requirement,
- Provide suitable PPE.

### DUST CONTROL

Dust shall be suppressed by the use of water spray either from hoses on the ground controlled by personnel or hoses built into plant. (For further details see McMahon Services SWI 1200, 1202, 1209, 1210 Environmental Dust controls)

### STORMWATER MANAGEMENT

McMahon Service shall prevent stormwater contamination in accordance to state EPA requirements and the site project requirements. During the works nominated drains shall be protected with silt socks or mesh and maintained to prevent pollution entering the stormwater system. General housekeeping on site shall be conducted at all times to mitigate risk of environmental impact.

### PLANT AND EQUIPMENT SERVICING AND REFUELLING

Refuelling of plant and equipment shall be carried out in accordance with site and EPA legislative procedures by Mini Tanker.

Particular requirements include but are not limited to the following:

- Bulk refuelling for heavy plant and equipment shall be carried out by Mini Tanker
- The storage of small amounts of fuel shall be contained in purpose built containers and stored in a purpose built bunded cupboard
- A fire extinguisher and a hydro carbon spill kit shall be readily available on Mini Tankers truck at all times
- Plant and Equipment servicing must be carried out and by a trained and competent person in accordance with the manufactures specifications
- Generated waste from the servicing shall be disposed in accordance with relevant state regulations and site procedures.



## FIRE PREVENTION

Site Emergency Procedures shall include provisions for dealing with fire. McMahon Services shall ensure FFE (Fire Fighting Equipment) is available on site in prominent work areas at all times. Fire extinguishers shall be maintained in good condition and tested within date ensuring equipment is not only readily available but in correct working order. Any equipment deemed unfit for use shall be taken out of service, tagged and site supervisor notified so action can be taken to rectify or replace.

Fire protection is critically important during the fire ban period of 1<sup>st</sup> November to 15<sup>th</sup> April due to the increased risk in the warmer months. Mechanical plant may be used in the fire ban period with additional controls in place.

McMahon Services shall provide:

- shovels and or rakes available to the operators at all times
- fully operational and checked – in date fire extinguishers within each plant
- plant that is serviced – in good condition i.e. engine exhaust system is leak free
- a 10,000 litre water tanker located on site, full of water readily accessible.
- A trailer mounted portable fire fighting unit full of water readily accessible.

Care shall be taken during rail retrieval as there is potential for flair up from sparks created by dragging rail over ballast. Operators are required to remain vigilant during execution of these tasks.

## Hot Works

All persons who perform work that generates sparks, flames or other sources of ignition shall obtain a Hot Work Permit (F 630) from the Site Supervisor prior to work commencing. Particular care shall be taken and appropriate controls implemented when grinding and oxy cutting to ensure that the generated sparks do not start a fire or cause hazards to personnel.

**Before a Permit to Work is issued, the issuer must ensure THAT:**

- Any combustible material is removed or protected with fire resistant blankets, has adequate ventilation and an appropriate number of approved fire extinguishers or water hose are immediately available,
- Flashback arrestors are fitted to both ends of all Oxy/Acetylene hose sets,
- Any flammable and combustible materials are stored and handled with due regard to its fire characteristics,
- Flammable liquids are stored in an approved manner, and dispensed only in acceptable safety containers.
- A fire spotter/watcher is provided during tasks to monitor and control sparks.

**Fire Prevention Requirements Are As Follows:**

- Portable FFE shall be placed within the work area
- Inspection and maintenance of fire fighting equipment and fire control measures shall be in accordance with statutory regulations. This equipment and the inspections shall be recorded on a register. (F 253)
- Fire extinguishers shall be fitted to major plant.
- Spark arresters shall be fitted to all plant that could discharge sparks,
- Fire watches shall be suitably trained to fulfil their duties,
- Smoking shall not be permitted at any time on site except in specially designated areas.

**WASTE TRACKING**

A waste tracking system is utilized to track all material removed from site as part of the works process. It identifies the destination of the waste and details what processing procedures the waste will be subject to as well as detail the form and quantities that the waste will be recycled into. This information is recorded and provided on a monthly basis.

**EMEX AUSTRALIS (THREE CORNERED JACK / WEED)**

This weed (Emex Australis) has been identified within areas rail recovery will be undertaken which shall be identified and delineated from McMahon Services works to prevent the spreading of the unwanted weed. The weed spreads rapidly and competes with crops and pastures and is estimated to cost millions of dollars a year in crop losses / production costs. A single plant can produce more than 1000 burrs which can contaminate agricultural produce such as wool, grain and dried fruit. If Emex is located within the work area, McMahon Services shall ensure the weed remains untouched to prevent spreading by excluding the weed from works with flagging or bunting.

EXAMPLE



## 24 ACCIDENT AND INCIDENT REPORTING, NOTIFICATION AND INVESTIGATION

### ACCIDENT AND INCIDENT REPORTING

McMahon Services personnel and its Contractors must report all incidents to the Site Supervisor or Manager immediately, who will notify ARTC Project Manager. Key components of the investigation and reporting process to be used for the project are:

- immediate verbal reporting of all loss incidents and near losses
- immediate attendance to injuries by site First Aid personnel followed by obtaining advanced medical assistance if required
- making the work area safe
- following the notification procedure by Contacting the State regulatory authority, Project Manager and HSEQ Manager immediately
- Initial investigation and completion of electronic copy of the investigation form within 24 hours
- more detailed investigation using Root Cause analysis and submission of final analysis
- communicating outcomes to personnel involved and to the broader workforce
- reviewing at Safety Committee and Tool Box meetings

### NON CONFORMANCE CONTROL

This procedure applies to actual and potential non-conformances in any incoming good and materials. The workmanship or systems covered by the Business Management System and Project HSE Plan, whether these are in-house, on-site or external. The Non Conformance Report (F 610) is designed for all types of non-conformances, including supplier and in-house non-conformances; process and system non-conformances; and customer/interested party complaints. The project team is responsible for the inspection of incoming and outgoing goods and materials to ensure that the project meets any relevant legislation, project specifications and any other requirement.

## 25 WORKPLACE AUDITS AND INSPECTIONS

### VISITING MANAGER'S INSPECTIONS

McMahon Services Internal System Audits are outlined in its Business Management System. Scheduled project team audits and inspections are for Safety and Environment activities relevant to a level of risk. The visiting Manager shall utilize form F245 Visiting Manager Inspection Record, to perform the workplace audit. Any actions arising from the audit shall be discussed amongst the site team via the toolbox meeting and closed out within a timely matter.

### HSE REVIEW

McMahon Services senior management shall conduct a comprehensive review of the HSEP at three-monthly intervals to check its continuing suitability and effectiveness in satisfying the company's, the client's and the project's HSE objectives and targets. This review will be in accordance with the procedure (SP209) Document and Data Control.

The reviews will take into account the following:

- Results from audits and inspections
- HSE KPI's
- Information from incidents and risk assessments
- Feedback from site and project meetings



Incident reviews for serious incidents shall involve senior management.

#### WORKPLACE AUDITS, INSPECTIONS AND MEETINGS

McMahon Services Internal System Audits are outlined in its Business Management System.

