

Joanne Kerr

From: s.73 Irrelevant information jhg.com.au>
Sent: Monday, 23 June 2014 12:51 PM
To: PALM
Cc: s.73 Irrelevant information
Subject: AR059747 John Holland Contaminated Soil Disposal Application
Attachments: John Holland Contaminated Soil Disposal Application 23-06-2014.pdf; ATT00002.txt
Categories: Orange Category

To Permit and Licence Management Implementation Support Unit,

Attached is a copy of John Holland's New Farm Riverwalk Replacement Project Contaminated Soil Disposal Application, the original is currently in transit (Tracking code – 0025INWOIZ) to the Permit and Licence Management Implementation Support Unit with Department of Environment and Heritage Protection.

For application/permit fees regarding this application, please contact:

s.73 Irrelevant information

PCR/Procurement Administrator, New Farm Riverwalk Redevelopment



Powered by People

The Emporium, Level 3, 1000 Ann Street, Fortitude Valley QLD 4006

P. +7 3358 8711 | **M.** +61 s.73 Irrelevant information
E. s.73 Irrelevant information @jhg.com.au

Kind Regards,

s.73 Irrelevant information

Environmental Graduate, Infrastructure North
New Farm Riverwalk Replacement



Powered by People

John Holland Group Pty Ltd

Level 3, 1000 Ann Street, Fortitude Valley QLD 4006

P. +61 7 33588712 | **M.** s.73 Irrelevant information
E. s.73 Irrelevant information @jhg.com.au | **W.** johnholland.com.au

Form

Corporate

Part A - General details for all applications

OFFICIAL USE ONLY

DATE RECEIVED

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FILE REF

PROJECT REF

COMPLETE FORM

☐

ENTERED BY [SIGNATURE]

DATE

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RECEIPTING DETAILS ONLY

DATE RECEIPTED

--	--	--

RECEIPT NUMBER

AMOUNT RECEIVED

\$

PROCESSED BY (INITIALS AND NAME)

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Important information for applicants

This form asks for general applicant details and a description of the proposed project and any associated activities. The completed form must be submitted together with relevant activity specific Part B forms.

Specific details must accompany this form to enable your application to be processed. The guide provided will help you complete your application correctly. If you have any difficulties completing the form, contact Permit and Licence Management on 1300 130 372 (Option 4). Please number all attachments alphabetically (e.g. 'Attachment A').

Commercial and confidential information must be marked clearly. This information will not be disclosed, except where required by law (including the *Right to Information Act 2009*). If subsequent activities are added to the project, you will be required to resubmit this application with details of the additional activity.

Tick relevant boxes below if the applicant(s) are:

- ☐ an individual or sole trader
☐ individuals in a partnership
☐ individual(s) acting on behalf of an unincorporated organisation
 → Go to Section 1
☐ an incorporated company
☐ an incorporated association
☐ a statutory authority
☐ a body politic
 → Go to Section 2



Guide

Question 1

The applicant is the person intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices.

It is the address of a person and cannot be a post office box.

If more than one applicant as part of a partnership, complete the form Joint Applicant Details (EM1863) and attach to this form.

1 Individual applicant(s) details

APPLICANT'S FULL NAME	TITLE	DATE OF BIRTH
-----------------------	-------	---------------

REGISTERED ADDRESS	POST CODE
--------------------	-----------

PHONE	FAX	EMAIL
-------	-----	-------

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)	POST CODE
---	-----------

Guardian details (if applicable)

A parent or legal guardian must complete the following details if an applicant is less than 18 years of age.

GUARDIAN'S FULL NAME	DATE OF BIRTH
----------------------	---------------

GUARDIAN'S REGISTERED ADDRESS	POST CODE
-------------------------------	-----------

GUARDIAN'S SIGNATURE	DATE
----------------------	------

→ Go to Section 3

2 Applicant details

Question 2

The applicant is the registered legal entity (not a business trading name) intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the registered business address of the company making the application and cannot be a post office box.

Enter the Australian Business Number (ABN); or the Australian Company Number (ACN) of the incorporated company; or the Association Number (AN) of the incorporated association; or the title and section of the legislation that gives the statutory corporation its legal status.

REGISTERED LEGAL ENTITY NAME John Holland Queensland Pty Ltd

TRADING NAME (IF APPLICABLE) John Holland
--

REGISTERED ADDRESS John Holland Group Pty Ltd Level 3 1000 Ann Street Fortitude Valley QLD	POST CODE 4006
--	-------------------

PHONE 07 3867 7000	FAX 07 3867 7100	E-MAIL/WEBSITE http://www.johnholland.com.au/
-----------------------	---------------------	---

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) John Holland Building PO Box 556 Fortitude Valley QLD	POST CODE 4006
--	-------------------

ABN/ACN/AN OR TITLE AND SECTION OF LEGISLATION 67133069280

Principal contact or person in charge details

PRINCIPAL CONTACT/PERSON IN CHARGE FULL NAME s.73 Irrelevant informa	TITLE Mr
---	-------------

POSITION IN CORPORATION Construction Manager

TELEPHONE s.73 Irrelevant infor	FASCIMILE	E-MAIL/WEBSITE s.73 Irrelevant in @jhgc.com.au
------------------------------------	-----------	---

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)	POST CODE
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Form

Part A - General details for all applications

As Above	
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Authorised signatory

The authorised signatory is the person authorised to sign an application on behalf of a corporation and in doing so declares that the corporation will be bound by the conditions associated with the granting of the licence or permit.

AUTHORIZED SIGNATORY FULL NAME	TITLE
s.73 Irrelevant information	MR

POSITION IN CORPORATION
CONSTRUCTION MANAGER

3 Project details

Pre-lodgement

Have you previously attended a pre-lodgement meeting or submitted a pre-lodgement form for this project?

- ☒ No
☐ Yes

PROJECT NUMBER (IF APPLICABLE)

Project description

Briefly describe the proposed activities, works, development or management.

Attach a separate sheet if there is insufficient space below.

DESCRIPTION
The New Farm Riverwalk Replacement Project is comprised of an 800m integral walkway structure supported on 37 no. single piers and two abutments. One section near the downstream end includes a swing bridge which opens to allow private boats to access the Brisbane River. The alignment is similar though not identical to that of the original structure. The Riverwalk connects from the Howard Smith Wharves Precinct to Merthyr Road, New Farm.

Form

Part A - General details for all applications

This information should at least provide enough details to allow a Department of Environment and Heritage Protection officer to locate the site of the proposal.

Give as much information as possible to accurately locate your activity, for example maps with contextual or boundary lines on plan or GPS boundary co-ordinates.

Geographical co-ordinates can include northing/easting, longitude/latitude.

Approvals required

Please list all Part B application forms you are attaching to this form.

APPLICATION FORMS

Part B - Application for contaminated soil disposal permit

Project site

Where will the activities be conducted? Provide the street address, real property description(s) of the land(s) in which the project is located and local government area. If you require more space, attach a separate sheet.

STREET ADDRESS

175 Bowen Street, Fortitude Valley QLD 4006

LOT

4

PLAN

SP 128032

LOCAL GOVERNMENT AREA

Brisbane City Council

If possible, provide a specific location within a protected area, a property name or an attached map with the project area clearly delineated. Also include the map name/details.

SPECIFIC LOCATION/PROPERTY NAME

175 Bowen Street, Howard Smith Wharves, Fortitude Valley QLD 4006 - Attachment A

PROTECTED AREA

N/A

GEOGRAPHICAL CO-ORDINATES

Part A - General details for all applications

Label all attachments alphabetically
(e.g. 'Attachment A')

Attachments

List all attached documents, including maps containing information supporting this application in the space below. If there are no attachments mark "N/A."

ATTACHMENTS (LABEL ALL ATTACHMENTS ALPHABETICALLY – E.G. "ATTACHMENT A")

Attachment A - Howard Smith Wharves Location

Attachment B – Transpacific Acceptance Letter

Attachment C – Soil Test Sample Location Map

Attachment D – Tabulated Soil Analysis

Attachment E – ALS Soil Test Analysis

Attachment F – Brisbane City Council Certificate of Title to the land

Attachment G – Soil Sample Methodology

Attachment H – ALS Chain of Custody

Privacy statement

The Department of Environment and Heritage Protection is committed to protecting the privacy, accuracy and security of your personal information in accordance with the *Information Privacy Act 2009*. The department is collecting your personal information in accordance with the Act specified in the relevant Part B form in order to process your application. The information will only be accessed by authorised employees within the department. Some of this information may be given to another department or agency as indicated in the privacy statement on the relevant Part B form. Your information will not be given to any other person or agency unless you have given us permission or we are authorised or required by law. All information supplied on this form may be disclosed publicly in accordance with the *Right to Information Act 2009* and *Evidence Act 1977*. For queries about privacy matters email: AdminReview@ehp.qld.gov.au or telephone: (07) 3896 3705.

Further Information

The latest version of this publication can be found at <www.ehp.qld.gov.au>. Note: where available, the publication number (e.g. EM1124 for this document) can be used as a search term.

4 Applicant's certification

If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge.
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

s.73 Irre
APPLICANT(1) SIGNATURE
s.73 Irrelevant information

Joint applicant signatures (if applicable)

APPLICANT(2) SIGNATURE

APPLICANT(3) SIGNATURE

APPLICANT(4) SIGNATURE

APPLICANT(5) SIGNATURE

DATE 23/06/14.

Complete the following checklist.

- ☒ Application form(s) signed and completed
- ☐ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information attached (e.g. maps)

Please return your completed application to:

Permit and Licence Management
Implementation Support Unit
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane Queensland 4001

Enquiries: 1300 130 372 (Option 4)
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au

Form

Contaminated land

Part B - Application for contaminated soil disposal permit

This is the approved form for making an application to the administering authority for a disposal permit to treat or dispose of contaminated soil from land recorded in the environmental management register (EMR) or contaminated land register (CLR) under s. 424 of the Environmental Protection Act 1994 (EP Act).

This form should be completed and forwarded to the administering authority with the form Part A - General Details for all Applicants (EM1124¹).

For more information about soil disposal permits see the Guideline for Contaminated Land Professionals, available on the EHP website: <www.ehp.qld.gov.au>

1 Site information**1.1 Site location**

Please provide details of site(s) the soil is proposed to be removed from

List any attachments provided.

