ENVIRONMENTAL INVESTIGATION SERVICES

REPORT

TO

ABC TISSUE PRODUCTS PTY LTD
C/- C.I.R. CONSTRUCTION PTY LTD

ON

HAZARDOUS BUILDING MATERIALS ASSESSMENT

FOR

PROPOSED DEMOLITION WORKS

AT

SELECTED BUILDINGS – 58-62 REDFERN STREET, WETHERILL PARK, NSW

27 APRIL 2017

REF: E29923Krpt-HAZ

AS/NZS ISO 9001 Certified
Davis Langdon Certification Services

Postal Address: PO Box 976, North Ryde BC NSW 1670
Tel: 02 9888 5000 • Fax: 9888 5004
EIS is a division of Jeffery and Katauskas Pty Ltd • ABN 17 003 550 801

EIS

Document Distribution Record		
Report Reference	**Distribution**	**Report Date**
E29923Krpt-Haz	1 * e-copy	27 April 2017

Report prepared by: Harry Leonard
Environmental Scientist
Asbestos Assessor A, License No: 001028

Report reviewed by: Adrian Kingswell
Principal

EIS

TABLE OF CONTENTS

1 INTRODUCTION

ABC Tissue Products Pty Ltd ('the client') commissioned Environmental Investigation Services (EIS)[1] to undertake a Hazardous Building Materials Assessment for the proposed demolition works at 58-62 Redfern Street, Wetherill Park, NSW.

The site location is shown on Figure 1 and the scope of the assessment was limited to the buildings shown in Figure 2. The proposed development area is referred to as 'the site' in this report.

The assessment was undertaken generally in accordance with an EIS proposal (Ref: EP44551K-HAZ) of 16/03/2017 and written acceptance from the client of 21/03/2017.

This document was prepared specifically for the proposed site development works and should not be considered a hazardous building materials management plan or removal control plan.

The document does not contain information regarding an assessment of risk, safe work procedures or control measures associated with hazardous building materials. In the event that hazardous building materials remain within the buildings/structures at the site a hazardous building materials management plan must be prepared.

1.1 Proposed Development Details

Based on information and plans provided by the client we understand that the proposed development includes the demolition of the south-eastern section of the Main Factory No.2 and the stand alone warehouse with associated outbuildings along the eastern boundary of the site.

1.2 Scope of Work

The scope of work included:

1. A detailed inspection of the existing building and structures;
2. Sampling of representative materials in accordance with the assessment criteria and inspection procedure outlined in Section 4;
3. Documentation of inspection finds including sample location, material type, condition, friability, photographic evidence and site location; and
4. Preparation of a report presenting the results of the hazardous building materials assessment.

[1] Environmental consulting division of Jeffery & Katauskas Pty Ltd (J&K)

2 SITE DESCRIPTION

Field work for this investigation was undertaken on the 7/04/2017. The site description at the time of the field work is outlined below.

The site location is shown on Figure 1 and the scope of the assessment was limited to the buildings shown in Figure 2.

The site is located to the north of Redfern Street, Wetherill Park, NSW. The site generally consists of a rectangular shaped warehouse and office attached to the south-east corner of the main warehouse and a separate set of stand-alone warehouse structures as shown on the attached Figure 2.

A general description of each building/structure is outlined below:

Building A – It was estimated the building was constructed in the 1980's. The building consisted of an open warehouse and office area which made up the south-east corner of the larger main warehouse building to the west. The building was of brick and metal construction with concrete floors, brick and metal external walls, metal and plaster internal walls, metal and acoustic tile ceilings and a metal roof.

Building B – It was estimated the building was constructed in the 1980's. The building consisted of a large warehouse area mainly used for storage with a small breakout area and toilets located in the south-east corner. The building was of steel frame construction with corrugated metal walls and roof and concrete floors.

Building C – It was estimated the building was constructed in the 1980's. The building consisted of a large warehouse used for storage. The building was of steel frame construction with corrugated metal walls and roof and concrete floors.