Scheduled project team audits and inspections for Safety and Environment activities relevant to a level of risk are listed below as:

HSEQ Activity	Risk H L M	When	Who
Pre Contract Start Up Meeting (F602)	H	Before commencement	Project Team
Safety and Environmental Plan, Project Risk Assessment and Register, JSA's to be established, approved and signed.	M	Before commencement	All site operatives
Site Project Induction/s	L	Before commencement	All site operatives
Daily Prestart Meetings (F235)	H	Daily	All site operatives
Permit to Work	H	Daily	All site operatives
Safe Act Observation Audit (SAO) (F225-1) for high risk work: refer to project risk assessment and Register	H	Weekly (Minimum)	McMahon Services
Toolbox/Safety Culture Meetings	M	Weekly	Site Supervisor
Workplace Audits	H	Weekly (Minimum)	Site Supervisor
HSE Plan and Project Risk Assessment and Register Review	H	At project start & then quarterly	Project Team
HSEQ Report Card	M	Monthly	Site Supervisor

#### MONITORING AND MEASUREMENT OF HSE PERFORMANCE

A specific project workplace schedule shall be established for the project team to execute. The schedule shall consist of the following items to monitor and measure HSE performance:

- Monthly completion of HSE report card
- Review of the project plan and risk assessment,
- Count of the number of SAO audits conducted,
- Form 950 Project Daily Diary (includes hours of sub-contractors, employees and agency labour)



## 26 APPENDICES

### APPENDIX 1

#### SAFETY POLICY

McMahon Services policy to conduct its business in a manner that protects the safety of employees, others involved in its operations, customers and the public is not placed at risk through our operations. McMahon Services will strive to prevent all accidents, injuries and occupational illness through the active participation of every employee. McMahon Services is committed to continuous efforts to identify and eliminate and or manage safety risks associated with its activities.

Accordingly, McMahon Services policy is to:

- Comply with all applicable laws and regulations and apply responsible standards where laws and regulations do not exist;
- Work with government agencies and other stakeholders to develop a transparent relationship;
- Design and maintain safety management systems, provide training and conduct our operations in a manner that safeguards people and property;
- Establish performance targets, monitoring performance and striving to continually improve the our safety performance;
- Respond quickly, effectively and with care to emergencies or accidents resulting from our activities in cooperation with industry organization and government agencies;
- Adopt a consultative process between management, employees and contractors with the view to maintain management systems and that promote and continually improve OHS performance;
- Undertake appropriate reviews and evaluations of our operations to measure compliance by undertaking audits and inspections.
- Company management fully supports and endorses occupational health and safety system, as described in the company Business Management System manual and associated procedures and work instructions.



David McMahon  
MANAGING DIRECTOR

Review: December 2012



Health &  
Safety  
AS 4801

SAI GLOBAL

**APPENDIX 2****QUALITY POLICY**

McMahon Services policy is to conduct its business in a manner to meet customer needs and expectations without compromising effects to service and products. McMahon Services is committed to continuous efforts to improve quality performance that delivers a high level of service to our clients.

Accordingly, McMahon Services policy is to:

- Comply with all applicable laws and regulations and apply responsible standards where laws and regulations do not exist;
- Design and maintain quality management systems, provide training and conduct our operations in a manner that leads to better quality and improve the level of service;
- Establish performance targets, monitoring performance and striving to continually improve the our quality performance;
- Strive to meet the business contractual obligations and project programs;
- Employees, subcontractors and suppliers engaged by the company comply with the direction and policy of the company's management system;
- Adopt a consultative process between management, employees and contractors with the view to maintain management systems and that promote and continually improve performance;
- Undertake appropriate reviews and evaluations of our operations to measure compliance by undertaking audits and inspections.



David McMahon  
MANAGING DIRECTOR

*Review: December 2012*





**APPENDIX 3****ENVIRONMENTAL & COMMUNITY POLICY**

McMahon Services policy is to conduct its business in a manner that is compatible with the balanced environmental and current climate needs of the community in which it operates. McMahon Services is committed to continuous efforts to improve environmental performance that benefits the environment and the community throughout our operations.

Accordingly, McMahon Services policy is to:

- Comply with all applicable laws and regulations and apply responsible standards where laws and regulations do not exist;
- Work with its client, the community and other stakeholders to develop a transparent relationship, including effects on energy and product use and supply;
- Communicate with the public on environmental matters and facilitate with others to improve the environment;
- Manage our operations with the goal of preventing incidents and of controlling emissions and waste below harmful levels;
- Establish performance targets, monitoring performance and striving to continually improve the our environmental performance;
- Respond quickly, effectively and with care to emergencies or accidents resulting from our activities in cooperation with industry organisation and government agencies;
- Adopt a consultative process between management, employees and contractors with the view to maintain management systems and that promote and continually improve performance;
- Undertake appropriate reviews and evaluations of our operations to measure compliance by undertaking audits and inspections.