FULL STREET ADDRESS OF SITE(S) 175 Bowen Street, Fortitude Valley QLD 4006	
LOT(S) 4	PLAN(S) SP 128032
LOCAL GOVERNMENT AREA Brisbane City Council	
ATTACHMENTS Attachment A – Howard Smith Wharves Project Location	

1.2 Site investigation

Has a site investigation report been submitted to the Department of Environment and Heritage Protection (EHP)? If yes please provide a project reference or file number.

☒ NO ☐ YES EHP project reference or file number)

1.3 Certificate of Title

Please provide a copy of the current Certificate of Title to the land

¹ This is the publication number, which can be used as a search term to find the latest version of the publication at <www.ehp.qld.gov.au>.

Form

Part B - Application for contaminated soil disposal permit

- ☒ Enclosed with this application ☐ Submitted previously to EHP as part of a site investigation/validation report

1.4 Is the site currently recorded in the environmental management register or contaminated land register because the land has been used for a notifiable activity or has been contaminated by a hazardous contaminate?

- ☒ YES ☐ NO (If no, the owner or occupier of the land must submit a notification form to the administering authority, under chapter 371 of the EP Act)

2 Soil removal and disposal

2.1 Soil volume

What is the approximate volume (in cubic metres) of soil to be removed (allowing for excavation bulking)? Over estimate the amount as a new permit will be required if the limit is reached before the disposal is complete.

Disposal of broken concrete with approximately 100m³ maximum, of soil amongst it.

2.2 Disposal period

What are the dates between which soil is proposed to be moved to the disposal location?

FROM DATE:
08-07-2014

TO DATE:
28-07-2014

Note: In accordance with section 424(7) of the EP Act soil disposal permits only authorise the disposal of soil for the term stated on the disposal permit.

2.3 Disposal location

What is the proposed disposal location?

Note: you must provide written acceptance of local government or registered owner of the site to receive the soil. If the soil is being disposed at a non local government administered landfill you must also provide a copy of the Certificate of Title

- (a) ☐ **Proposed to dispose of soil at local government administered landfill site**

NAME AND ADDRESS OF LOCAL GOVERNMENT ADMINISTERED LANDFILL

- ☐ Written acceptance from the local government is enclosed

- (b) ☒ **Proposed to dispose of soil at a non local government-administered landfill**

LOT(S) 268 & 227

PLAN(S) SP 103913

FULL STREET ADDRESS OF SITE(S)

100 Chum Street, New Chum QLD 4303

Part B - Application for contaminated soil disposal permit

- ☒ Written acceptance from registered owner of site is enclosed with this application, stating the amount of soil and the type of contaminants present in the soil the non-government landfill has agreed to accept.

(c) ☐ **Proposed to remove soil to another parcel of land on the EMR or CLR**

LOT(S)	PLAN(S)
FULL STREET ADDRESS OF SITE(S)	

- ☐ Accepting land is listed on the EMR or CLR
- ☐ Written acceptance from registered owner of site is enclosed with this application, stating the amount of soil and the type of contaminants present in the soil the site owner has agreed to accept.

3 Supporting information

3.1 Management options

Disposal to landfill should only be considered where no other method of dealing with the contaminated soil is available / viable.

State reason(s) why on-site treatment or management is not proposed.

The New Farm Riverwalk Replacement Project Client has requested that John Holland remove all temporary works prior to the completion of the Riverwalk Project.

A part of these temporary include the concrete rail beams which were used to launch the girder units. During the demolition process of the concrete rail beams, soil may become mixed within some of the finer pieces of concrete.

For the complete removal of all the concrete, this permit is being sought to ensure the Project is complying with Environmental Legislation.

3.2 Is it proposed to undertake validation sampling to confirm that all soil has been removed?

- ☒ NO ☐ YES

3.3 Provide a description of the contamination present in the soil to be removed

Soil on site has zinc levels exceeding the Ecological Investigation Levels. All metals and Hydrocarbons were within Health-Based Investigation Levels E – Parks, recreational open space and playing fields; including secondary schools.

3.4 Please tick relevant boxes below to indicate that you have attached the following information with this application and list the relevant attachments. If a site investigation

Part B - Application for contaminated soil disposal permit

report has been or is being submitted to the administering authority, refer to the relevant sections of that report.

Required information	Attachment name / number and section
☒ Scaled plan showing soil sampling locations and contamination source(s)	Attachment C – Soil Test Sample Location Map
☒ Tabulation of soil analysis results	Attachment D – Tabulated Soil Analysis
☐ Toxicity Characteristic Leaching Procedure (TCLP) results from relevant soil samples	
☒ Copies of all laboratory reports and sample receipt advices for all soil analysis	Attachment E – ALS Soil Test Analysis Attachment G – ALS Chain of Custody
☒ Explanation of location and depths of samples, how samples were collected, and how sample integrity was maintained	Attachment F – Soil Sample Methodology

Declaration

Note: If you do not tell the truth in this application you may be liable for prosecution under the relevant legislation.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge. I understand that it is an offence under s480 of the *Environmental Protection Act 1994* to give to the administering authority or an authorised person a document containing information that I know to be false, misleading or incomplete in a material particular; and
- I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

APPLICANT'S NAME s.73 Irrelevant information	PRINT NAME OF APPOINTED SIGNATORY (IF APPLICABLE) s.73 Irrelevant information
---	--

APPLICANT'S SIGNATURE/APPOINTED SIGNATORY s.73 Irrelevant information	DATE 23/06/14.
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4 Applicant checklist

Required	Not Applicable	
☒	☐	Part A form completed
☒	☐	All sections of the form have been completed
☒	☐	Letter of acceptance from landfill attached (if required).
☒	☐	Application form(s) signed and dated
☒	☐	Supporting information attached
☒	☐	Completed notification of land form (if the originating site is not listed on the EMR or CLR).

Part B - Application for contaminated soil disposal permit

Please return your completed application kit to:

Permit and Licence Management
Implementation and Support Unit
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane Queensland 4001
Enquiries: **1300 130 372 (Option 4)**
Email: palm@ehp.qld.gov.au

Published on DES Disclosure Log
RTI Act 2009

Attachment A – Howard Smith Wharves Project Location

Published on DES Disclosure Log
RTI Act 2009



■ Project Site

Attachment B – Transpacific Acceptance Letter

Published on DES Disclosure Log
RTI Act 2009



Solid Waste Division

Transpacific Waste Management
ABN: 55 120 175 635

100 Chum Street
New Chum QLD 4303
PO Box 384
BOOVAL FAIR QLD 4304
Phone: + 07 3816 2166
Fax: + 07 3816 3055

23rd June 2014

ATTENTION:

s.73 Irrelevant info

Environmental Graduate, Infrastructure North, John Holland Group

Dear s.73 Irrel

RE: D14627

Howard Smith Wharves 175 Bowen Terrace, Fortitude Valley QLD 4006. Lot 4 on Plan SP 128032

Following your email correspondence and provision of laboratory results, I consider we are able to accept approximately **100m³ of contaminated soil for disposal to our Single Lined cell 5**

A condition of this acceptance letter being issued is that the applicant must inform Landfill Management of the dates that the contaminated soil will be transported to the landfill.

We consider that this material will fall within the acceptance criteria of Transpacific Waste Management's DEHP Licence. Our DEHP licence number is EPPR00445713, Lot 268 on SP103913 and Lot 227 on SP103913. If you require any additional information please do not hesitate to contact the undersigned on (07) 3816 2166.