Building D – It was estimated the structure was constructed in the 1980's. The structure consisted of a large open-sided warehouse used for storage. The building was of steel frame construction with a corrugated metal roof and concrete floors.

Building E – It was estimated the building was constructed in the 1980's. The building consisted of a semi-permanent demountable containing a small kitchenette and seating area. The building was of timber and metal construction with timber and metal walls, metal roof and metal floors.

3 REGULATORY BACKGROUND INFORMATION

All work associated with the inspection and reporting of hazardous building materials is generally undertaken in accordance with the following legislation, guidelines and standards:

Guidelines/Regulations/Documents
Asbestos
National Code of Practice How to Manage and Control Asbestos in the Workplace, Safe Work Australia 2011
National Code of Practice How to Safely Remove Asbestos, Safe Work Australia 2011
Code of Practice for the Safe Removal of Asbestos 2nd Edition, National Occupational Health and Safety Commission: 2002 (2005)
Code of Practice for the Management and Control of Asbestos in Workplaces, National Occupational Health and Safety Commission: 2018 (2005)
Management Of Asbestos In The Non-Occupational Environment, Environmental Health Committee, Department of Health and Ageing, 2005
Working with Asbestos: Guide, WorkCover Authority of New South Wales, 2008
Asbestos: The survey guide, Health and Safety Executive, UK, 2010
SMF
National Standard for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:1004 (1990)]
National Code of Practice for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:2006 (1990)]
Lead
Guide to Lead Paint Management, Part 1: Industrial Applications, Australian Standard AS4361.1, 1995
Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings, Australian Standard AS4361.2, 1998
National Standard for the Control of Inorganic Lead at Work, National Occupational Health and Safety Commission: 1012 (1994)
National Code of Practice for the Control and Safe Use of Inorganic Lead at Work, National Occupational Health and Safety Commission: 2015 (1994)
Guidance Note For Ceiling Dusts Containing Lead, WorkCover Authority of New South Wales
Code of Practice for Ceiling Dust Removal, Australian Dust Removalists Association, http://www.adra.com.au/cop.html
PCBs
Polychlorinated Biphenyls Management Plan, Environmental Protection & Heritage Council, Revised Edition, April 2003
Identification of PCB-Containing Capacitors, Australian and New Zealand Environment and Conservation Council (ANZECC), 1997
Polychlorinated Biphenyl (PCB) Chemical Control Order 1997, made under the *Environmentally Hazardous Chemicals Act 1985*
General

Guidelines/Regulations/Documents
Work Health and Safety Act, NSW Government 2011
Work Health and Safety Regulation, NSW Government 2011
Control of Workplace Hazardous Substances, Code of Practice, WorkCover Authority of NSW, 2006
National Code of Practice for the Control of Workplace Hazardous Substances, National Occupational Health and Safety Commission: 2007 (1994)
The Demolition of Structures, Australian Standard AS2601 (2001)

4 ASSESSMENT CRITERIA AND INSPECTION PROCEDURE

The assessment included a visual inspection of the buildings/structures, sampling and laboratory analysis as described in the following sections.

4.1 Asbestos Fibre Containing Materials

Representative samples of construction materials identified as potentially containing asbestos were obtained using hand tools by personnel wearing suitable personal protective equipment (PPE). The samples were placed in sealed plastic bags and labelled with a unique job number, sampling location and date. All samples were recorded on the chain of custody (COC) record presented in Appendix B.

Following the completion of the field inspection, the samples were forwarded to a National Association of Testing Authorities (NATA) registered laboratory, Envirolab Services Pty Ltd (NATA Accreditation No. 2901), for analysis. The asbestos samples were analysed using stereo and polarising light microscopy methods with dispersion staining techniques.

4.2 Lead Containing Materials

Representative samples of deteriorated paint films and accumulated dust that potentially contain elevated lead concentrations were obtained using hand tools by personnel wearing suitable PPE.