David McMahon  
MANAGING DIRECTOR

*Review: December 2012*

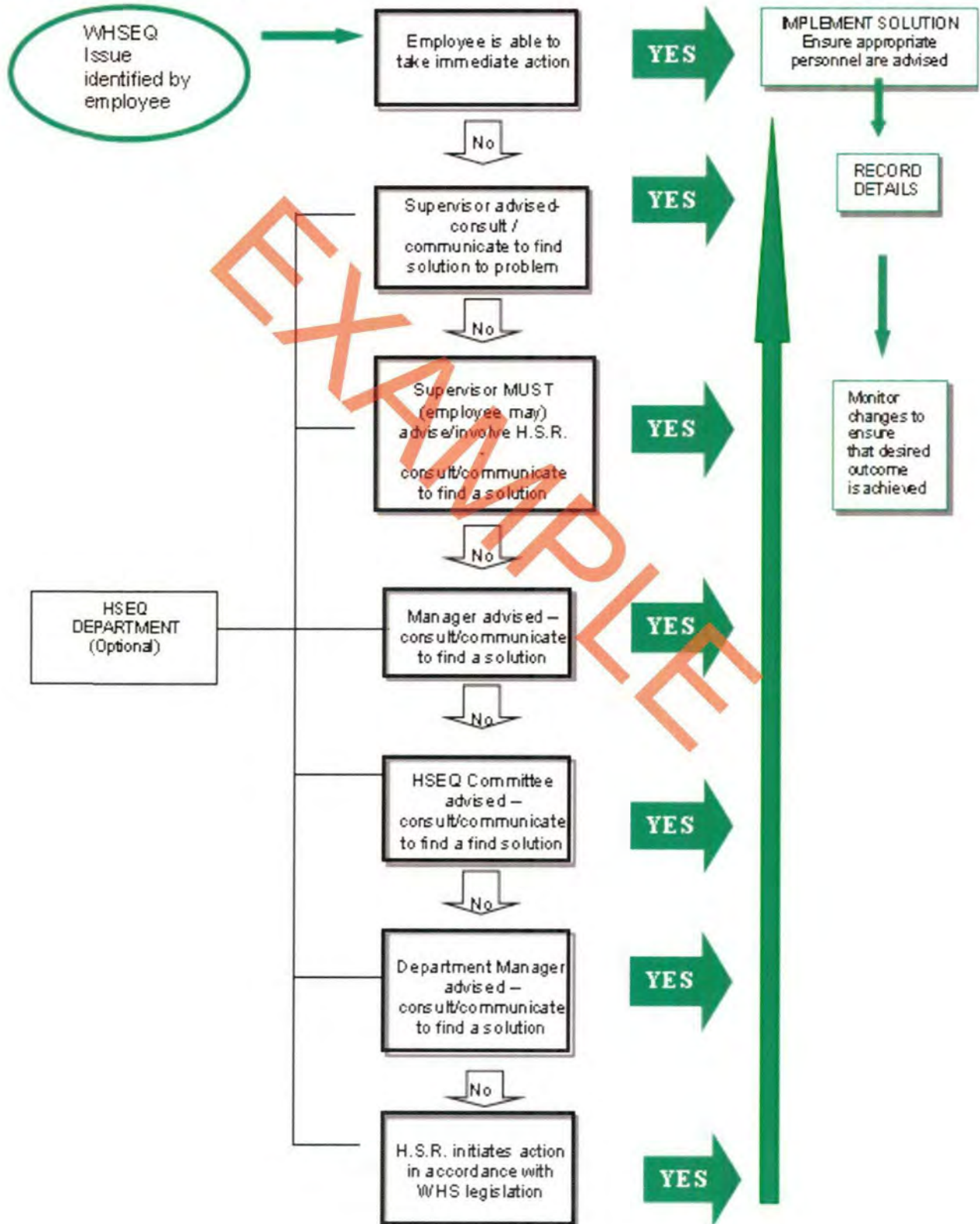


Environment  
ISO 14001

 SAI GLOBAL

APPENDIX 4

RESOLUTION OF AN WHS PROBLEM





APPENDIX 5

REPORTING GUIDELINES

Requirement	When	Details	How
Contract Declaration Form	As soon as agreement is reached on a tender, or a contract is signed for a Scheme project	<ul style="list-style-type: none"> <li>Notifies the OFSC of the details regarding a new Scheme project that was awarded to the accredited contractor</li> </ul>	Insert into Pre-start meeting document whether the contract is a scheme project as determined by the OHS Performance Reporting Pack Pg. 7-8 and provide either Contract Declaration Form as an attachment or provide link to document. Document and guide appears in section 4 Pages 13-16 in the OHS Performance Reporting document
OHS Plan	Provide ASAP before starting building work on a Scheme project	<ul style="list-style-type: none"> <li>Outlines the accredited contractor's approach to managing OHS on a specific project</li> </ul>	Insert into Pre-start meeting document the need to provide HSE Plan to OFSC once developed. Insert into HSE plan the reporting requirement of the OFSC Performance Reporting document this will include the Scheme Project Reporting scheduled dates, Incident reporting requirements and Biannual Activity Reports
Scheme Project Report	<ul style="list-style-type: none"> <li>Report 6 monthly, due on 15 October and 15 April each year and at the completion of a Scheme project (within 2 weeks of the project completion date)</li> <li>A separate report must be submitted for each Scheme project</li> </ul>	<ul style="list-style-type: none"> <li>OHS strategies applied by companies on individual projects.</li> <li>Performance indicators that gauge the cultural uptake of OHS within the project in relation to worker involvement</li> </ul>	Insert the requirements and scheduled dates for this report and the Biannual Activity report into the Audit and Inspection schedule matrix or similar business reporting schedule document

Requirement	When	Details	How
OFSC Incident Report	Following: <ul style="list-style-type: none"> <li>All fatalities irrespective of the project value or type (notify immediately to 1800 652 500 and provide report within 48 hours);</li> <li>Any incident on a Scheme or non-Scheme project resulting in a LTI (reporting of AWIs is also encouraged ) where the project value is \$3 million or more (provide report within 48 hours if a Notifiable Incident, otherwise provide report within 3 weeks);</li> <li>Any MTI or dangerous occurrence on a Scheme project (provide report within 48 hours if a Notifiable Incident, otherwise provide report within 3 weeks)</li> </ul>	<ul style="list-style-type: none"> <li>Location / incident details</li> <li>Breakdown agency of incident</li> <li>Working days /shifts lost and/or significant change to duties made/expected</li> <li>Description of corrective action(s) taken or proposed action(s)</li> <li>Injured party details, project details, work activity details</li> </ul>	Insert into Incident Reporting Procedure (SP 403) the need to report any fatality to OFSC within 48hrs (notify immediately to 1800 652 500 and provide report within 48 hours);  If a Notifiable Incident or Dangerous Occurrence Any Scheme or Non-scheme project over the value of \$3m within 48hrs and Reporting Injuries and Incidents  It is a legal obligation of the employer to notify SafeWork SA of any work-related injury that requires treatment as an inpatient in a hospital immediately after the injury (disregarding any time taken for emergency treatment or to get the person to hospital).  This legal obligation under Regulation 418 does not lie with the hospital, doctor ambulance or worker.  If you are reporting work-related injuries or incidents to SafeWork SA the 24 hour Emergency Telephone number is 1800 777 209  If you are unsure whether or not to report any work-related injuries or incidents to SafeWork SA contact the SafeWork SA Help Centre on 1300 365 255  The following are required to be immediately notified to SafeWork SA: <ul style="list-style-type: none"> <li>A work related death</li> </ul> A injury that: <ul style="list-style-type: none"> <li>requires admittance to hospital as an inpatient</li> <li>is from exposure to any substance that causes acute symptoms</li> <li>is a dangerous occurrence</li> </ul> Examples of 'dangerous occurrences' include: <ul style="list-style-type: none"> <li>the collapse, overturning or failure of the load-bearing capacity of cranes, hoists or scaffolding</li> <li>the damage to, or malfunction of, other major plant or equipment</li> <li>the collapse of a floor, wall or ceiling of a building used as a workplace</li> <li>an electrical short, malfunction or explosion</li> <li>an uncontrolled explosion, fire or escape of gas, steam or other hazardous substance.</li> </ul> Reports for Notifiable incidents should be provided to the OFSC within 48 hours.)