Yours sincerely,

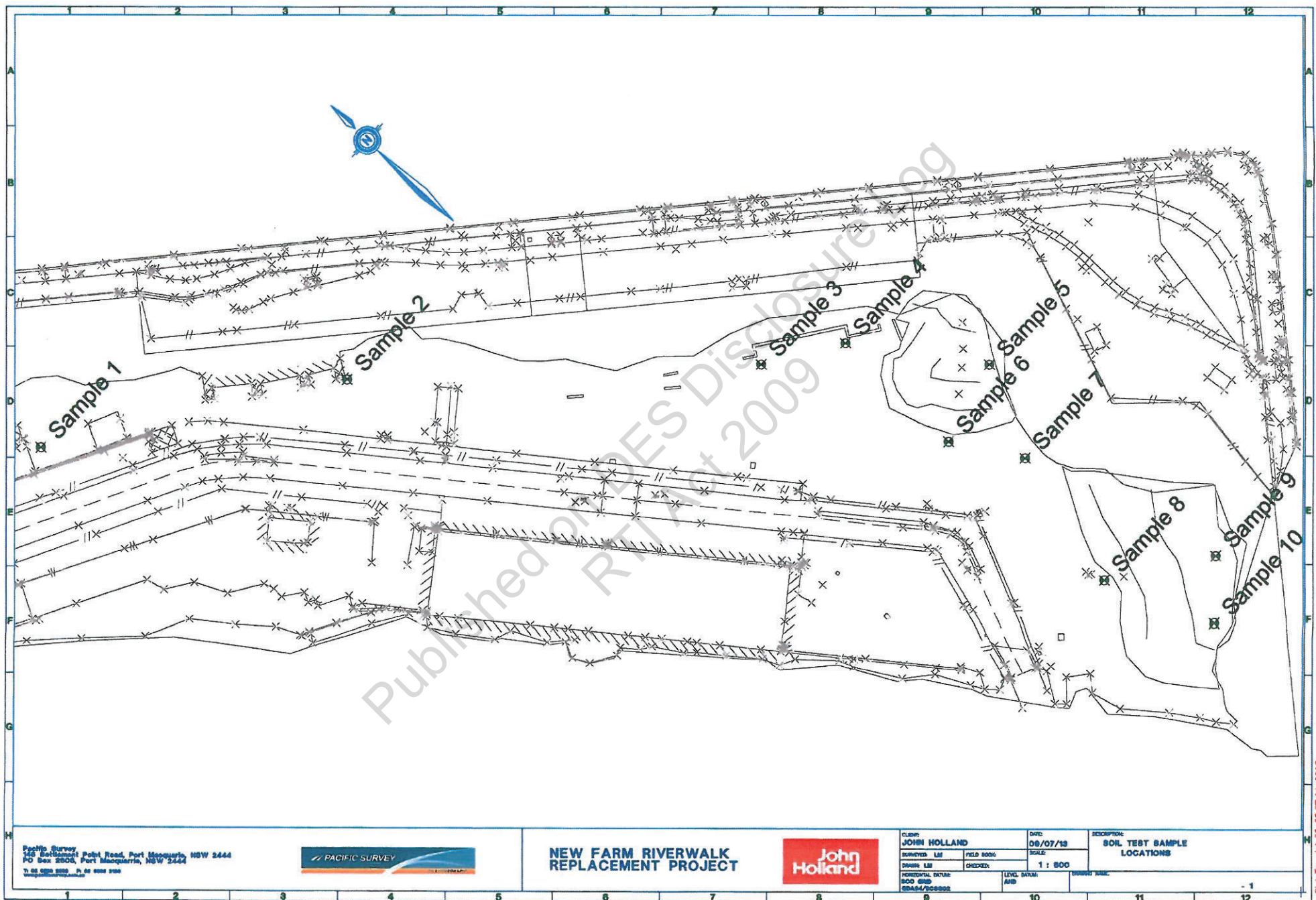
s.73 Irrelevant infor

Environmental/Technical Manager

s.73 Irrelevant information

Attachment C – Soil Test Sample Location Map

Published on DES Disclosure Log
RTI Act 2009



Plot Tue Jul 09 09:27:14 2013

Attachment D – Tabulated Soil Analysis

Published on DES Disclosure Log
RTI Act 2009

			Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10			HIL E - Parks, recreational open space and playing fields; including secondary schools
Analyte grouping/Analyte	Units	LOR											Levels under Schedule B1 - EIL - Interim Urban	Levels under Schedule B1 - Background EIL	
EA055 Moisture Content															
Moisture Content (dried @ 103°C)	%	1.0	16.0	16.9	12.3	12.9	13.4	18.4	7.9	11.1	9.2	10.6			
EG005T Total Metals by ICP-AES															
Arsenic	mg/kg	5	8	18	10	12	16	10	9	10	13	12	20		200
Cadmium	mg/kg	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	3		40
Chromium	mg/kg	2	14	18	19	13	17	15	6	7	13	12	400 (Chromium III)		200
Copper	mg/kg	5	43	69	35	38	44	36	32	24	32	32	100		2000
Lead	mg/kg	5	509	420	363	257	415	140	93	128	186	193	600		600
Nickel	mg/kg	2	10	14	10	9	15	16	11	7	8	9	60		600
Zinc	mg/kg	5	616	1100	504	629	2010	422	360	615	626	649	200	10-300	14000
EG025T Total Recoverable Mercury by FIMS															
Mercury	mg/kg	0.1	0.2	0.9	<0.1	0.1	0.2	0.2	0.1	<0.1	0.1	0.1			
EP080 BTEX															
Benzene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1		
Toluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
Ethylbenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
meta- & para-Xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
ortho-Xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
EP080 BTEXN															
Sum of BTEX	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1		
Total Xylenes	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
Naphthalene	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1		
EP080/071 Total Petroleum Hydrocarbons															
C6 - C9 Fraction	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
C10 - C14 Fraction	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	3065		
C15 - C28 Fraction	mg/kg	100	130	130	<100	<100	<100	270	<100	<100	<100	<100	3065		
C29 - C36 Fraction	mg/kg	100	140	120	<100	<100	<100	270	<100	<100	<100	<100	3065		
C10 - C36 Fraction (sum)	mg/kg	50	270	250	<50	<50	<50	540	<50	<50	<50	<50	3065		
EP080/071 Total Recoverable Hydrocarbons - NEPM 2010 Draft															
C6 - C10 Fraction	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
C6 - C10 Fraction minus BTEX (F1)	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
>C10 - C16 Fraction	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	3065		
>C16 - C34 Fraction	mg/kg	100	230	210	<100	120	140	470	<100	<100	100	100	3065		
>C34 - C40 Fraction	mg/kg	100	<100	<100	<100	<100	<100	140	<100	<100	<100	<100	3065		
>C10 - C40 Fraction (sum)	mg/kg	50	230	210	<50	120	140	610	<50	<50	100	100	3065		
EP080S TPH(V)/BTEX Surrogates															
1,2-Dichloroethane-D4	%	0.1	92.7	86.7	91.3	91.8	85.8	87.9	91.3	90.3	94.4	89.4			
Toluene-D8	%	0.1	102	97.4	97.7	108	97.9	99.9	103	103	105	103			
4-Bromofluorobenzene	%	0.1	89.7	85.1	90.2	93.4	86.7	88.3	89.9	89.8	91.2	89.6			

Matrix:	SOIL	Sample Type:		REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Workgroup:	EB1314646	ALS Sample number:		EB1314646001	EB1314646002	EB1314646003	EB1314646004	EB1314646005	EB1314646006	EB1314646007	EB1314646008	EB1314646009	EB1314646010
Project name/number:	New Farm River Walk Replaceme	Sample date:		18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013
		Client sample ID (1st):		Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
		Client sample ID (2nd):											
		Site:											
		Purchase Order:											
alyte	CAS Number	Units	LOR										
ment													
ed @ 103°C)		%	1.0	16.0	16.9	12.3	12.9	13.4	18.4	7.9	11.1	9.2	10.6
s by ICP-AES													
	7440-38-2	mg/kg	5	8	18	10	12	16	10	9	10	13	12
	7440-43-9	mg/kg	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
	7440-47-3	mg/kg	2	14	18	19	13	17	15	6	7	13	12
	7440-50-8	mg/kg	5	43	69	35	38	44	36	32	24	32	32
	7439-92-1	mg/kg	5	509	420	363	257	415	140	93	128	186	193
	7440-02-0	mg/kg	2	10	14	10	9	15	16	11	7	8	9
	7440-66-6	mg/kg	5	616	1100	504	629	2010	422	360	615	626	649
verable Mercury by FIMS													
	7439-97-6	mg/kg	0.1	0.2	0.9	<0.1	0.1	0.2	0.2	0.1	<0.1	0.1	0.1
	71-43-2	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	108-88-3	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	100-41-4	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	108-38-3 106-42-3	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	95-47-6	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
		mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1330-20-7	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	91-20-3	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
roileum Hydrocarbons													
		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
		mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
		mg/kg	100	130	130	<100	<100	<100	270	<100	<100	<100	<100
		mg/kg	100	140	120	<100	<100	<100	270	<100	<100	<100	<100
		mg/kg	50	270	250	<50	<50	<50	540	<50	<50	<50	<50
coverable Hydrocarbons - NEPM 2010 Draft													
		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
us BTEX (F1)		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
		mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
		mg/kg	100	230	210	<100	120	140	470	<100	<100	100	100
		mg/kg	100	<100	<100	<100	<100	<100	140	<100	<100	<100	<100
		mg/kg	50	230	210	<50	120	140	610	<50	<50	100	100
X Surrogates													
	17060-07-0	%	0.1	92.7	86.7	91.3	91.8	85.8	87.9	91.3	90.3	94.4	89.4
	2037-26-5	%	0.1	102	97.4	97.7	108	97.9	99.9	103	103	105	103
	460-00-4	%	0.1	89.7	85.1	90.2	93.4	86.7	88.3	89.9	89.8	91.2	89.6

Attachment E – ALS Soil Test Analysis

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Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EB1314646	Page	: 1 of 7
Amendment	: (Preliminary Report)	Laboratory	: Environmental Division Brisbane
Client	: JOHN HOLLAND GROUP	Contact	: Client Services
Contact	: s.73 Irrelevant information	Address	: 2 Byth Street Stafford QLD Australia 4053
Address	: LEVEL 3 - 1000 ANN STREET FORTITUDE VALLEY QLD 4006	E-mail	: Melbourne.Enviro.Services@alsglobal.com
E-mail	: s.73 Irrelevant @jhg.com.au	Telephone	: +61-3-8549 9600
Telephone	: +61 3867 7000	Facsimile	: +61-3-8549 9601
Facsimile	: +61 3867 7100	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Project	: New Farm River Walk Replacement Project	Date Samples Received	: 18-JUN-2013
Order number	: ---	Issue Date	: 25-JUN-2013 17:09
C-O-C number	: ---	No. of samples received	: 10
Sampler	: s.73 Irrelevant i	No. of samples analysed	: 10
Site	: ---		
Quote number	: EN/056/13		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
s.73 Irrelevant info	Inorganic Coordinator	Brisbane Inorganics
	Inorganic Coordinator	Brisbane Inorganics
	Senior Inorganic Chemist	Brisbane Inorganics
	Senior Organic Chemist	Brisbane Organics

Address 2 Byth Street Stafford QLD Australia 4053 PHONE +61-7-3243 7222 Facsimile +61-7-3243 7218
Environmental Division Brisbane ABN 84 009 936 029 Part of the ALS Group An ALS Limited Company



www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

(Preliminary Report)

Page : 2 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- EG005T(Total Metals by ICP-AES) Samples EB1314646 - 003 shows poor duplicate results due to sample heterogeneity. Confirmed by visual inspection.