Only significantly deteriorated paint systems that are considered likely to impact on demolition/refurbishment practices or that are considered a health or environmental hazard were sampled and recorded.

The paint flakes obtained included all layers of paint on a particular surface and so are considered to be composites of the materials at each location. The paint flake samples were placed in sealed plastic bags and labelled with a unique job number, sampling location and date. All samples were recorded on the chain of custody (COC) record presented in Appendix B.

In accordance with the Australia Standard, AS4361.2 – 1998 "*Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings*", a lead in paint concentration greater than 1.0% w/w is considered to be lead based paint.

Settled dust sampling involved the collection of settled dust from a known surface area by wet wipe. The area should preferably be 0.09m^2 (which corresponds to an area 30 cm × 30cm) and in any event not less than 0.01m^2, depending on the amount of dust present. A non-alcoholic moistened wipe is folded to form a firm swab. The swab is placed flat onto the surface in one corner of the area to be sampled and rubbed across the entire area in an 'S' pattern. The wipe is re-folded so that the collected dust is on the inside and is again rubbed across the area at 90° to the first 'S'. The wipe is again folded with the dust inside and placed in the sterile sample container.

The lead concentration per m^2 is calculated using the equation (µg/swab ÷ 0.09) ÷ 1000.

Following the completion of the field inspection, the samples were forwarded to a NATA registered laboratory for analysis. Analysis for lead content is performed using a nitric and hydrochloric acid digest followed by ICP-AES (Inductively Coupled Plasma – Atomic Emission Spectroscopy) quantification methods.

The result, when received from the laboratory, is converted to milligrams, and then divided by the area sampled (in square metres) to give a lead loading expressed in mg/m^2.

4.2.1 Lead Materials Assessment Criteria

As stated above, a lead in paint concentration greater than 1.0% w/w is considered to be lead based paint.

Australian Standard AS 4361.2-1998 *Guide to lead paint management Part 2: Residential and Commercial Buildings,* does not offer any general guidance on lead levels in dust but it does have surface dust lead loading values as acceptance levels after lead paint management activities. The acceptance levels for surface dust are:

- Interior floors 1 mg/m^2 (as lead);
- Interior window sills 5 mg/m^2 (as lead); and
- Exterior surfaces 8 mg/m^2 (as lead).

EIS uses the Australian Standard levels above as a guide in assessing lead dust risks. These figures can also be used to assess the risk of exposure from other lead sources.
The acceptance level of lead in dust for exterior surfaces of 8 mg/m^2 is considered the most appropriate guideline for comparison for lead in ceiling dust.

4.3 Polychlorinated Biphenyls (PCBs) Containing Electrical Equipment

The major use of PCBs in the electrical industry has been inside transformers and capacitors. Transformers may include relatively small transformers inside electrical mains/fuse cabinets. Capacitors containing PCBs were installed in numerous types of fluorescent light fittings during the 1950's, 60's and 70's. Representative samples of each type of electrical equipment identified within the existing structure were visually examined to assess whether the equipment is insulated with PCBs. Details on the make, type, capacitance, dimensions, date and power were recorded and checked with the ANZECC database of known PCB containing electrical equipment and the results of the review were noted.

4.4 Synthetic Mineral Fibre Containing Materials

Construction materials identified as potentially containing synthetic mineral fibre (SMF) were examined by site personnel and their location was noted. In the event that the materials were suspected to contain asbestos fibres, representative samples were obtained using hand tools by personnel wearing suitable PPE. The material samples were placed in sealed plastic bags and labelled

with a unique job number, sampling location and date. All samples were recorded on the chain of custody (COC) record presented in Appendix B.

Following the completion of the field inspection, the samples were forwarded to a NATA registered laboratory for asbestos fibre analysis. The samples were analysed using stereo and polarising light microscopy methods with dispersion staining techniques.