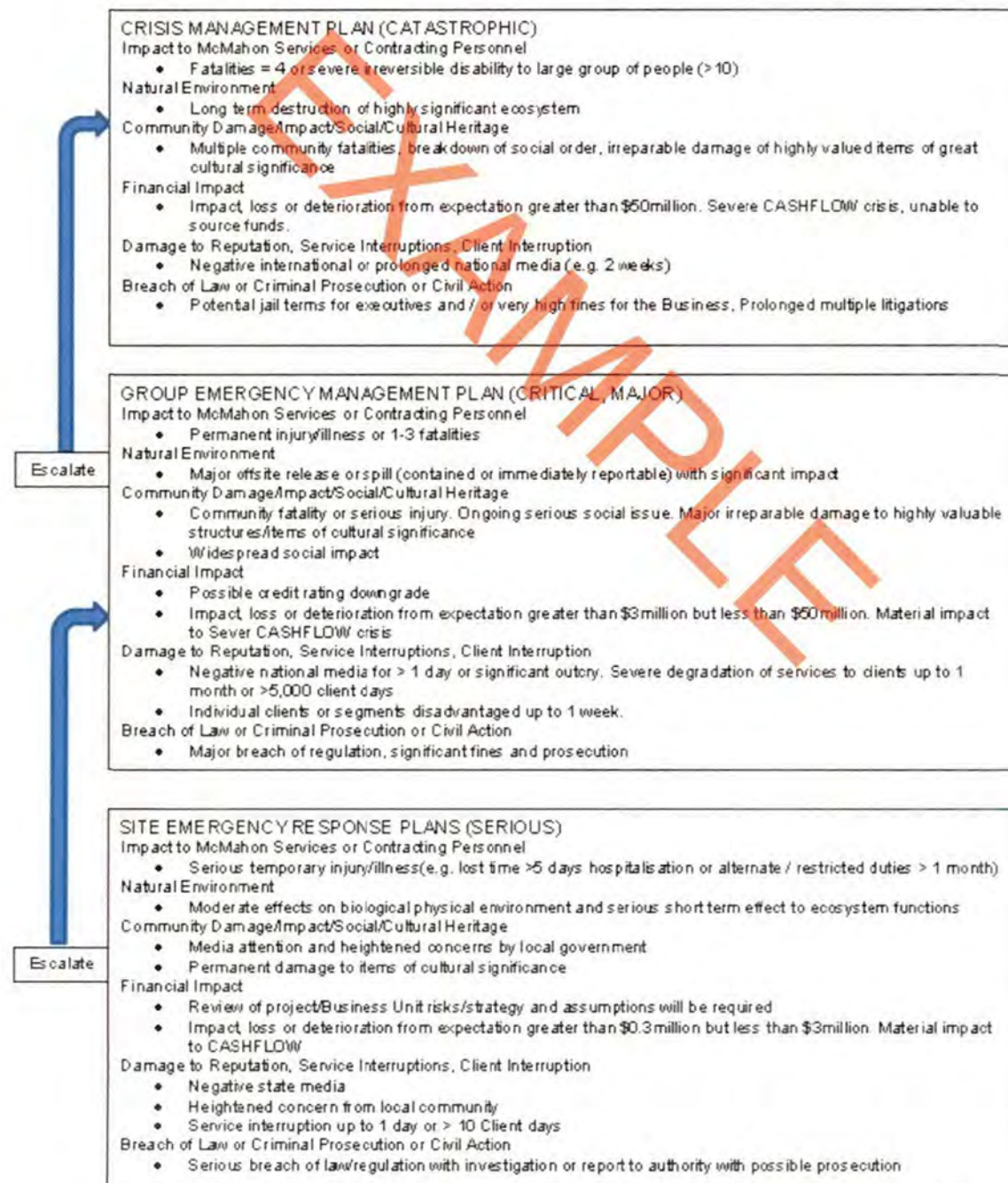


Requirement	When	Details	How
Biannual Activity Report	Report 6 monthly, due on 15 February and 15 July each year  <ul style="list-style-type: none"> <li>All accredited contractors must submit, even if no projects (Scheme and/or non-Scheme) have been undertaken in the period</li> </ul>	Fatalities  <ul style="list-style-type: none"> <li>Numbers of LTIs and MTIs</li> <li>Injury and incident number and profile</li> <li>Current workers' compensation premium rate</li> <li>Notices, prosecutions</li> <li>PPI, key initiatives</li> </ul>	Insert the requirements and scheduled dates for this into the Audit and Inspection schedule matrix or similar business reporting schedule document.

### APPENDIX 6 DIAGRAM 1 – SITE EMERGENCY, GROUP EMERGENCY AND CRISIS FOR McMAHON SERVICES

#### System Procedure CRISIS and EMERGENCY MANAGEMENT

Diagram 1 – Site Emergency, Group Emergency and Crisis for McMahon Services





**27 HEALTH SAFETY AND ENVIRONMENTAL PLAN CHECKLIST**

McMahon Services project team shall review the Project HSE Plan on a quarterly basis to determine the effectiveness of the Plan. If this plan does not conform the Project Manager is to be contacted immediately to action the necessary item. The checklist for the Project HSE Plan is as follows:

Activities Reviewed	Conforms	Review Date	Next Review	Conforms
	✓Yes ✗No			✓Yes ✗No
Changes and Distribution				
Project Details/Description of Works/Organisation details are correct				
HSE Policies are signed and dated by Managing Director				
Project Objectives and Targets are allocated and sighted				
Project Risk Assessment and Register has been performed and is current to project risks				
Plant Risk Assessments have been performed (F239)				
Job Safety Analyses are developed and current to work (F230)				
Job Safety Analysis inductions are current				
HSE Resolution procedure is in place				
Site Specific Inductions records are current (F619)				
Roles and Responsibilities are sighted and signed				
Periodic workplace inspections and meeting program have been completed				
Accident/Incident/Near Miss reporting procedure is current				
References to National Occupational Health Safety Commission / Legislative / Standards / Codes of Practice are current and available				
Project Team inducted into the Project HSE Plan				





PROJECT RISK ASSESSMENT AND REGISTER

**PROJECT RISK  
ASSESSMENT AND  
REGISTER**



PRAR V1.00

ISSUE DATE: AUGUST 2012

<b>PROJECT</b>	ARTC scrap rail and clip collection		
<b>DIVISION</b>	Demolition		
<b>JOB NUMBER</b>	5200907		
<b>DATE COMPLETED</b>	20 <sup>th</sup> November 2012		
<b>COMPLETED BY</b>	Tim Cotton	SIGNED & DATE	
<b>PROJECT MANAGER</b>		SIGNED & DATE	
<b>SITE SUPERVISOR</b>		SIGNED & DATE	
<b>1<sup>ST</sup> REVIEW (Date)</b>		<b>1<sup>ST</sup> REVIEWED (Date)</b>	
<b>2<sup>ND</sup> REVIEW (Date)</b>		<b>2<sup>ND</sup> REVIEWED (Date)</b>	
<b>1<sup>ST</sup> REVIEW BY</b>		<b>SIGN</b>	
<b>2<sup>ND</sup> REVIEW BY</b>		<b>SIGN</b>	

**THE RISK ASSESSMENT PROCESS**

The risk assessment process revolves around the consistent assessment of risk. This is achieved by the use of a Risk Matrix. This matrix assesses risk by determining the consequence and likelihood of a hazard to cause harm. The risk is assigned a rating using the Consequence and Likelihood as follows:

Consequence x Likelihood = Risk Rating

**TABLE A. Consequence**

The consequence descriptors below are applied to the task or activity to be assessed based on the maximum reasonable consequence (How bad could the outcome be?)

LEVEL	DESCRIPTOR	EXAMPLES
1	Insignificant	No injuries, low financial loss, limited damage to area
2	Low	First aid treatment, on-site release immediately contained, medium financial loss
3	Moderate	Medical treatment required, on-site release contained with outside assistance, high financial loss.
4	Major	Extensive injuries, loss of production capability, off-site release with no detrimental effects, major financial loss.
5	Extreme	Fatality/ Multiple fatalities, toxic release off-site with detrimental effect / long term environmental effects, huge financial loss

**TABLE B. LIKELIHOOD**

The likelihood descriptors below are applied to the task or activity to be assessed based on the probability of an incident occurring. (How often have things gone wrong?)

LEVEL	DESCRIPTOR	EXAMPLES
A	Very Likely	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Moderate	Might occur at some time
D	Unlikely	Could occur at some time
E	Rare	May occur only in exceptional circumstances



TABLE C. QUALITATIVE RISK ANALYSIS MATRIX LEVEL OF RISK

CONSEQUENCE	INSIGNIFICANT Level 1	LOW Level 2	MODERATE Level 3	MAJOR Level 4	EXTREME Level 5
Very Likely (A)	H (11)	H (16)	E (20)	E (23)	E (25)
Likely (B)	M (7)	H (12)	H (17)	E (21)	E (24)
Moderate (C)	L (4)	M (8)	H (13)	F (18)	E (22)
Unlikely (D)	L (2)	L (5)	M (9)	H (14)	E (19)
Rare (E)	L (1)	L (3)	M (6)	M (10)	H (15)

TABLE D. RISK LEVEL DEFINITIONS

RISK LEVEL	NUMBER	REQUIRED RESPONSE
Low	1-5	Review controls to ensure continued effectiveness and look for improvements.
Moderate	6-10	Introduce additional controls to reduce the risk to as low as reasonably practicable
High	11-17	Risk must be reduced before work commences. Contact Site Safety Supervisor for approval for work to proceed.
Extreme	18-25	Must reduce risk immediately – highest priority Work is not to commence until appropriate controls

**MONITORING EFFECTIVENESS OF RISK CONTROLS**

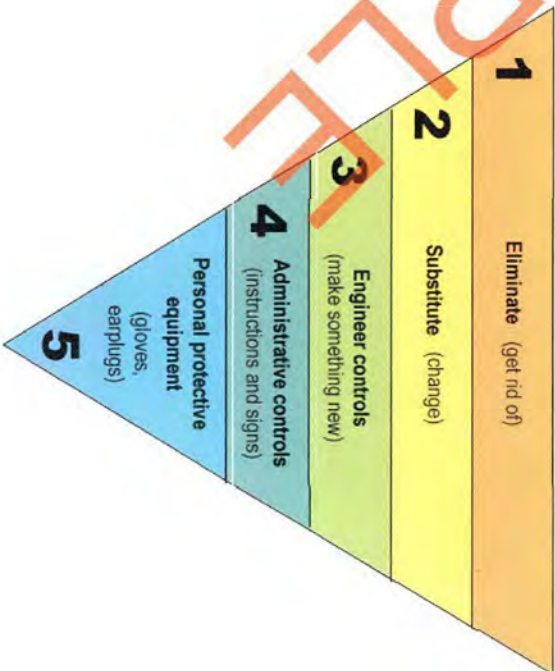
Risk assessment involves the identification of hazards (potential to cause harm), the assessment of the risks posed by those hazards, the development of controls to eliminate and minimise risks, and the ongoing management of the risk controls. Audits will be scheduled throughout the project life that will include the following:

- Risk assessment reviews
- Project plan reviews,
- Project surveillance audits,
- Safe Act Observation Audits,
- Workplace audits and inspections.