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(Preliminary Report)

Page : 3 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Client sampling date / time				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-001	EB1314646-002	EB1314646-003	EB1314646-004	EB1314646-005
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	—	1.0	%	16.0	16.9	12.3	12.9	13.4
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	18	10	12	16
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	14	18	19	13	17
Copper	7440-50-8	5	mg/kg	43	69	35	38	44
Lead	7439-92-1	5	mg/kg	509	420	363	257	415
Nickel	7440-02-0	2	mg/kg	10	14	10	9	16
Zinc	7440-66-6	5	mg/kg	616	1100	504	629	2010
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	0.9	<0.1	0.1	0.2
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C15 - C28 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C29 - C36 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C10 - C36 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C16 - C34 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C34 - C40 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C10 - C40 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080: BTEXN								
Sum of BTEX	—	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

(Preliminary Report)

Page : 4 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-001	EB1314646-002	EB1314646-003	EB1314646-004	EB1314646-005
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	92.7	86.7	91.3	91.8	85.8
Toluene-D8	2037-26-5	0.1	%	102	97.4	97.7	108	97.9
4-Bromofluorobenzene	460-00-4	0.1	%	89.7	85.1	90.2	93.4	86.7

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Page : 5 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

				Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
Client sampling date / time				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-006	EB1314646-007	EB1314646-008	EB1314646-009	EB1314646-010
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	—	1.0	%	18.4	7.9	11.1	9.2	10.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	9	10	13	12
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	15	6	7	13	12
Copper	7440-50-8	5	mg/kg	36	32	24	32	32
Lead	7439-92-1	5	mg/kg	140	93	128	186	193
Nickel	7440-02-0	2	mg/kg	16	11	7	8	9
Zinc	7440-66-6	5	mg/kg	422	360	615	626	649
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	0.1	<0.1	0.1	0.1
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C15 - C28 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C29 - C36 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C10 - C36 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C16 - C34 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C34 - C40 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C10 - C40 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080: BTEXN								
Sum of BTEX	—	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

(Preliminary Report)

Page : 6 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

				Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
Client sampling date / time				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-006	EB1314646-007	EB1314646-008	EB1314646-009	EB1314646-010
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	87.9	91.3	90.3	94.4	89.4
Toluene-D8	2037-26-5	0.1	%	99.9	103	103	105	103
4-Bromofluorobenzene	460-00-4	0.1	%	88.3	89.9	89.8	91.2	89.6

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Page : 7 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Surrogate Control Limits

Sub-Matrix: **SOIL**

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	52.7	133.7
Toluene-D8	2037-26-5	60.3	131.1
4-Bromofluorobenzene	460-00-4	59.2	126.6

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Attachment F – Brisbane City Council Certificate of Title to the land

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CURRENT TITLE SEARCH

DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 14538199

Search Date: 29/08/2012 12:11

Title Reference: 50323249

Date Created: 31/07/2000

Previous Title: 40025609

REGISTERED OWNER

Dealing No: 707890862 14/07/2004

BRISBANE CITY COUNCIL

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 128032
County of STANLEY Parish of NORTH BRISBANE
Local Government: BRISBANE CITY

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 40025609 (Lot 4 on SP 128032)

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
713597367	HERITGE SITE	30/11/2010 11:14	CURRENT
QUEENSLAND HERITAGE ACT 1992			

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

COPYRIGHT THE STATE OF QUEENSLAND (DEPT OF NATURAL RESOURCES AND MINES) [2012]
Requested By: D APPLICATIONS CITEC CONFIRM

Attachment G – Soil Sample Methodology

Ten soil samples were taken, within the eastern end of the site.

Samples were taken from a 20cm soil profile, wearing disposable gloves. The sides of the profile were scraped off by hand to avoid contaminates from digging equipment.

Samples were placed within an eski and immediately taken to the ALS Laboratory for analysis, as per ALS Laboratory sampling procedure.

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Attachment H – ALS Chain of Custody

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ Sydney 2077 Sydney Ave, North Sydney NSW 1585
Ph: 02 8784 6595 Fax: 02 8784 6596
☐ Newcastle 55 Roseglen Rd, Warrawee NSW 2204
Ph: 06 9559 9400 Fax: 06 9559 9401

☐ Brisbane 32 Island Dr, Bayside QLD 4015
Ph: 07 324 7222 Fax: 07 324 7223
☐ Townsville 14-15 Davies St, Tully QLD 4855
Ph: 07 4755 0503 Fax: 07 4755 0504

☐ Melbourne 2/4 Victoria St, Springvale VIC 3171
Ph: 03 9540 9600 Fax: 03 9540 9601
☐ Adelaide 2/1 Burns Rd, Morphett SA 5095
Ph: 08 3059 0840 Fax: 08 3059 0841

☐ Perth 10 Rod Way, Manjimabo WA 6068
Ph: 08 9269 7833 Fax: 08 9269 7834
☐ Launceston 27 Westgate St, Launceston TAS 7250
Ph: 03 6331 2158 Fax: 03 6331 2159

CLIENT: John Holland Group -
OFFICE: Howard Smith Wharves (under store)
PROJECT: New Farm River Walk Replacement Project
ORDER NUMBER:
PROJECT MANAGER: s.73 Irrelevant information
CONTACT PH: s.73 Irrelevant information
SAMPLER: s.73 Irrelevant information
SAMPLER MOBILE: s.73 Irrelevant information
COC emailed to ALST? (YES / NO)
Email Reports to (will default to PM if no other addresses are listed): s.73 Irrelevant information
Email Invoice to (will default to PM if no other addresses are listed): s.73 Irrelevant information

TURNAROUND REQUIREMENTS: ☐ Standard TAT (List due date): 25/6/13
(Standard TAT may be longer for some tests e.g., Ultra Trace Organics)
☐ Non Standard or urgent TAT (List due date):
ALS QUOTE NO.:
COC SEQUENCE NUMBER (Circle)
COC: 1 2 3 4 5 6 7
OF: 1 2 3 4 5 6 7
RELINQUISHED BY: s.73 Irrelevant information
RECEIVED BY: s.73 Irrelevant information
DATE/TIME: 11:35pm 18/6/13
DATE/TIME: 18/6 1335

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Test TRH (CG-C40)/BTEXIN plus 8 metals

SAMPLE DETAILS MATRIX: Solid(S) Water(W)				CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB, Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (Bolt filtered bottle required).										Additional Information	
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES											Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.	
1	Sample 1				1												
2	Sample 2				1												
3	Sample 3				1												
4	Sample 4				1												
5	Sample 5				1												
6	Sample 6				1												
7	Sample 7				1												
8	Sample 8				1												
9	Sample 9				1												
10	Sample 10				1												

Environmental Division
Brisbane
s.73 Irrelevant Work Order s.73 Irrelevant
EB1314646

Telephone: +61-7-3243 7222

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VS = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Solids; B = Unpreserved Bag.

Date : 23/06/2014 12:50:46 PM

From : s.73 Irrelevant information

To : "PALM"

Cc : s.73 Irrelevant information

Subject : AR059747 John Holland Contaminated Soil Disposal Application

Attachment : John Holland Contaminated Soil Disposal Application 23-06-2014.pdf;ATT00002.txt;image001.jpg;image002.jpg;image003.gif;

To Permit and Licence Management Implementation Support Unit,

Attached is a copy of John Holland's New Farm Riverwalk Replacement Project Contaminated Soil Disposal Application, the original is currently in transit (Tracking code 0025INWOIZ) to the Permit and Licence Management Implementation Support Unit with Department of Environment and Heritage Protection.

For application/permit fees regarding this application, please contact:

s.73 Irrelevant information

PCR/Procurement Administrator, New Farm Riverwalk Redevelopment



Powered by People

The Emporium, Level 3, 1000 Ann Street, Fortitude Valley QLD 4006

P. +7 3358 8711 | M. +61 s.73 Irrelevant information

E. s.73 Irrelevant information@jhg.com.au

Kind Regards,

s.73 Irrelevant information

Environmental Graduate, Infrastructure North

New Farm Riverwalk Replacement



Powered by People

John Holland Group Pty Ltd

Level 3, 1000 Ann Street, Fortitude Valley QLD 4006

P. +61 7 33588712 | M. s.73 Irrelevant information

E. s.73 Irrelevant information@jhg.com.au | W. johnholland.com.au

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Form

Corporate

Part A - General details for all applications

OFFICIAL USE ONLY

DATE RECEIVED

--	--	--

FILE REF

PROJECT REF

COMPLETE FORM

☐

ENTERED BY [SIGNATURE]

DATE

--	--	--

RECEIPTING DETAILS ONLY

DATE RECEIPTED

--	--	--

RECEIPT NUMBER

AMOUNT RECEIVED

\$

PROCESSED BY (INITIALS AND NAME)

--

Important information for applicants

This form asks for general applicant details and a description of the proposed project and any associated activities. The completed form must be submitted together with relevant activity specific Part B forms.

Specific details must accompany this form to enable your application to be processed. The guide provided will help you complete your application correctly. If you have any difficulties completing the form, contact Permit and Licence Management on 1300 130 372 (Option 4). Please number all attachments alphabetically (e.g. 'Attachment A').

Commercial and confidential information must be marked clearly. This information will not be disclosed, except where required by law (including the *Right to Information Act 2009*). If subsequent activities are added to the project, you will be required to resubmit this application with details of the additional activity.

Tick relevant boxes below if the applicant(s) are:

- ☐ an individual or sole trader
☐ individuals in a partnership
☐ individual(s) acting on behalf of an unincorporated organisation
 → Go to Section 1
☐ an incorporated company
☐ an incorporated association
☐ a statutory authority
☐ a body politic
 → Go to Section 2



Guide

Question 1

The applicant is the person intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices.

It is the address of a person and cannot be a post office box.

If more than one applicant as part of a partnership, complete the form Joint Applicant Details (EM1863) and attach to this form.

1 Individual applicant(s) details

APPLICANT'S FULL NAME	TITLE	DATE OF BIRTH
-----------------------	-------	---------------

REGISTERED ADDRESS	POST CODE
--------------------	-----------

PHONE	FAX	EMAIL
-------	-----	-------

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)	POST CODE
---	-----------

Guardian details (if applicable)

A parent or legal guardian must complete the following details if an applicant is less than 18 years of age.

GUARDIAN'S FULL NAME	DATE OF BIRTH
----------------------	---------------

GUARDIAN'S REGISTERED ADDRESS	POST CODE
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GUARDIAN'S SIGNATURE	DATE
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→ Go to Section 3

2 Applicant details

Question 2

The applicant is the registered legal entity (not a business trading name) intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the registered business address of the company making the application and cannot be a post office box.

Enter the Australian Business Number (ABN); or the Australian Company Number (ACN) of the incorporated company; or the Association Number (AN) of the incorporated association; or the title and section of the legislation that gives the statutory corporation its legal status.

REGISTERED LEGAL ENTITY NAME John Holland Queensland Pty Ltd

TRADING NAME (IF APPLICABLE) John Holland
--

REGISTERED ADDRESS John Holland Group Pty Ltd Level 3 1000 Ann Street Fortitude Valley QLD	POST CODE 4006
--	-------------------

PHONE 07 3867 7000	FAX 07 3867 7100	E-MAIL/WEBSITE http://www.johnholland.com.au/
-----------------------	---------------------	---

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) John Holland Building PO Box 556 Fortitude Valley QLD	POST CODE 4006
--	-------------------

ABN/ACN/AN OR TITLE AND SECTION OF LEGISLATION 67133069280

Principal contact or person in charge details

PRINCIPAL CONTACT/PERSON IN CHARGE FULL NAME s.73 Irrelevant information	TITLE Mr
---	-------------

POSITION IN CORPORATION Construction Manager

TELEPHONE s.73 Irrelevant information	FASCIMILE	E-MAIL/WEBSITE s.73 Irrelevant information@jhgc.com.au
--	-----------	---

POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)	POST CODE
---	-----------

Part A - General details for all applications

As Above	
----------	--

Authorised signatory

The authorised signatory is the person authorised to sign an application on behalf of a corporation and in doing so declares that the corporation will be bound by the conditions associated with the granting of the licence or permit.