5 RESULTS OF SITE INSPECTION

The results of the inspection are summarised in the following sections. For specific location and details of materials identified during the inspection, please refer to the Hazard Materials Register in Appendix A and the laboratory analysis report in Appendix B.

5.1 Asbestos

No confirmed asbestos materials were identified at the time of the inspection.

Materials identified as potentially containing asbestos were identified in the form of covered electrical backing boards within distribution boards. These boards should be inspected prior to demolition or refurbishment works.

5.2 Synthetic Mineral Fibre (SMF)

Materials containing SMF were identified in the form of air conditioning ductwork insulation, acoustic ceiling tiles, and foil backed insulation beneath the roof. All materials were in good condition at the time of the inspection.

5.3 Lead in Paint

No lead containing paint systems were identified at the time of the inspection.

5.4 Lead in Dust

No lead containing dust was identified at the time of the inspection.

5.5 Polychlorinated Biphenyls (PCBs)

Fluorescent light fittings potentially housing PCB containing capacitors were identified throughout the building.

5.6 Site Access Limitations

Access throughout the site was generally restricted due to stored materials and occupation by staff.

Some electrical switchboards and distribution boards were generally locked or sealed with a fixed metal cover.

6 COMMENTS AND RECOMMENDATIONS

6.1 Asbestos Materials

Materials potentially containing asbestos fibre have been identified within the interior and the exterior of the existing building and structures at the site. All materials were considered to be non-friable.

Prior to demolition or refurbishment work this document must be provided as a register to the demolition/building contractor.

All works associated with the disturbance and removal of asbestos containing materials must be undertaken by a Licenced *Class B* Asbestos Removalist and air fibre monitoring should be undertaken during the proposed works.

The asbestos removalist must prepare an Asbestos Removal Control Plan for the proposed works.

An asbestos management plan must be prepared for the proposed works in areas containing asbestos.

A clearance inspection must be undertaken on completion of works and prior to any other construction activities being undertaken.

If previously unidentified materials (suspected of containing asbestos) are identified during the demolition phase, works should cease and the material should be inspected and classified by an experienced consultant. The area should be isolated and barricaded until the material has been classified as non-hazardous or removed and the area cleared.

All asbestos containing materials (and materials presumed to contain asbestos) must be removed in accordance with the regulations and codes outlined in Section 3 of this report.

6.2 Lead Paint

Not identified within the scope and limitations of the report.

6.3 Lead in Accumulated Dust

Not identified within the scope and limitations of the report.

6.4 PCB Containing Electrical Equipment

Representative samples of each major type of fluorescent light fitting were visually inspected to determine which lights are fitted with PCB containing ballast capacitors.

Light fittings potentially housing a PCB containing metal capacitor were identified in various locations throughout the site. PCBs are a scheduled waste with strict guidelines regarding transport and handling. PCB work is to be conducted in accordance with the Environmental Protection & Heritage Council's Polychlorinated Biphenyls Management Plan, Revised Edition April 2003. This briefly includes:

- Prior to demolition when the power is disconnected, inspect the light fittings.
- Metal PCB containing capacitors are to be removed, placed in plastic lined 200 litre drums and disposed of as PCB Scheduled Waste. Any light fitting that shows signs of oil staining from capacitors is to be disposed of as PCB contaminated.
- Protective clothing including eye protection, PCB resistant gloves and overalls are to be worn.
- Contaminated gloves and disposable coveralls are to be disposed of as PCB contaminated waste.
- Contractors licenced to transport and handle PCBs must be used for transport and disposal. PCBs are a scheduled waste with strict guidelines regarding transport and handling.

If any metal cased capacitors are found during demolition works that were previously unidentified they should be treated as containing PCBs. Details on storing, conveying and disposing of PCB material or PCB wastes can be found in *Polychlorinated Biphenyls Management Plan*, Environmental Protection & Heritage Council, Revised Edition April 2003.

6.5 SMF Materials

Sources of SMF containing materials are present as insulation material within the roof void of the building. These SMF materials were in a stable condition at the time of the site inspection.