The Project Manager and Site Project Supervisor are responsible for ensuring that HSE related risk controls are implemented and monitored for effectiveness. The McMahon Services Divisional Manager is responsible for providing sufficient resources to ensure that risk controls are implemented.

**HIERARCHY OF CONTROLS**

McMahon Services recognises that the "Hierarchy of Control" is a legislative requirement for the selection of controls and incorporates this into the selection of controlling identified hazards. The first option is to eliminate the hazard however where this is not practicable the aim is to minimise the risk to as low as reasonably practicable. (ALARP)





**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
<b>Site Management</b>						
SM01	Management of Sub Contractors and other workgroups.	Failure to induct & implement site management plan, inductions, systems and procedures for this project.	High 2 B	Project management will ensure Sub-contractors are site inducted into MCM systems, procedures, plans and JSA documentation. (MCM – F 619 Site Induction)  All sub-contractors to be included in the auditing process, daily pre-starts, weekly toolbox meetings and anything else relevant to McMahon Services management systems. (MCM – F 235 Daily Job Checklist/Meeting; F 627 Tool Box / Safety Culture Minutes)	Low 2 D L5	Project Manager. Supervisor.
SM02	Site establishment.	Inadequate training and instruction for the overall project including McMahon Services Policies and Procedures with potential to lead to injury / property damage.	High 3 B	Site inductions and training by the Relevant Stakeholders to be undertaken by all employees.  Project management to conduct McMahon Services site inductions specific to the site and task, all personnel to complete site induction questionnaire (MCM – F 619 Site Induction).  Ensure signs, barriers, restrictions are in place and all personnel are informed of any hazards at the work site, to be established during the project.  Implement site evacuation procedures (include in the site evacuation procedures, the MUSTER POINT for personnel in the work site) and induct personnel into the plan. (MCM – F 619 Site Induction)	Moderate 3 E M6	Project Manager. Supervisor.
SM03	Dangerous goods and hazardous substances management (used and stored on site)	Failure to manage dangerous goods and hazardous substances results in injury, illness and / or environmental damage.	High 3 B	Project management to identify hazardous substances and dangerous goods in their respective areas and to ensure any substances identified the following is established:- <ul style="list-style-type: none"> <li>• SDS and a register available (ensure everyone knows where the SDS's are located)</li> <li>• Risk assessments are conducted on the use, handling, transport and / or disposal.</li> <li>• Storage of all hazardous substances and dangerous goods in accordance with current legislation and MCM requirements.</li> <li>• Emergency preparedness includes emergencies arising from interaction with Dangerous Goods / hazardous substances</li> <li>• All personnel receive training and instruction in the handling of Dangerous Goods / hazardous substances via a documented process within a task specific JSA.</li> </ul>	Moderate 3 E M9	Project Manager. Supervisor.

PROJECT RISK ASSESSMENT AND REGISTER

No.	Primary Activity	Risk Identified	Risk Rating Before Controls		Risk Controls	Risk Rating after Controls		Responsible		
			Exposure	Controls		Exposure	Controls			
SM04	Railway protocol, protection of plant and personnel.	Failure to observe / follow protocols on site breaching access, clearances and authorised entry into restricted areas leading to injury / property damage.	4	C	E18	Moderate	4	E	M10	Project Manager, Supervisor
SM05	Emergency Preparedness	Failure to implement emergency planning on site for preparedness for an unforeseen event if it was to occur causing injury / death / property damage.	4	C	E18	Moderate	4	E	M10	Project Manager, Supervisor.



**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
SM06	Hazardous materials (HAZMAT) discovered during works. i.e. Asbestos	Harm to personnel / public from exposure to HAZMAT during works.	4 Extreme	<p>If HAZMAT is discovered or assumed during works personnel shall cease works and exclude area until either removal can commence or proven safe to continue works. Assumed material shall be treated as such until proven otherwise.</p> <p>All tasks to be undertaken in line with instruction documented within job specific JSA's / SWMS's.</p> <p>HAZMAT to be removed by trained and competent personnel.</p> <p>Establish safe work zones during HAZMAT removal work.</p> <p>Engineering controls to be implemented to control gravitational and inadequate ventilation risks, if identified.</p> <p>Personnel to wear mandatory PPE issued for the project and as stipulated within JSA's / SWMS's.</p> <p>Monitoring during HAZMAT removal to be performed on-site by external hygienist with daily reports made available.</p> <p>External Hygienist to inspect site and provide clearance certificates upon completion of works.</p> <p>SDS and register to be implemented for the project to provide information on handling, use and storage of materials.</p>	Moderate	Project Manager. Supervisor.
		Environmental harm from release of HAZMAT during works.	4 Extreme	<p>Spill kits to be available on site and positioned in work areas to be readily available.</p> <p>Monitoring during HAZMAT removal to be performed on-site by external hygienist with daily reports made available.</p> <p>External Hygienist to inspect site and provide clearance certificates upon completion of works.</p> <p>SDS and register to be implemented for the project to provide information on handling, use and storage of materials.</p>	Moderate	Project Manager. Supervisor.

PROJECT RISK ASSESSMENT AND REGISTER

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Controls	Risk Controls	Risk Rating after Controls	Responsible	
SM07	Housekeeping on site. Safe access egress to / from works.	Failure to identify and control housekeeping risk can result in injury to personnel.	Extreme	4	C	E18	Project management must ensure workplace areas under their controls are maintained in regards to housekeeping. SAO (Safe Act Observation) Audits carried out minimum weekly to identify housekeeping requirements on site and action appropriately. Emergency planning to include work zone layout and how to egress from each work area safely.	Project Manager. Supervisor.
				2	C	M8		
				2	C	M8		
SM08	Incident investigation.	Failure to properly investigate and implement controls form an incident, allowing a potential re-occurrence.	High	3	B	H17	Incidents / near misses to be reported to Supervision as soon as reasonably practicable. Incidents to be fully investigated as per McMahon Services procedures. Incidents are to be communicated throughout personnel via Toolbox meetings to highlight root cause and controls / action for future risk mitigation.	Project Manager. Supervisor.
				3	C	H13		
				3	C	H13		
SM09	McMahon Services Permit to work forms filled out prior to certain works commencing in accordance with McMahon's Services AS4801 certified management system.	Risk of fire / flooding / property damage.	High	3	C	H13	McMahon Services project manager / Supervisor are to ensure appropriate permits are filled out with prescribed controls implemented prior to works. (Such as hot work permits prior to hot works).	Project Manager. Supervisor.
				3	C	H13		
SM10	Heat exhaustion.	Sickness and injury from exposure to heat / dehydration.	High	4	D	H14	Personnel supplied water during works. Crib room provided for cool area during breaks. First Aid personnel available on site to attend heat stressed personnel.	Project Manager. Supervisor.
				4	D	H14		