AUTHORIZED SIGNATORY FULL NAME	TITLE
s.73 Irrelevant information	MR

POSITION IN CORPORATION
CONSTRUCTION MANAGER

3 Project details**Pre-lodgement**

Have you previously attended a pre-lodgement meeting or submitted a pre-lodgement form for this project?

☒ No

☐ Yes

PROJECT NUMBER (IF APPLICABLE)

Project description

Briefly describe the proposed activities, works, development or management.

Attach a separate sheet if there is insufficient space below.

DESCRIPTION

The New Farm Riverwalk Replacement Project is comprised of an 800m integral walkway structure supported on 37 no. single piers and two abutments. One section near the downstream end includes a swing bridge which opens to allow private boats to access the Brisbane River. The alignment is similar though not identical to that of the original structure. The Riverwalk connects from the Howard Smith Wharves Precinct to Merthyr Road, New Farm.

Part A - General details for all applications

This information should at least provide enough details to allow a Department of Environment and Heritage Protection officer to locate the site of the proposal.

Give as much information as possible to accurately locate your activity, for example maps with contextual or boundary lines on plan or GPS boundary co-ordinates.

Geographical co-ordinates can include northing/easting, longitude/latitude.

Approvals required

Please list all Part B application forms you are attaching to this form.

APPLICATION FORMS

Part B - Application for contaminated soil disposal permit

Project site

Where will the activities be conducted? Provide the street address, real property description(s) of the land(s) in which the project is located and local government area. If you require more space, attach a separate sheet.

STREET ADDRESS

175 Bowen Street, Fortitude Valley QLD 4006

LOT

4

PLAN

SP 128032

LOCAL GOVERNMENT AREA

Brisbane City Council

If possible, provide a specific location within a protected area, a property name or an attached map with the project area clearly delineated. Also include the map name/details.

SPECIFIC LOCATION/PROPERTY NAME

175 Bowen Street, Howard Smith Wharves, Fortitude Valley QLD 4006 - Attachment A

PROTECTED AREA

N/A

GEOGRAPHICAL CO-ORDINATES

Part A - General details for all applications

Label all attachments alphabetically
(e.g. 'Attachment A')

Attachments

List all attached documents, including maps containing information supporting this application in the space below. If there are no attachments mark "N/A."

ATTACHMENTS (LABEL ALL ATTACHMENTS ALPHABETICALLY – E.G. "ATTACHMENT A")

Attachment A - Howard Smith Wharves Location

Attachment B – Transpacific Acceptance Letter

Attachment C – Soil Test Sample Location Map

Attachment D – Tabulated Soil Analysis

Attachment E – ALS Soil Test Analysis

Attachment F – Brisbane City Council Certificate of Title to the land

Attachment G – Soil Sample Methodology

Attachment H – ALS Chain of Custody

Privacy statement

The Department of Environment and Heritage Protection is committed to protecting the privacy, accuracy and security of your personal information in accordance with the *Information Privacy Act 2009*. The department is collecting your personal information in accordance with the Act specified in the relevant Part B form in order to process your application. The information will only be accessed by authorised employees within the department. Some of this information may be given to another department or agency as indicated in the privacy statement on the relevant Part B form. Your information will not be given to any other person or agency unless you have given us permission or we are authorised or required by law. All information supplied on this form may be disclosed publicly in accordance with the *Right to Information Act 2009* and *Evidence Act 1977*. For queries about privacy matters email: AdminReview@ehp.qld.gov.au or telephone: (07) 3896 3705.

Further Information

The latest version of this publication can be found at www.ehp.qld.gov.au. Note: where available, the publication number (e.g. EM1124 for this document) can be used as a search term.

4 Applicant's certification

If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge.
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

APPLICANT(1) SIGNATURE

s.73 Irrelevant information

Joint applicant signatures (if applicable)

APPLICANT(2) SIGNATURE

APPLICANT(3) SIGNATURE

APPLICANT(4) SIGNATURE

APPLICANT(5) SIGNATURE

DATE

23/06/14.

Complete the following checklist.

- ☒ Application form(s) signed and completed
- ☐ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information attached (e.g. maps)

Please return your completed application to:

Permit and Licence Management
Implementation Support Unit
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane Queensland 4001

Enquiries: 1300 130 372 (Option 4)

Fax: (07) 3330 5875

Email: palm@ehp.qld.gov.au

Form

Contaminated land

Part B - Application for contaminated soil disposal permit

This is the approved form for making an application to the administering authority for a disposal permit to treat or dispose of contaminated soil from land recorded in the environmental management register (EMR) or contaminated land register (CLR) under s. 424 of the Environmental Protection Act 1994 (EP Act).

This form should be completed and forwarded to the administering authority with the form Part A - General Details for all Applicants (EM1124¹).

For more information about soil disposal permits see the Guideline for Contaminated Land Professionals, available on the EHP website: <www.ehp.qld.gov.au>

1 Site information

1.1 Site location

Please provide details of site(s) the soil is proposed to be removed from

List any attachments provided.

FULL STREET ADDRESS OF SITE(S) 175 Bowen Street, Fortitude Valley QLD 4006	
LOT(S) 4	PLAN(S) SP 128032
LOCAL GOVERNMENT AREA Brisbane City Council	
ATTACHMENTS Attachment A – Howard Smith Wharves Project Location	

1.2 Site investigation

Has a site investigation report been submitted to the Department of Environment and Heritage Protection (EHP)? If yes please provide a project reference or file number.

☒ NO ☐ YES EHP project reference or file number)

1.3 Certificate of Title

Please provide a copy of the current Certificate of Title to the land

¹ This is the publication number, which can be used as a search term to find the latest version of the publication at <www.ehp.qld.gov.au>.

Form

Part B - Application for contaminated soil disposal permit

- ☒ Enclosed with this application ☐ Submitted previously to EHP as part of a site investigation/validation report

1.4 Is the site currently recorded in the environmental management register or contaminated land register because the land has been used for a notifiable activity or has been contaminated by a hazardous contaminate?

- ☒ YES ☐ NO (If no, the owner or occupier of the land must submit a notification form to the administering authority, under chapter 371 of the EP Act)

2 Soil removal and disposal

2.1 Soil volume

What is the approximate volume (in cubic metres) of soil to be removed (allowing for excavation bulking)? Over estimate the amount as a new permit will be required if the limit is reached before the disposal is complete.

Disposal of broken concrete with approximately 100m³ maximum, of soil amongst it.

2.2 Disposal period

What are the dates between which soil is proposed to be moved to the disposal location?

FROM DATE:
08-07-2014

TO DATE:
28-07-2014

Note: In accordance with section 424(7) of the EP Act soil disposal permits only authorise the disposal of soil for the term stated on the disposal permit.

2.3 Disposal location

What is the proposed disposal location?

Note: you must provide written acceptance of local government or registered owner of the site to receive the soil. If the soil is being disposed at a non local government administered landfill you must also provide a copy of the Certificate of Title

- (a) ☐ **Proposed to dispose of soil at local government administered landfill site**

NAME AND ADDRESS OF LOCAL GOVERNMENT ADMINISTERED LANDFILL

- ☐ Written acceptance from the local government is enclosed

- (b) ☒ **Proposed to dispose of soil at a non local government-administered landfill**

LOT(S) 268 & 227

PLAN(S) SP 103913

FULL STREET ADDRESS OF SITE(S)

100 Chum Street, New Chum QLD 4303

Part B - Application for contaminated soil disposal permit

- ☒ Written acceptance from registered owner of site is enclosed with this application, stating the amount of soil and the type of contaminants present in the soil the non-government landfill has agreed to accept.

(c) ☐ **Proposed to remove soil to another parcel of land on the EMR or CLR**

LOT(S)	PLAN(S)
FULL STREET ADDRESS OF SITE(S)	

- ☐ Accepting land is listed on the EMR or CLR
- ☐ Written acceptance from registered owner of site is enclosed with this application, stating the amount of soil and the type of contaminants present in the soil the site owner has agreed to accept.

3 Supporting information

3.1 Management options

Disposal to landfill should only be considered where no other method of dealing with the contaminated soil is available / viable.

State reason(s) why on-site treatment or management is not proposed.

The New Farm Riverwalk Replacement Project Client has requested that John Holland remove all temporary works prior to the completion of the Riverwalk Project.

A part of these temporary include the concrete rail beams which were used to launch the girder units. During the demolition process of the concrete rail beams, soil may become mixed within some of the finer pieces of concrete.

For the complete removal of all the concrete, this permit is being sought to ensure the Project is complying with Environmental Legislation.

3.2 Is it proposed to undertake validation sampling to confirm that all soil has been removed?

- ☒ NO ☐ YES

3.3 Provide a description of the contamination present in the soil to be removed

Soil on site has zinc levels exceeding the Ecological Investigation Levels. All metals and Hydrocarbons were within Health-Based Investigation Levels E – Parks, recreational open space and playing fields; including secondary schools.

3.4 Please tick relevant boxes below to indicate that you have attached the following information with this application and list the relevant attachments. If a site investigation

Part B - Application for contaminated soil disposal permit

report has been or is being submitted to the administering authority, refer to the relevant sections of that report.

Required information	Attachment name / number and section
☒ Scaled plan showing soil sampling locations and contamination source(s)	Attachment C – Soil Test Sample Location Map
☒ Tabulation of soil analysis results	Attachment D – Tabulated Soil Analysis
☐ Toxicity Characteristic Leaching Procedure (TCLP) results from relevant soil samples	
☒ Copies of all laboratory reports and sample receipt advices for all soil analysis	Attachment E – ALS Soil Test Analysis Attachment G – ALS Chain of Custody
☒ Explanation of location and depths of samples, how samples were collected, and how sample integrity was maintained	Attachment F – Soil Sample Methodology

Declaration

Note: If you do not tell the truth in this application you may be liable for prosecution under the relevant legislation.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge. I understand that it is an offence under s480 of the *Environmental Protection Act 1994* to give to the administering authority or an authorised person a document containing information that I know to be false, misleading or incomplete in a material particular; and
- I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977*.