All SMF containing materials must be removed in accordance with the national Standard and code outlined in Section 3 of this report.

7 LIMITATIONS

The conclusions developed in this report are based on site conditions which existed at the time of the site assessment. They are based on investigation of conditions at specific locations, chosen to be as representative as possible under the given circumstances, and visual observations of the site and vicinity, together with the interpretation of available documents reviewed as described in this report.

Surveys are conducted in a conscientious and professional manner. The nature of the task however, and the likely disproportion between any damage or loss which might arise from the work or reports prepared as a result, and the cost of our services, is such that EIS cannot guarantee that all hazardous building materials have been identified and/or addressed.

Due to the possibility of renovations and additions to the building structures over time, hazardous building materials may have been hidden behind new walls and ceilings. Such areas were inaccessible during the inspection. If any suspect materials are found during further renovation of the buildings, the material should be sent for identification and expert advice sought.

Therefore while we carry out the work to the best of our ability, we totally exclude any loss or damages which may arise from services we have provided to our client and/or any other associated parties.

Unless specifically noted, the survey did not cover:

- Hidden and/or inaccessible locations such as in or under concrete slabs, wall cavities, hidden storage areas and the like.
- Lift wells and inaccessible/unidentified shafts, cavities and the like.
- Air conditioning, heating, mechanical, electrical or other equipment.
- General exterior ground surfaces and subsurface areas e.g. asbestos in fill/soil.
- Materials dumped, hidden, or otherwise placed in locations which one could not reasonably anticipate.
- Materials other than normal building fabric, materials in laboratories or special purpose facilities and building materials that cannot be reasonably and safely assessed without assistance.
- Areas where access was limited during the time of the site inspection as outlined in Section 6.
- Materials other than asbestos, lead, PCBs and SMF are generally outside the scope as identification can require specialised analysis/inspection techniques.

Where potentially hazardous materials are identified these are normally reported on to the best of the consultant's ability. Analysis is not normally included and there is no guarantee that all such materials have been identified and/or addressed.

All work conducted and reports produced by EIS are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between EIS and the Client. Information and/or report(s) prepared by EIS may therefore not be suitable for any use other than

the intended objective. No parties other than the Client should use any information and/or report(s) without first conferring with EIS.

Before passing on to a third party any information and/or report(s) prepared by EIS, the Client is to inform fully the third party of the objective and scope, and all limitations and conditions, including any other relevant information which applies to the information and/or report(s) prepared by EIS.

It is the responsibility of third parties to investigate fully to their satisfaction if any information and/or report(s) prepared by EIS are suitable for a specific objective. The report(s) and/or information produced by EIS should not be reproduced and/or presented/reviewed except in full.

This report has been prepared for the particular project described and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose. Copyright in this report is the property of EIS. EIS has used a degree of care, skill and diligence normally exercised by consulting engineers in similar circumstances and locality. No other warranty expressed or implied is made or intended. Subject to payment of all fees due for the investigation, the client alone shall have a licence to use this report.

If you have any questions concerning the contents of this letter please do not hesitate to contact us.