**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
<b>Program Planning &amp; Scheduling</b>						
PPS01	Program	Failure by Project management to prepare program detailing work breakdown structure / sequence of work	High	H13	Moderate	Project Manager. Supervisor.
		Risk of delays in the project works / delay of trains.	High	H13	Moderate	Supervisor.
PPS02	Testing & inspection	Failure to undertake required testing / inspections on site, inadequate approval consents by client / engineer	Moderate	M8	Low	Project Manager.
		Failure to provide accurate results / proof from works.	Moderate	M8	Low	Project Manager.
		Failure to remove HAZMAT prior to recycling.	High	H13	Moderate	Project Manager.
PPS03	Practical completion and handover.	Failure to complete all agreed construction activities in accordance with projected dates for substantial completion.	High	H13	Moderate	Project Manager.
		Failure to provide supporting documentation in regards to works completion.	High	H13	Moderate	Project Manager.
PPS04	Integration of Design Issues	Changes involved at the design stage which may affect safety issues include <ul style="list-style-type: none"> <li>• Design specifications</li> <li>• Subcontractor specifications requiring design change</li> <li>• Design review</li> <li>• New revisions to the design plan</li> <li>• Risks that cannot be design out have been documented</li> </ul>	High	H13	Moderate	Project Manager Site Supervisor Sub-Contractor



PROJECT RISK ASSESSMENT AND REGISTER

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
HM01	Asbestos containing materials (ACM)  <b>(NOTE: It is not uncommon to find unforseen Asbestos products during works)</b>	Release of ACM fibres into the atmosphere posing risk of contaminating the environment and harm to human health.	Extreme	All ACM removal and handling shall be in line with Code of Practice – How To Safely Remove Asbestos. All ACM removal works are to be undertaken by trained and competent personnel, equipped with required PPE, in line with a task specific JSA / SWMS with adequate controls implemented prior to / during execution of the task. Decontamination points for personnel shall be established within the exclusion zones to prevent contamination in other areas.	Moderate	Project Manager. Supervisor.
			Extreme	McMahon Services will engage an external consultant to undertake monitoring and inspections of asbestos removal and provide clearance certificates after works have been completed.	Moderate	Project Manager.
			Extreme	Exclusion zones and signage to be established around ACM removal zones to prevent access and warn others of such works, with air monitoring undertaken by a certified consultant. PPE: Tyvek coveralls, respirator, gloves, closed safety boots, safety glasses.	Moderate	Supervisor.
			Extreme	Any Friable Asbestos removal shall be undertaken within a encapsulated area under negative air pressure with additional PPE requirements which shall be outlined within a task specific JSA. Work shall cease in any area where asbestos levels exceed 0.01mL. Reference – MCM-SWI 0311 Air Monitoring Action in event of elevated reading. Methods to be re-assessed prior to continuing.	Moderate	Supervisor.
		ACM not being removed under a controlled environment via a controlled method causing harm to health / release of ACM into the atmosphere.	Extreme	All ACM removed shall be contained within 200um plastic sheeting, double lined (Friable within drums) for transportation to a certified dump by a McMahon Services Dangerous Goods licensed transporter or a contractor with Dangerous Goods license. Waste tracking forms shall be completed for all waste being disposed of and entered into a register with total waste reports generated monthly.	Moderate	Supervisor.
		ACM not being disposed of appropriately under current legislation creating risk environmentally and to the general public.	Extreme	Materials suspected of containing ACM shall be sampled and tested by an external consultant and treated as ACM until proven otherwise. Suspected ACM shall be banded off and excluded from personnel until confirmed otherwise or removed appropriately. Documentation proving investigation out comes to be filed on site and copies handed to ARTC Project Manager along with Full or Partial Clearance Certificates as work is being completed.	Moderate	Project Manager. Supervisor.



**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
HM02	Safety Data Sheets (Material Safety Data Sheets as previously known)	Failure to identify hazards with substances.	4 C Extreme	E18	Moderate 4 E M10	Supervisor.
		Risk to the environment and peoples health via contamination / not knowing how to action an incident.	4 C Extreme	E18	Moderate 4 E M10	Project Manager. Supervisor.
<b>Environmental</b>						
EN01	Dust	Excessive dust from works, resulting in potential health / environmental effects.	2 C Moderate	M8	Low 2 D L5	Supervisor
EN02	Noise	Employee hearing damage.	3 C High	H13	Moderate 3 E M6	Supervisor
EN03	Emex Australis (Three corner jack)	Spreading the weed. contaminating local produce (farming)	3 C High	H13	Moderate 3 E M6	Project Manager. Supervisor
EN04	Snakes	Contact with snakes causing injury.	4 C Extreme	E18	Moderate 4 E M10	Project Manager. Supervisor

PROJECT RISK ASSESSMENT AND REGISTER

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
EN05	Fire	Risk of property damage / personnel injury	Extreme 4 C E18	<p>Project Management / Supervisors are to address within site inductions the importance of personnel to remain vigilant during execution of tasks.</p> <p>Shovels and/or rakes are available to the operators at all times in case of small flare ups i.e. from dragging rail over ballast.</p> <p>Fully operational and checked – in date fire extinguishers within each plant.</p> <p>Plant shall be serviced – in good condition i.e. engine exhaust system is leak free</p> <p>A 10,000 litre water tanker located on site, full of water readily accessible.</p> <p>A 4m cleared space around areas where rail breaking is undertaken.</p> <p>A trailer mounted portable fire fighting unit full of water readily accessible.</p>	Moderate 4 E M10	Project Manager, Supervisor
<b>Work Activities</b>						
WA01	Services isolation / identification prior to works commencing.	Failure to identify / isolate services within the work area resulting in damage to plant / property and injury to personnel.	Extreme 4 C E18	<p>Project Manager / Supervisor to ensure services within the work site have been identified against drawings.</p> <p>Qualified personnel only to disconnect / isolate services and provide documentation outlining the works performed.</p> <p>If live services are to remain they shall be clearly identified and protected from work activities.</p> <p>Drawings marked up to date with services as a visual reference.</p> <p>McMahon Services Document References F 401 Electrical Register; F 266 Equipment Register; F 630 Hot Work Permit.</p>	Moderate 4 E M10	Project Manager, Supervisor
		Risk of fire / minimal flooding.	Extreme 4 C E18	Ensure appropriate permits are in place prior to undertaking works around or on services, personnel to be inducted into the content within the permits.	Moderate 4 E M10	Project Manager, Supervisor.



**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
WA02	Entering the Rail Corridor for collection of scrap.	Live rail / passing trains.	Extrem 4 C E18	<p>Personnel to possess Rail Safety Worker card and have an understanding of requirements within the rail corridor and wear appropriate orange hi-vis vest.</p> <p>Personnel must not wear yellow or red within the corridor.</p> <p>Personnel are to stay 3 metres away / out of the danger zone of the rail unless track protector is present and approves to do so.</p> <p>Personnel must follow track protector instructions at all times and move within the designated safe area during passing trains.</p> <p>All personnel within the rail to undertake a Rail Corridor Access Pre-start (Form F 054) to communicate requirements within the corridor and ensure appropriate planning has taken place.</p>	Moderate 4 E M10	Project Manager. Supervisor
		Inability to egress from site.	Extrem 4 C E18	<p>All personnel within the rail to undertake a Rail Corridor Access Pre-start (Form F 054) which communicates to the work group how to egress from site and where the nominated refuge area is located.</p> <p>Any changes within the environment shall be captured by performing another Rail Corridor Access Pre-start to ensure the work group is clear on requirements regarding changes.</p>	Moderate 4 E M10	Supervisor
		Plant movement within the corridor.	Extrem 4 C E18	<p>Plant shall only be operated by a ticketed person.</p> <p>Plant shall have pre-start checks performed on them prior to works to ensure good working order.</p> <p>Plant must be fitted with a flashing light and warning beeper.</p> <p>Spotter to be utilized where plant operators vision is restricted.</p>	Moderate 4 E M10	Supervisor