APPLICANT'S NAME s.73 Irrelevant information	PRINT NAME OF APPOINTED SIGNATORY (IF APPLICABLE) s.73 Irrelevant information
---	--

APPLICANT'S SIGNATURE/APPOINTED SIGNATORY s.73 Irrelevant information	DATE 23/06/14.
--	-------------------

4 Applicant checklist

Required	Not Applicable	
☒	☐	Part A form completed
☒	☐	All sections of the form have been completed
☒	☐	Letter of acceptance from landfill attached (if required).
☒	☐	Application form(s) signed and dated
☒	☐	Supporting information attached
☒	☐	Completed notification of land form (if the originating site is not listed on the EMR or CLR).

Part B - Application for contaminated soil disposal permit

Please return your completed application kit to:

Permit and Licence Management
Implementation and Support Unit
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane Queensland 4001
Enquiries: **1300 130 372 (Option 4)**
Email: palm@ehp.qld.gov.au

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Attachment A – Howard Smith Wharves Project Location

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RTI Act 2009



Project Site

Attachment B – Transpacific Acceptance Letter

Published on DES Disclosure Log
RTI Act 2009



Solid Waste Division

Transpacific Waste Management
ABN: 55 120 175 635

100 Chum Street
New Chum QLD 4303
PO Box 384
BOOVAL FAIR QLD 4304
Phone: + [s.73 Irrelevant]
Fax: + 07 3816 3055

23rd June 2014

ATTENTION:

[s.73 Irrelevant informat]

Environmental Graduate, Infrastructure North, John Holland Group

Dear [s.73 Irreleva]

RE: D14627

Howard Smith Wharves 175 Bowen Terrace, Fortitude Valley QLD 4006. Lot 4 on Plan SP 128032

Following your email correspondence and provision of laboratory results, I consider we are able to accept approximately **100m³ of contaminated soil for disposal to our Single Lined cell 5**

A condition of this acceptance letter being issued is that the applicant must inform Landfill Management of the dates that the contaminated soil will be transported to the landfill.

We consider that this material will fall within the acceptance criteria of Transpacific Waste Management's DEHP Licence. Our DEHP licence number is EPPR00445713, Lot 268 on SP103913 and Lot 227 on SP103913. If you require any additional information please do not hesitate to contact the undersigned on (07) 3816 2166.

Yours sincerely,

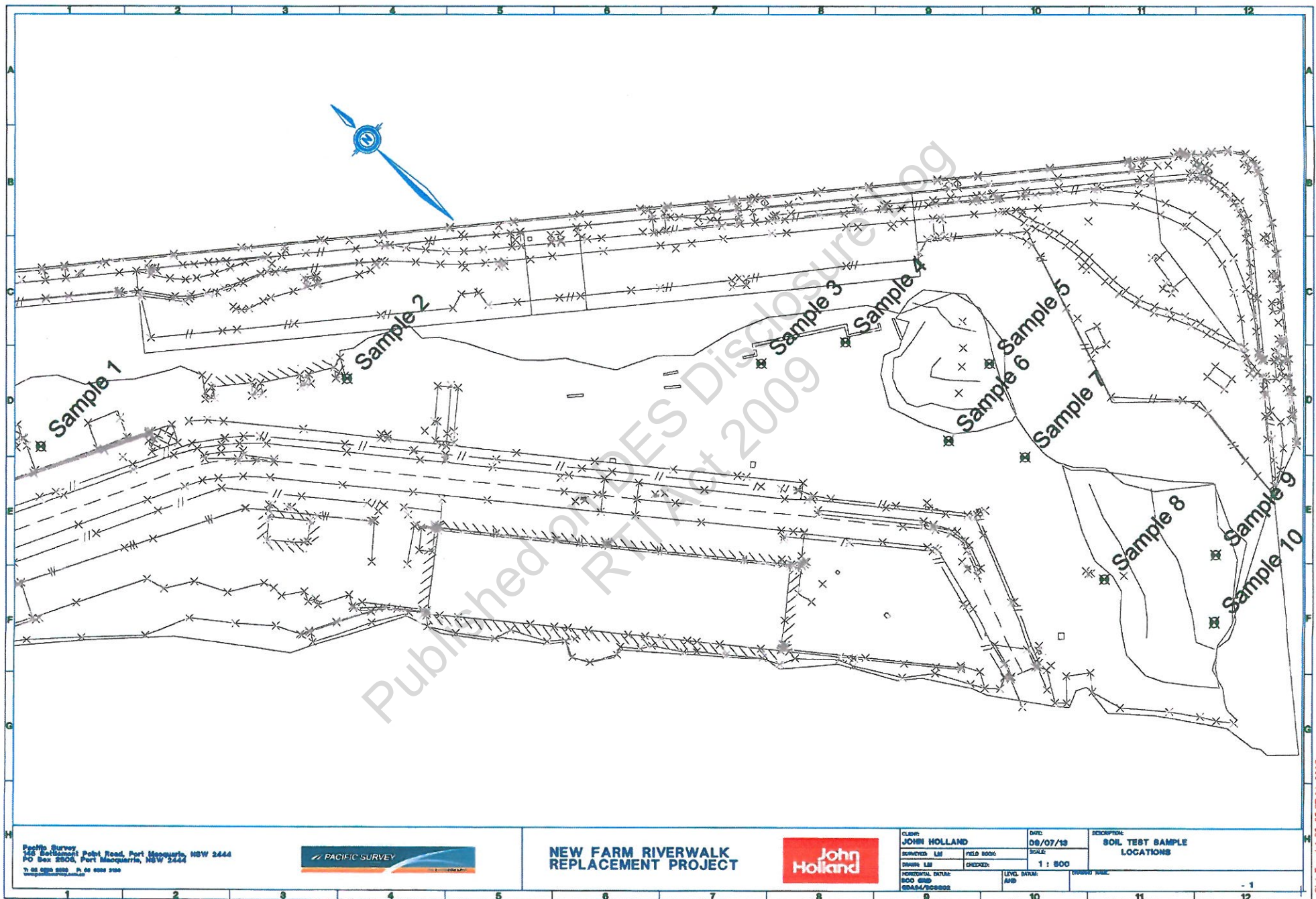
[s.73 Irrelevant inform]

Environmental/Technical Manager

[s.73 Irrelevant information]

Attachment C – Soil Test Sample Location Map

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Attachment D – Tabulated Soil Analysis

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RTI Act 2009

			Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10			HIL E - Parks, recreational open space and playing fields; including secondary schools
Analyte grouping/Analyte	Units	LOR											Levels under Schedule B1 - EIL - Interim Urban	Levels under Schedule B1 - Background EIL	
EA055 Moisture Content															
Moisture Content (dried @ 103°C)	%	1.0	16.0	16.9	12.3	12.9	13.4	18.4	7.9	11.1	9.2	10.6			
EG005T Total Metals by ICP-AES															
Arsenic	mg/kg	5	8	18	10	12	16	10	9	10	13	12	20		200
Cadmium	mg/kg	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	3		40
Chromium	mg/kg	2	14	18	19	13	17	15	6	7	13	12	400 (Chromium III)		200
Copper	mg/kg	5	43	69	35	38	44	36	32	24	32	32	100		2000
Lead	mg/kg	5	509	420	363	257	415	140	93	128	186	193	600		600
Nickel	mg/kg	2	10	14	10	9	15	16	11	7	8	9	60		600
Zinc	mg/kg	5	616	1100	504	629	2010	422	360	615	626	649	200	10-300	14000
EG025T Total Recoverable Mercury by FIHS															
Mercury	mg/kg	0.1	0.2	0.9	<0.1	0.1	0.2	0.2	0.1	<0.1	0.1	0.1			
EP080 BTEX															
Benzene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1		
Toluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
Ethylbenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
meta- & para-Xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
ortho-Xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
EP080 BTEXN															
Sum of BTEX	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1		
Total Xylenes	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1		
Naphthalene	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1		
EP080/071 Total Petroleum Hydrocarbons															
C6 - C9 Fraction	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
C10 - C14 Fraction	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	3065		
C15 - C28 Fraction	mg/kg	100	130	130	<100	<100	<100	<100	<100	<100	<100	<100	3065		
C29 - C36 Fraction	mg/kg	100	140	120	<100	<100	<100	<100	<100	<100	<100	<100	3065		
C10 - C36 Fraction (sum)	mg/kg	50	270	250	<50	<50	<50	540	<50	<50	<50	<50	3065		
EP080/071 Total Recoverable Hydrocarbons - NEPM 2010 Draft															
C6 - C10 Fraction	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
C6 - C10 Fraction minus BTEX (F1)	mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3065		
>C10 - C16 Fraction	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	3065		
>C16 - C34 Fraction	mg/kg	100	230	210	<100	120	140	470	<100	<100	100	100	3065		
>C34 - C40 Fraction	mg/kg	100	<100	<100	<100	<100	<100	140	<100	<100	<100	<100	3065		
>C10 - C40 Fraction (sum)	mg/kg	50	230	210	<50	120	140	610	<50	<50	100	100	3065		
EP080S TPH(V)/BTEX Surrogates															
1,2-Dichloroethane-D4	%	0.1	92.7	86.7	91.3	91.8	85.8	87.9	91.3	90.3	94.4	89.4			
Toluene-D8	%	0.1	102	97.4	97.7	108	97.9	99.9	103	103	105	103			
4-Bromofluorobenzene	%	0.1	89.7	85.1	90.2	93.4	86.7	88.3	89.9	89.8	91.2	89.6			