Kind Regards

Harry Leonard
Environmental Scientist / Asbestos Assessor

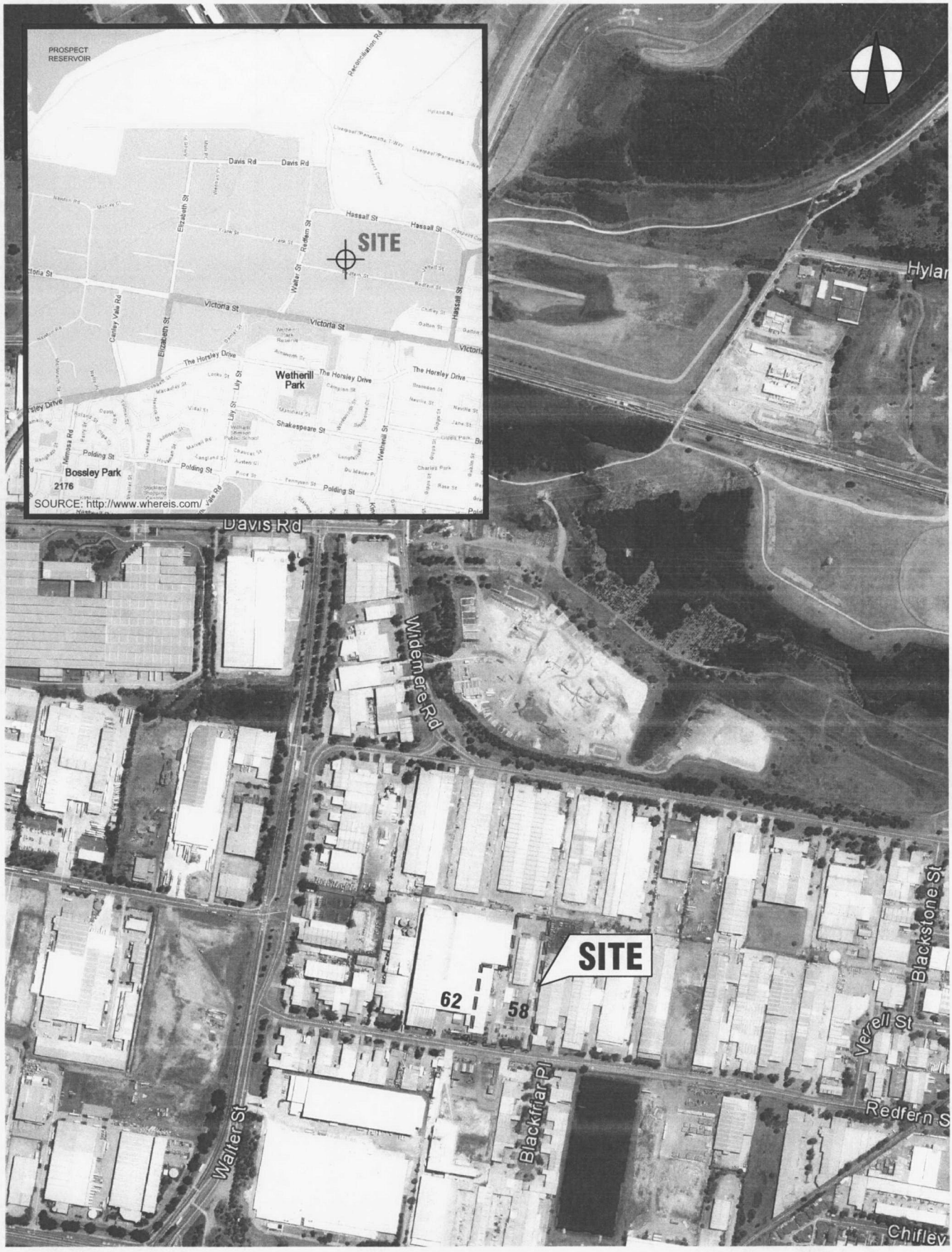
Adrian Kingswell
Principal

Attachments:

1) Report Figures
2) Appendices

REPORT FIGURES

Feature Appendices not presented



AERIAL IMAGE SOURCE: GOOGLE EARTH PRO 7.1.5.1557
AERIAL IMAGE ©: 2015 GOOGLE INC.

This plan should be read in conjunction with the EIS report.

Title: **SITE LOCATION PLAN**

Location: HAZMAT REPORT - 58-62 REDFERN STREET
WETHERILL PARK, NSW

Report No: E29923K

Figure No: 1

ENVIRONMENTAL INVESTIGATION SERVICES

EIS

PLOT DATE: 21/04/2017 11:24:30 AM - DWG FILE: S:\5 EIS\5C EIS JOBS\29000'S\E29923K WETHERILL PARK, NSW\CAD\E29923K_HAZ.DWG