

**Shell Cove
Boat Harbour Precinct**

**Concept Plan Application
and Environmental Assessment
Appendix C - Contamination**

prepared by

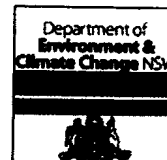
LFA (Pacific) Pty Ltd

date

February 2010



NSW Site Auditor Scheme SITE AUDIT STATEMENT



A site audit statement summarises the findings of a site audit. For full details of the site auditor's findings, evaluations and conclusions, refer to the associated site audit report.

This form was approved under the Contaminated Land Management Act 1997 on 26 March 2009. For more information about completing this form, go to Part IV.

PART I: Site audit identification

Site audit statement no. ...PWH_NSW_018

This site audit is a ~~statutory audit~~/non-statutory audit* within the meaning of the Contaminated Land Management Act 1997.

Site auditor details (as accredited under the Contaminated Land Management Act 1997)

NamePhillip Hitchcock..... Company ...ENVIRON Australia Pty Ltd

Address ...Level 1, 456 High St (PO Box 564), Maitland NSW Postcode ...2320

Phone ...02 49 344354

Fax02 49 344359

Site details

Address Boolwarro Parade, Shell Cove, NSW Postcode 2259

Property description Part Lot 8032 in DP 1072187

Local Government Area Shellharbour City Council

Area of site (e.g. hectares) 3.7 hectares

Current zoning 2(f) Mixed Use Residential

To the best of my knowledge, the site ~~is~~/is not* the subject of a declaration, order, agreement, proposal or notice under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.

Declaration/Order/Agreement/Proposal/Notice* no(s)

NA

Site audit commissioned by

Name Glenn Colquhoun Company Australand Corporation

Address Shell Cove Office, P.O. Box A148, Shellharbour, NSW Postcode 2529

Phone (2) 4297-7364 Fax (2) 4297-7366

Name and phone number of contact person (if different from above)

NA

Purpose of site audit

- ☒ A. To determine land use suitability for low – medium density residential use

OR

- ☐ ~~B(i) To determine the nature and extent of contamination, and/or~~
- ☐ ~~B(ii) To determine the appropriateness of an investigation/remedial action/management plan*, and/or~~
- ☐ ~~B(iii) To determine if the land can be made suitable for a particular use or uses by implementation of a specified remedial action plan/management plan* (please specify intended use(s))~~

Information sources for site audit

Consultancy(ies) which conducted the site investigation(s) and/or remediation

Coffey Partners, Golders, URS

Title(s) of report(s) reviewed

Appendix 5 of LFA (Australia) Pty Ltd (June 1995) Environmental Impact Statement, Shell Cove Boat Harbour / Marina, Shadforth Wetland, Haul Road Landfill, including the following:

Golder Associates (December 1994) *Additional Water Quality Information, Shell Cove EIS* (ref: 94650300(A);

Golder Associates (May 1995) *Shell Cove EIS, Boat Harbour/Marina, Preliminary Geotechnical Investigation, Shellharbour* (ref:94650116);

Golder Associates (May 1995) *Shell Cove EIS, Boat Harbour/Marina, Geo-Environmental Investigation, Shellharbour* (ref:94650116.A);

Golder Associates (May 1995) *Shell Cove EIS, Boat Harbour/Marina, Pilot Study, Acid Sulphate Soils, Shellharbour* (ref: 94650348.B);

Golder Associates (May 1995) *Shell Cove EIS, Boat Harbour/Marina, Preliminary Acid Sulphate Soils Investigation, Shellharbour* (ref: 94650116.F);

Golder Associates (May 1995) *Shell Cove EIS, Boat Harbour/Marina, Additional Acid Soil and Geotechnical Investigation, Shellharbour* (ref: 94650348.B).

URS (7 July 2005) *Subsurface Field Investigations - Old Landfill* (ref: 43167202);

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URS (14 November 2003) *Waste Containment Cell, Shell Cove QBZ, Engineering Approach* (ref: 49221.001);

URS (February 2009) *Shell Cove Waste Relocation Project, Pre-Validation Report* (ref: 43167202);

URS (August 2009a) *Shell Cove Waste Relocation Project, Pre-Validation Report* (ref: 43167202 Rev 2);

URS (April 2009) *Remediation Characterisation and Validation Report, Shell Cove Waste Relocation Project, Shell Cove, NSW* (ref: 43167202 Draft);

URS (August 2009b) *Remediation Characterisation and Validation Report, Shell Cove Waste Relocation Project, Shell Cove, NSW* (ref: 43167202 Final).