Matrix:	SOIL	Sample Type:		REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Workgroup:	EB1314646	ALS Sample number:		EB1314646001	EB1314646002	EB1314646003	EB1314646004	EB1314646005	EB1314646006	EB1314646007	EB1314646008	EB1314646009	EB1314646010
Project name/number:	New Farm River Walk Replaceme	Sample date:		18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013	18/06/2013
		Client sample ID (1st):		Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
		Client sample ID (2nd):											
		Site:											
		Purchase Order:											
alyte	CAS Number	Units	LOR										
ntent													
ed @ 103°C)		%	1.0	16.0	16.9	12.3	12.9	13.4	18.4	7.9	11.1	9.2	10.6
s by ICP-AES													
	7440-38-2	mg/kg	5	8	18	10	12	16	10	9	10	13	12
	7440-43-9	mg/kg	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
	7440-47-3	mg/kg	2	14	18	19	13	17	15	6	7	13	12
	7440-50-8	mg/kg	5	43	69	35	38	44	36	32	24	32	32
	7439-92-1	mg/kg	5	509	420	363	257	415	140	93	128	186	193
	7440-02-0	mg/kg	2	10	14	10	9	15	16	11	7	8	9
	7440-66-6	mg/kg	5	616	1100	504	629	2010	422	360	615	626	649
verable Mercury by FIMS													
	7439-97-6	mg/kg	0.1	0.2	0.9	<0.1	0.1	0.2	0.2	0.1	<0.1	0.1	0.1
	71-43-2	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	108-88-3	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	100-41-4	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	108-38-3 106-42-3	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	95-47-6	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
		mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	1330-20-7	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	91-20-3	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
roleum Hydrocarbons													
		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
		mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
		mg/kg	100	130	130	<100	<100	<100	270	<100	<100	<100	<100
		mg/kg	100	140	120	<100	<100	<100	270	<100	<100	<100	<100
		mg/kg	50	270	250	<50	<50	<50	540	<50	<50	<50	<50
coverable Hydrocarbons - NEPM 2010 Draft													
		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
us BTEX (F1)		mg/kg	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
		mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
		mg/kg	100	230	210	<100	120	140	470	<100	<100	100	100
		mg/kg	100	<100	<100	<100	<100	<100	140	<100	<100	<100	<100
um)		mg/kg	50	230	210	<50	120	140	610	<50	<50	100	100
X Surrogates													
	17060-07-0	%	0.1	92.7	86.7	91.3	91.8	85.8	87.9	91.3	90.3	94.4	89.4
	2037-26-5	%	0.1	102	97.4	97.7	108	97.9	99.9	103	103	105	103
e	460-00-4	%	0.1	89.7	85.1	90.2	93.4	86.7	88.3	89.9	89.8	91.2	89.6

Attachment E – ALS Soil Test Analysis

Published on DES Disclosure Log
RTI Act 2009

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EB1314646	Page	: 1 of 7
Amendment	: (Preliminary Report)	Laboratory	: Environmental Division Brisbane
Client	: JOHN HOLLAND GROUP	Contact	: Client Services
Contact	: s.73 Irrelevant information	Address	: 2 Byth Street Stafford QLD Australia 4053
Address	: LEVEL 3 - 1000 ANN STREET FORTITUDE VALLEY QLD 4006	E-mail	: Melbourne.Enviro.Services@alsglobal.com
E-mail	: s.73 Irrelevant@jhg.com.au	Telephone	: +61-3-8549 9600
Telephone	: +61 3867 7000	Facsimile	: +61-3-8549 9601
Facsimile	: +61 3867 7100	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Project	: New Farm River Walk Replacement Project	Date Samples Received	: 18-JUN-2013
Order number	: ---	Issue Date	: 25-JUN-2013 17:09
C-O-C number	: ---	No. of samples received	: 10
Sampler	: s.73 Irrelevant info	No. of samples analysed	: 10
Site	: ---		
Quote number	: EN/056/13		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
s.73 Irrelevant information	Inorganic Coordinator	Brisbane Inorganics
	Inorganic Coordinator	Brisbane Inorganics
	Senior Inorganic Chemist	Brisbane Inorganics
	Senior Organic Chemist	Brisbane Organics

Address 2 Byth Street Stafford QLD Australia 4053 PHONE +61-7-3243 7222 Facsimile +61-7-3243 7218
Environmental Division Brisbane AEN 84 009 936 029 Part of the ALS Group An ALS Limited Company



www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

(Preliminary Report)

Page : 2 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- EG005T(Total Metals by ICP-AES) Samples EB1314646 - 003 shows poor duplicate results due to sample heterogeneity. Confirmed by visual inspection.

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(Preliminary Report)

Page : 3 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Client sampling date / time				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-001	EB1314646-002	EB1314646-003	EB1314646-004	EB1314646-005
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	—	1.0	%	16.0	16.9	12.3	12.9	13.4
EG05T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	18	10	12	16
Cadmium	7440-43-9	1	mg/kg	<1	1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	14	18	19	13	17
Copper	7440-50-8	5	mg/kg	43	69	35	38	44
Lead	7439-92-1	5	mg/kg	509	420	363	257	415
Nickel	7440-02-0	2	mg/kg	10	14	10	9	16
Zinc	7440-66-6	5	mg/kg	616	1100	504	629	2010
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	0.9	<0.1	0.1	0.2
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C15 - C28 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C29 - C36 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C10 - C36 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C16 - C34 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C34 - C40 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C10 - C40 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080: BTEXN								
Sum of BTEX	—	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

(Preliminary Report)

Page : 4 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-001	EB1314646-002	EB1314646-003	EB1314646-004	EB1314646-005
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	92.7	86.7	91.3	91.8	85.8
Toluene-D8	2037-26-5	0.1	%	102	97.4	97.7	108	97.9
4-Bromofluorobenzene	460-00-4	0.1	%	89.7	85.1	90.2	93.4	86.7

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(Preliminary Report)

Page : 5 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

				Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
Client sampling date / time				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-006	EB1314646-007	EB1314646-008	EB1314646-009	EB1314646-010
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	—	1.0	%	18.4	7.9	11.1	9.2	10.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	9	10	13	12
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	15	6	7	13	12
Copper	7440-50-8	5	mg/kg	36	32	24	32	32
Lead	7439-92-1	5	mg/kg	140	93	128	186	193
Nickel	7440-02-0	2	mg/kg	16	11	7	8	9
Zinc	7440-66-6	5	mg/kg	422	360	615	626	649
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	0.1	<0.1	0.1	0.1
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C15 - C28 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C29 - C36 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
C10 - C36 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	—	10	mg/kg	<10	<10	<10	<10	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C16 - C34 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C34 - C40 Fraction	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
>C10 - C40 Fraction (sum)	—	-	-	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP080: BTEXN								
Sum of BTEX	—	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

(Preliminary Report)

Page : 6 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

				Sample 6	Sample 7	Sample 8	Sample 9	Sample 10
				18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00	18-JUN-2013 11:00
Compound	CAS Number	LOR	Unit	EB1314646-006	EB1314646-007	EB1314646-008	EB1314646-009	EB1314646-010
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	87.9	91.3	90.3	94.4	89.4
Toluene-D8	2037-26-5	0.1	%	99.9	103	103	105	103
4-Bromofluorobenzene	460-00-4	0.1	%	88.3	89.9	89.8	91.2	89.6

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Page : 7 of 7
Work Order : EB1314646
Client : JOHN HOLLAND GROUP
Project : New Farm River Walk Replacement Project



Surrogate Control Limits

Sub-Matrix: SOIL

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	52.7	133.7
Toluene-D8	2037-26-5	60.3	131.1
4-Bromofluorobenzene	460-00-4	59.2	126.6

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RTI Act 2009

Attachment F – Brisbane City Council Certificate of Title to the land

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RTI Act 2009

CURRENT TITLE SEARCH

DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 14538199

Search Date: 29/08/2012 12:11

Title Reference: 50323249

Date Created: 31/07/2000

Previous Title: 40025609

REGISTERED OWNER

Dealing No: 707890862 14/07/2004

BRISBANE CITY COUNCIL

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 128032
County of STANLEY Parish of NORTH BRISBANE
Local Government: BRISBANE CITY

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 40025609 (Lot 4 on SP 128032)

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
713597367	HERITGE SITE	30/11/2010 11:14	CURRENT

QUEENSLAND HERITAGE ACT 1992

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

COPYRIGHT THE STATE OF QUEENSLAND (DEPT OF NATURAL RESOURCES AND MINES) [2012]
Requested By: D APPLICATIONS CITEC CONFIRM

Attachment G – Soil Sample Methodology

Ten soil samples were taken, within the eastern end of the site.

Samples were taken from a 20cm soil profile, wearing disposable gloves. The sides of the profile were scraped off by hand to avoid contaminates from digging equipment.

Samples were placed within an eski and immediately taken to the ALS Laboratory for analysis, as per ALS Laboratory sampling procedure.

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Attachment H – ALS Chain of Custody

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RTI Act 2009



CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ Sydney 277 Widdowson Rd, North Ryde NSW 1585
Ph: 02 8786 6555 Fax: 02 8786 6556 Email: sydney@als.com.au

☐ Brisbane 32 Spring Rd, Brisbane QLD 4000
Ph: 07 324 7422 Fax: 07 324 7423 Email: brisbane@als.com.au

☐ Melbourne 2/4 Vieux La Rue, Springvale VIC 3171
Ph: 03 9540 9600 Fax: 03 9540 9601 Email: melbourne@als.com.au

☐ Perth 10 Rod Way, Malaga WA 6060
Ph: 08 9269 7855 Fax: 08 9269 7856 Email: perth@als.com.au

☐ Adelaide 2/1 Birnie Rd, Mawson SA 5095
Ph: 08 8259 0844 Fax: 08 8259 0845 Email: adelaide@als.com.au

CLIENT: John Holland Group-
OFFICE: Howard Smith Wharves (under bridge)
PROJECT: New Farm River Walk Replacement Project
ORDER NUMBER:
PROJECT MANAGER: s.73 Irrelevant information
CONTACT PH: s.73 Irrelevant information
SAMPLER: s.73 Irrelevant information
SAMPLER MOBILE: s.73 Irrelevant information
COC emailed to ALS? (YES / NO)
Email Reports to (will default to PM if no other addresses are listed): s.73 Irrelevant information @jhg.com.au
Email Invoice to (will default to PM if no other addresses are listed): s.73 Irrelevant information

TURNAROUND REQUIREMENTS: ☐ Standard TAT (List due date): 25/6/13
(Standard TAT may be longer for some tests e.g., Ultra Trace Organics)
☐ Non Standard or urgent TAT (List due date):
ALS QUOTE NO.:
COC SEQUENCE NUMBER (Circle)
COC: 1 2 3 4 5 6 7
OF: 1 2 3 4 5 6 7
RECEIVED BY: s.73 Irrelevant information
DATE/TIME: 18/6 1335
RELINQUISHED BY:
DATE/TIME: 18/6 1335

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Test TRH (CG-C40)/BTEXN plus 8 metals

SAMPLE DETAILS MATRIX: Solid(S) Water(W)				CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB, Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (Bald filtered bottle required).										Additional Information	
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL BOTTLES												Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	Sample 1				✓												
2	Sample 2				✓												
3	Sample 3				✓												
4	Sample 4				✓												
5	Sample 5				✓												
6	Sample 6				✓												
7	Sample 7				✓												
8	Sample 8				✓												
9	Sample 9				✓												
10	Sample 10				✓												

Environmental Division
Brisbane

s.73 Irrelevant Work Order

EB1314646



Telephone: +61-7-3243 7222

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VS = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Solids; B = Unpreserved Bag.