**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
WA05	Retrieving rail clips.	Manual handling.	High 3 C H13	Correct manual handling technique utilized when picking rail clips. Mechanical plant with a magnet attachment shall be utilized to retrieve the clips minimizing manual handling. Collect clips within a bobcat bucket to transfer into drums for disposal.	Moderate 3 D M9	Supervisor
		Live rail / passing trains	Extreme 4 C E18	Personnel to be rail induced and have an understanding of requirements within the rail corridor and wear appropriate orange hi-vis vest. Personnel must not wear yellow or red within the corridor. Personnel and plant are to stay 3 meters away / out of the danger zone of the rail unless track protector is present and approves to do so. Personnel must follow track protector instructions at all times and move within the designated safe area during passing trains. All personnel within the rail to undertake a Rail Corridor Access Pre-start (Form F 054) to communicate requirements within the corridor and ensure appropriate planning has taken place.	Moderate 4 E M10	Project Manager Supervisor
WA06	Collection of rail lengths via rigging to a loader and dragging to a laydown area out of the rail corridor for shearing.	Cuts / abrasions / pinch to body parts.	High 3 C H13	Site mandatory PPE to be worn at all times: Hard hat, safety glasses, long sleeves and pants, safety boots, orange hi-vis. Gloves are to be worn during manual handling tasks and body parts kept out of the line of fire of pinch points.	Moderate 3 E M6	Supervisor
		Manual handling.	High 3 C H13	Correct manual handling technique utilized during hazardous manual tasks (as per SWM 0100 Manual Handling). Mechanical lifting aids to be utilized where possible.	Moderate 3 D M9	Supervisor
		Live rail / passing trains	Extreme 4 C E18	Personnel to be rail induced and have an understanding of requirements within the rail corridor and wear appropriate orange hi-vis vest. Personnel must not wear yellow or red within the corridor. Personnel and plant are to stay 3 meters away / out of the danger zone of the rail unless track protector is present and approves to do so. Personnel must follow track protector instructions at all times and move within the designated safe area during passing trains. All personnel within the rail to undertake a Rail Corridor Access Pre-start (Form F 054) to communicate requirements within the corridor and ensure appropriate planning has taken place.	Moderate 4 E M10	Project Manager Supervisor

PROJECT RISK ASSESSMENT AND REGISTER

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Controls	Risk Rating after Controls	Responsible						
WA07	Shearing rail lengths into approximately 18ft sections for transport.	Uncontrolled shear movements resulting in injury to personnel / property damage.	Extreme	4	C	E18	Exclusion zones established around works to delineate personnel from plant movements or spotter utilized. Ticketed / competent operator to operate plant only. Flashing light and warning beeper fitted to plant. Shearing activities shall cease during rail delivery to shear area and can commence once personnel are clear from the shear area.	Moderate	4	E	M10	Supervisor
		Flying debris	High	4	D	H14	The exclusion zone either side of the cutters shall be a minimum of 30m. Personnel will be restricted from shearing area during the cutting process. Site mandatory PPE shall be worn by all on site including a hard hat, safety boots, safety glasses, long sleeves and pants and gloves during manual tasks.	Moderate	4	E	M10	Supervisor
		Uncontrolled plant movements resulting in injury to personnel / property damage.	Extreme	4	C	E18	Exclusion zones established around works to delineate personnel from plant movements or spotter utilized. Ticketed / competent operator to operate plant only. Flashing light and warning beeper fitted to plant.	Moderate	4	E	M10	Supervisor
WA08	Loading length of rail into road trains utilizing a loader with fork tines attachment.	Falling objects during loading.	Extreme	4	C	E18	Exclusion zone established around load out area and truck utilizing a spotter to ensure personnel keep out of loading area. Truck driver must not enter / exit cabin during loading out. Truck driver must not check loads during loading out, loader must be stationary with tines lowered before checking.	Moderate	4	E	M10	Supervisor
		Unsecured load for transport.	High	4	D	H14	Truck driver to check load prior to leaving site and ensure load is secure. Trucks to be fitted with approved bolsters and cabin protection plates.	Moderate	4	E	M10	Supervisor



**PROJECT RISK ASSESSMENT AND REGISTER**

No.	Primary Activity	Risk Identified	Risk Rating Before Controls	Risk Controls	Risk Rating after Controls	Responsible
WA09	McMahon Services Site traffic movement.	Uncontrolled traffic / plant movement on site resulting in injury / property damage.	4 C Extreme	Site plant / vehicle movement plans to be established for site and implemented.  Delineate plant movement from personnel movement; implement spotters where delineation cannot occur.  Flashing light on all mobile plant on site.	4 E Moderate	Project Manager.  Supervisor.
		ARTC site personnel / ARTC property.	4 C Extreme	Site plant / vehicle movement plans to be established for site and implemented.  Delineation between traffic roads and personnel walkways established for plant movement and personnel movement. Implement spotters where delineation cannot occur. Zones to restrict traffic from train line by 6m minimum.  Flashing light on all mobile plant on site.	4 E Moderate	Project Manager.  Supervisor.
		Spills of oils / fuel.	2 C Moderate	Spill kit located on site in case of spills and incorporated into the emergency planning.	2 E L3 Low	Supervisor



Appendix H  
**Compliance**



MINUTES OF THE MEETING OF THE CITY OF MOUNT GAMBIER HELD AT THE COUNCIL  
CHAMBER, CIVIC CENTRE, 10 WATSON TERRACE, MOUNT GAMBIER ON TUESDAY 20<sup>TH</sup>  
AUGUST, 2013 AT 6.00 P.M.

---

## **CONSIDERATION FOR EXCLUSION OF PUBLIC**

Cr Smith moved that the following items be received, discussed and considered 'In Confidence' by excluding the public pursuant to Section 90(2) of the Local Government Act 1999, and an order be made that the public (with the exception of other Council Members and Council Officers now present) be excluded from the meeting in order for the items to be considered 'In Confidence' as the Committee is satisfied that the item is a matter that can be considered 'In Confidence' pursuant to the grounds referenced in Section 90(3) of the said Act:

<b>ITEM NO.</b>	<b>SUBJECT MATTER</b>	<b>S90(3) GROUNDS</b>
	<b>Operational Services Committee</b>	
17.	<b><u>PROPERTY MANAGEMENT</u> - Mount Gambier Aquatic Centre Business Plan 2013/2014 - Ref. AF11/1451</b>	(a) (b) (d)
18.	<b><u>PROPERTY MANAGEMENT</u> - Project Management - Former Mount Gambier Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224</b>	(b) (d) (k)
	<b>CONSIDERATION FOR KEEPING MATTERS CONFIDENTIAL</b>	

Cr Lee seconded

**Carried**



**19. PROPERTY MANAGEMENT - Project Management - Former Mount Gambier Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224**

Pursuant to Division 3 - Conflict of Interest, Sections 73 and 74 Part 4 of the Local Government Act 1999, Mayor Perryman disclosed an interest in Item 14 (*provided a quote to a Tenderer for long term accommodation*) and did not:-

- (a) propose or second a motion relating to the matter; or
- (b) take part in discussion by the Committee relating to that matter; or
- (c) while such discussion is taking place, be in, or in the close vicinity of, the room in which or other place at which that matter is being discussed; or
- (d) vote in relation to that matter.

Mayor Perryman vacated the meeting at 7.45 p.m.

Pursuant to Division 3 - Conflict of Interest, Sections 73 and 74 Part 4 of the Local Government Act 1999, Cr White disclosed an interest in Item 14 (*related to the owner of Gambier Earth Movers Pty Ltd*) and did not:-

- (a) propose or second a motion relating to the matter; or
- (b) take part in discussion by the Committee relating to that matter; or
- (c) while such discussion is taking place, be in, or in the close vicinity of, the room in which or other place at which that matter is being discussed; or
- (d) vote in relation to that matter.