Other information reviewed (including previous site audit reports and statements relating to the site)

NA

Site audit report

Title Site Audit Report, Former Council Landfill, Shell Cove Project, Shell Cove, NSW

Report no. AS130019

Date 3rd November 2009

PART II: Auditor's findings

Please complete either Section A or Section B, **not both**. (*Strike out the irrelevant section.*)

Use Section A where site investigation and/or remediation has been completed and a conclusion can be drawn on the suitability of land use(s).

Use Section B where the audit is to determine the nature and extent of contamination and/or the appropriateness of an investigation or remedial action or management plan and/or whether the site can be made suitable for a specified land use or uses subject to the successful implementation of a remedial action or management plan.

Section A

☒ I certify that, in my opinion, the site is **SUITABLE** for the following use(s) (*tick all appropriate uses and strike out those not applicable*):

- ☐ ~~Residential, including substantial vegetable garden and poultry~~
- ☐ ~~Residential, including substantial vegetable garden, excluding poultry~~
- ☒ Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry
- ☒ Day care centre, preschool, primary school
- ☒ Residential with minimal opportunity for soil access, including units
- ☒ Secondary school
- ☒ Park, recreational open space, playing field
- ☒ Commercial/industrial
- ☐ Other (*please specify*)

subject to compliance with the following environmental management plan
(*insert title, date and author of plan*) **in light of contamination remaining on the site:**

Nil

OR

☐ I certify that, in my opinion, the site is **NOT SUITABLE** for any use due to the risk of harm from contamination.

Overall comments

The site was a former shallow landfill and following remediation all waste has been removed. The remaining soils and groundwater contain low contaminants levels. It is noted that deeper soils at the site may be Acid Sulphate producing and could impact on deep foundations but as the site is to be filled by at least 4m and only shallow footings are proposed this is not a concern for the development.

Section B

Purpose of the plan¹ which is the subject of the audit

.....

.....

I certify that, in my opinion:

- ☐ the nature and extent of the contamination HAS/HAS NOT* been appropriately determined

AND/OR

- ☐ the investigation/remedial action plan/management plan* IS/IS NOT* appropriate for the purpose stated above

AND/OR

- ☐ the site CAN BE MADE SUITABLE for the following uses (tick all appropriate uses and strike out those not applicable):

- ☐ Residential, including substantial vegetable garden and poultry
- ☐ Residential, including substantial vegetable garden, excluding poultry
- ☐ Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry
- ☐ Day care centre, preschool, primary school
- ☐ Residential with minimal opportunity for soil access, including units
- ☐ Secondary school
- ☐ Park, recreational open space, playing field
- ☐ Commercial/industrial
- ☐ Other (please specify)

if the site is remediated/managed* in accordance with the following remedial action plan/management plan* (insert title, date and author of plan)

.....

.....

subject to compliance with the following condition(s):

Overall comments

¹ For simplicity, this statement uses the term 'plan' to refer to both plans and reports.

PART III: Auditor's declaration

I am accredited as a site auditor by the NSW Environment Protection Authority under the *Contaminated Land Management Act 1997* (Accreditation No. 0502).

I certify that:

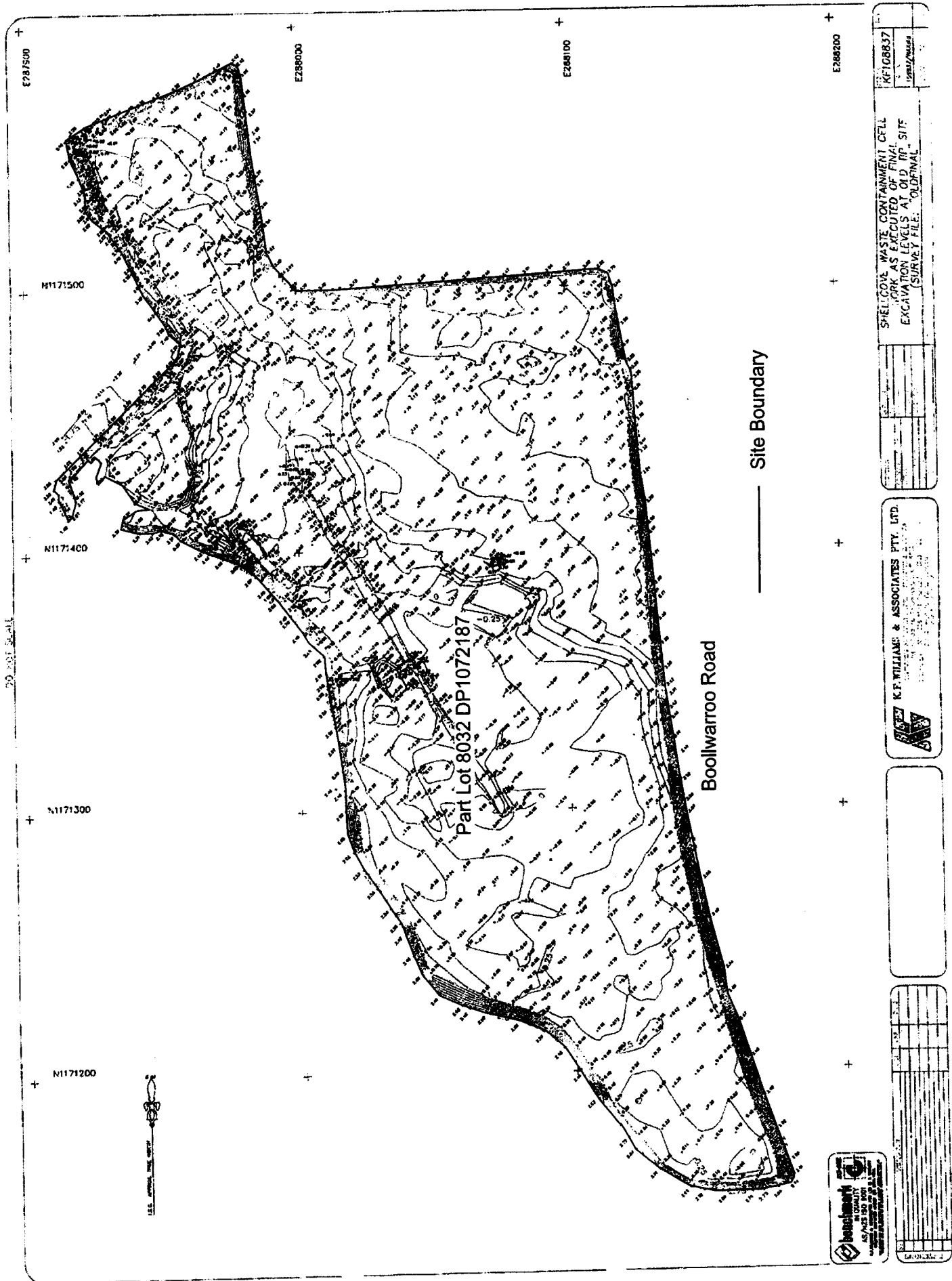
- I have completed the site audit free of any conflicts of interest as defined in the *Contaminated Land Management Act 1997*, and
- with due regard to relevant laws and guidelines, I have examined and am familiar with the reports and information referred to in Part I of this site audit, and
- on the basis of inquiries I have made of those individuals immediately responsible for making those reports and obtaining the information referred to in this statement, those reports and that information are, to the best of my knowledge, true, accurate and complete, and
- this statement is, to the best of my knowledge, true, accurate and complete.

I am aware that there are penalties under the *Contaminated Land Management Act 1997* for wilfully making false or misleading statements.

Signed



Date 03/11/09



KF108837
K.F. Williams & Associates Pty. Ltd.

SHELL COAL WASTE CONTAINMENT CELL
WORK AS EXECUTED OF FINAL
EXCAVATION LEVELS AT OLD IIP SITE
(SURVEY FILE: "OLD FINAL")

K.F. Williams & Associates Pty. Ltd.

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