Cr White vacated the meeting at 7.45 p.m.

In the Absence of the Mayor, Deputy Mayor Cr Byron Harfield took the chair.

*Goal: Building Communities*  
*Strategic Objective: (i) Strive for an increase in services and facilities to ensure the community has equitable access and that the identified needs of the community are met*

The Acting Presiding Member reported:

- (a) Council has called Expressions of Interest for demolition of the Former Hospital and ancillary buildings. The Expressions of Interest closed on 31<sup>st</sup> July 2013;
- (b) a verbal report will be provided at the meeting on this;
- (c) the following Council Officers were involved in the assessment of the Expressions of Interest's and were selected to provide expertise in various areas in order to ensure a full assessment was undertaken on the Expression of Interest's:

Assessment Panel

Daryl Morgan - Engineering / Project Management / Work, Health and Safety  
Michael Silvy - Architectural / Project Management  
Gary Button - Financial  
Aaron Izzard - Environmental Sustainability  
Cr Des Mutton - Council Representation  
Daryl Sexton - Process / Peer Review

- (d) Expression of Interest's were received from the following companies:
  - 1. City Circle - Victoria
  - 2. Royal Park Salvage - South Australia
  - 3. D & V Services - South Australia
  - 4. Delta Group - Victoria
  - 5. Kyshor Contracting - South Australia
  - 6. McMahon Services - South Australia
  - 7. Gambier Earth Movers - South Australia (local)
  - 8. SMB Civil - South Australia (local)
- (e) Council's Expression of Interest evaluation matrix was used to assess each of the eight (8) submissions and the following table summarises the assessment:



	EVALUATION CRITERIA	COMMENTS	CITY CIRCLE	ROYAL PARK	D&V SERV	DELTA	KYSHOR	McMAHON	GEM	SMB
	<b>1. PROFESSIONAL COMPETENCE</b>									
1.1	Compliance to Specifications		4.0	4.4	4.4	4.4	3.4	5.0	4.6	4.6
1.2	Capability / Availability		4.0	4.6	4.4	4.8	2.2	5.0	4.6	3.6
1.3	Past performance in similar sized projects		4.0	4.6	3.8	5.0	2.8	5.0	3.6	2.4
1.4	Customer service standards		1.4	2.2	2.8	3.6	2.2	4.4	4.4	3.0
1.5	Quality systems		2.8	4.6	4.6	4.6	3.0	5.0	4.0	3.4
	<b>2. COMMERCIAL CAPABILITY</b>									
2.1	Financial Viability of company		4.0	4.2	2.8	4.4	2.2	5.0	4.6	4.2
2.2	Adequate Professional Indemnity Insurance		1.6	1.0	1.0	2.6	0.6	5.0	5.0	4.0
2.3	Public liability Insurance		5.0	5.0	4.0	4.6	3.4	5.0	5.0	5.0
2.4	Financial capacity to fund works prior to progress payments		4.2	4.2	2.6	4.4	2.2	5.0	4.8	4.4
	<b>3 ENVIRONMENTAL COMMITMENT</b>									
3.1	Environmental controls to address project		4.4	3.6	4.4	4.8	3.4	4.8	4.8	3.2
3.2	Environmental approach to project (both statutory & financial sustainability viewpoint)		4.2	3.2	4.2	4.0	2.6	4.8	4.0	3.0
3.3	Environmental Management System		3.2	3.4	4.0	4.2	2.4	5.0	3.8	3.8
3.4	Sustainability Principles		3.6	2.8	3.2	4.2	2.0	4.8	3.6	2.6
3.5	Previous commitment to environmental considerations		3.2	3.4	2.4	4.0	2.4	4.8	2.8	3.0
	<b>4. WORK HEALTH &amp; SAFETY, RISK MANAGEMENT</b>									
4.1	Relevant licences / accreditations to carry out works		4.4	4.6	4.8	4.4	3.0	4.2	4.2	3.8
4.2	Compliance with WHS regulations		4.2	4.2	4.8	4.6	4.0	5.0	4.4	3.4
4.3	WHS policies and procedures in place		4.4	3.8	4.8	4.6	4.0	5.0	4.4	3.2
4.4	Methodology Statement prepared to address safety issues		4.8	3.8	4.8	4.2	2.6	5.0	4.6	4.2
4.5	Risk Management policies and procedures in place		4.6	2.8	4.6	4.6	3.6	5.0	4.4	3.4
4.6	Risk Analysis of project		3.6	2.4	4.8	3.8	2.8	5.0	4.6	3.6
	<b>5. SOCIAL CONSIDERATIONS</b>									
5.1	Involvement of Local Contractors		0.0	0.2	0.0	0.0	4.4	2.8	5.0	5.0
		<b>TOTAL</b>	<b>75.6</b>	<b>73.0</b>	<b>77.2</b>	<b>85.8</b>	<b>59.2</b>	<b>100.6</b>	<b>91.2</b>	<b>76.8</b>
		Raw score ranking	6	7	4	3	8	1	2	5

(f) Comments

There were three (3) clear standouts in the assessments being McMahons, Gambier Earth Movers and Delta Group who have supplied all the documentation that satisfied the key areas of the Expression of Interest, namely:

- Professional competence
- Commercial capability
- Environmental commitment
- Work, Health, Safety and Risk Management
- Social considerations

These three (3) companies have also demonstrated previous experience in large demolition projects and consequently have provided a sound methodology for demolition of the Former Mount Gambier Hospital site.

The assessment panel had some concerns over the ability of SMB Civil to undertake such a complex and significant project given they have limited experience in large scale demolition projects;

City Circle have significant experience in high rise demolition interstate but some concerns were raised regarding appropriate licences etc to operate in South Australia.

Royal Park, D & V Services and Kyshor all rated significantly lower by all panel members than that of the top three (3) submissions. Attached to the agenda was a copy of the top three (3) rated submissions (McMahon, Gambier Earth Movers and Delta Group), however if Members wish to see a copy of the other five (5) submissions then these can be made available upon request.

Cr Von Stanke moved it be recommended:

- (a) The report be received;
- (b) Council invite tenders from the following three (3) companies:
  1. McMahon Services
  2. Gambier Earth Movers
  3. Delta Group

Cr Mutton seconded

Carried

(c) Council pass its congratulations to Council officers and involved Members for their contribution

**Cr Von Stanke moved that the recommendation of the Operational Services Committee as contained in item 19 be adopted.**

**Cr Mutton seconded**

**Carried**



Mayor Perryman and Cr White resumed the meeting at 7.48 p.m.

**CONSIDERATION FOR KEEPING MATTERS CONFIDENTIAL**

Cr Von Stanke moved that an order be made pursuant to Section 91(7) of the Local Government Act 1999 that the documents in relation to the following items which have been considered by the Operational Services Committee on a confidential basis pursuant to Section 90 (3) be kept confidential as follows:

ITEM NO.	SUBJECT MATTER	ELEMENT TO BE KEPT CONFIDENTIAL	DURATION, CIRCUMSTANCES OR REVIEW
18.	<b><u>PROPERTY MANAGEMENT</u></b> - Mount Gambier Aquatic Centre Business Plan 2013/2014 - Ref. AF11/1451	All details	12 months
19.	<b><u>PROPERTY MANAGEMENT</u></b> - Project Management - Former Mount Gambier Hospital Site - Expression of Interests for demolition of Former Mount Gambier Hospital buildings - Ref. AF13/224	All details	6 months or until tenders have been finalised

**Cr Mutton seconded**

**Carried**

Meeting closed at 7.56 p.m.

FM