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RTI Act 2009

COVER SHEET

☐ Regional Info & Filing (hard copy) ☒ Electronic application received ☒ Regional - Action Required

PaLM Non-DA TEAM - ADMINISTRATION PROCESSING Application for Disposal Permit (Contaminated Land) Checklist	
Department/Office: Waste and Contaminated Land	AR No: AR105212
Project No: 193530	Permit No: CLEB0647817
Ecotrack Application ID reference: 623173	
Client No: 696935	EMR/CLR ID No: 31053
PaLM Contact: Kim Christeson	
Application Details Indicate by Yes ☒	
Applicant Name: Greencap Limited	
Contact Name: s.73 Irrelevant inform	
Site Location Address: Howard Smith Wharves Precinct Boundary St Fortitude Valley	
Lot/Plan: 4 SP128032	
Application Dates	
Date Received: 27/9/17	Application Valid Date: 27/9/17
Due Date: 11/10/17 (10 business days after application deemed valid)	
Application Type: Non-DA Soil Disposal Permit	
Application Checks – Indicate by Yes ☒ Please note: A blank box may indicate an 'INVALID' application	
☒ Part A and Part B application forms supplied and completed ☒ Forms signed and dated ☒ All parts of the forms completed ☒ Letter of acceptance from Landfill, etc.	
WLCA ADMINISTRATION PROCESSING	
Applications are generally received by Email	
☐	SAVE COVER SHEET; ELECTRONIC AND/OR SCANNED HARD COPY FILE PARTS **
☐	LOCATE & ORDER FILE (eDOCS/Records) FILE Reference: ***Refer for eDOCS file path
☐	MOVE FILE TO WLCA OFFICER AND UPDATE eDOCS LOCATION
☐	FORWARD HARD COPY FILE TO WLCA OFFICER LOCATION
APPLICATION ASSESSMENT DECISION	
☐	PRINT DECISION NOTICE AND PERMIT; DELEGATE TO SIGN & SAVE *

☐	POST or EMAIL (if email address provided on application) NOTICE & PERMIT TO APPLICANT/OWNER/LGA
☐	UPDATE ECOTRACK (Decision, Permit Effective Date & Expiry Date; Officer Responsible, Delegate, File Reference, &.Upload Notices)
	➤ EMAIL COPY OF DECISION NOTICE TO: emr.clr.registry@ehp.qld.gov.au
☐	COPY OVER FILES FROM LOCAL DIRECTORY/FOLDER TO eDOCS (** to ***)

****Save to:** "\\chqfile2\groupdir\Environmental Services\Contaminated Land\DISPOSAL PERMITS AND SITE ASSESSMENTS" under the corresponding year; month; project number; as e.g. "Cover Sheet-Ecotrack Permit Reference #"

*****eDOCS save to:** ENVIRONMENTAL MANAGEMENT\CONTAMINATED SITES MANAGEMENT\Notifiable Activities or by Local Government Authority (request file creation using lot/plan description)

☐ For Regional Information & Filing

☒ Regional Action Required

Admin. Office: Contaminated Land Unit, Southern Region

Project No: 193530

Client No: EMR/CLR ID No. 31053

Permit No.

(2,000 cubic Metres)

Ecoaccess Customer Service Unit

CROW No. 54593

Application for Disposal Permit (Contaminated Land) Checklist

☒	Part A and Part B application forms supplied and complete.
☒	Forms signed and dated
☒	All parts of the forms completed
☒	Letter of acceptance from Landfill etc 7.2.11 (Transpacific Industries)
☒	TPR approval received (if one is appointed for the site (Contaminated Land Unit to action).

Applicant Name: BRISBANE CITY COUNCIL

Contact Name: Carl Downthwaite

Location: 175 Bowen Terrace, Fortitude Valley (Lot 4 on SP128032)

Third Party Reviewer: N/A
(If applicable)

Co-ordinator: Geoff Dunbar

Date Received:

18 / 2 / 11

Due Date

(10 business days after application deemed valid):

___ / ___ / ___

Date Application Deemed Valid:

18 / 2 / 11

Due Date (TPR)

(5 business days after application deemed valid)

___ / ___ / ___

Record of consultation

Applicant name:

Date	Person Contacted:		Phone No:	
	Information Requested:			
	Response:			
	Ecoaccess CSU Staff:			

Date	Person Contacted:		Phone No:	
	Information Requested:			
	Response:			
	Ecoaccess CSU Staff:			

Date	Person Contacted:		Phone No:	
	Information Requested:			
	Response:			
	Ecoaccess CSU Staff:			

Date	Person Contacted:		Phone No:	
	Information Requested:			
	Response:			
	Ecoaccess CSU Staff:			

FOR INTERNAL USE ONLY

DEPARTMENT OF ENVIRONMENT AND RESOURCE MANAGEMENT

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1291909
2011

EMR Site Id: 31053

21 February

This response relates to a search request received for the site:

Lot: 4 Plan: SP128032

SEARCH RESULT

The site you have searched is a lot resulting from the amalgamation of the following sites, which are included on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR), as indicated below. Further details for these sites are available by contacting this Agency.

Lot	Plan	
2	B3333	EMR
2	RP44680	EMR
2	RP8616	EMR
4	RP41821	EMR
21	RP8614	EMR
22	RP8614	EMR

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3330 5685.

Darryl Byers
Registrar, Contaminated Land Unit

To execute a new search, select the "Back" button on the browser twice



RECEIVED

18 FEB 2011

PaLM

Dedicated to a better Brisbane

Phone direct: 07 302 74726

Fax direct: 07 333 40071

Email: carl.dowthwaite@brisbane.qld.gov.au

Brisbane Infrastructure

City Design

Level 1 Green Square 505 St Pauls Terrace

Fortitude Valley Qld 4006

GPO Box 1434 Brisbane Qld 4001

T 07 3027 4748 F 07 3334 0212

7 February 2011

Ecoaccess Customer Service Unit
Department of Environment and Resource Management
PO Box 15155
CITY EAST 4002

Re: HOWARD SMITH WHARF, FORTITUDE VALLEY CONTAMINATED SOIL DISPOSAL PERMIT

Council is currently undertaking an upgrade of the Howard Smith Wharf site at 175 Bowen Terrace, Fortitude Valley (Lot 4 SP128032). The site is currently listed on the Environmental Management Register (EMR) as a Hazardous Contaminant Site. In undertaking this upgrade an estimated 2000m³ of material has been removed from the adjacent rock face and excavated from the sites floor before being stockpiled onsite.

Due to the homogenous nature of the material a reduced number of samples (27) were submitted to the laboratory for analysis. Analysis of the stockpiled material recorded elevated metal concentrations of Zinc (3000mg/kg), Lead (420mg/kg), Copper (930mg/kg) and Arsenic (31mg/kg). These results are above the Ecological Investigation Levels detailed within Table 5A – Soil Investigation Levels of the National Environmental Protection Measure (1999).

Council has approval to dispose of the material at the Transpacific New Chum Landfill Facility and is submitting the attached application for a Contaminated Soil Disposal Permit.

I trust this information is sufficient, should you have any questions or require further information please contact Carl Dowthwaite on 3027 4726.

Regards ^{s.7}
s.73 Irrelevant in

Greg McPherson
Principal Engineer
Contaminated Land Services - City Design

Published on DES Disclosure Log
RTI Act 2009

AH PALM. - Ria George
Minaal House

Hi Ria,

Can u please
add an ecotrack.
etc. If u have
any problems please
contact me on

3350 5687

22-166

s.73 Irrelevant

Attachments:

Part A: General Details for all Applications

Part B: Application for Contaminated Soil Disposal Permit

Attachment A: Written Acceptance from Transpacific Landfill Facility and Certificate of Title;

Attachment B: Sample Location Map and Certificate of Title;

Attachment C: Tabulated Analysis Results;

Attachment D: Soil Analysis Lab Results; and

Attachment E: TCLP Lab Results.

Published on DES Disclosure Log
RTI Act 2009

Application Form

Part A

General details for all applications

OFFICIAL USE ONLY

DATE RECEIVED

FILE REF

PROJECT REF

COMPLETE FORM

☐

ENTERED BY [SIGNATURE]

DATE

RECEIPTING DETAILS ONLY

DATE RECEIPTED

RECEIPT NUMBER

AMOUNT RECEIVED

\$

PROCESSED BY (INITIALS AND NAME)

GUIDE

- The applicant is the person intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the address of a person and cannot be a post office box.

If more than one applicant as part of a partnership, complete the "Joint applicant details" form and attach to this PART A form.

Important information for applicants

This form asks for general applicant details and a description of the proposed project and any associated activities. The completed form must be submitted together with relevant activity specific [Part B] forms and any other associated forms included in your application kit.

Specific details must accompany this form to enable your application to be processed. The guide provided will help you complete your application correctly. If you have any difficulties completing the form, contact the Ecoaccess Customer Service Unit desk on 1300 368 326. Please number all attachments alphabetically (e.g. 'Attachment A').

(Commercial and confidential information must be marked clearly. If subsequent activities are added to the project, you will be required to resubmit this application with details of the additional activity).

Tick relevant boxes below if the applicant(s) are:

- ☐ an individual or sole trader
- ☐ individuals in a partnership
- ☐ individual(s) acting on behalf of an unincorporated organisation

→ **Go to Section 1**

- ☒ an incorporated company
- ☐ an incorporated association
- ☐ a statutory authority
- ☐ a body politic

→ **Go to Section 2**

1. Individual applicant(s) details⁽¹⁾

APPLICANT'S FULL NAME		TITLE	DATE OF BIRTH
REGISTERED ADDRESS			POST CODE
TELEPHONE	FACSIMILE	E-MAIL	
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)			POST CODE



Application form – Part A
General details for all applications

Guardian details (if applicable)

A parent or legal guardian must complete the following details if an applicant is under 18 years of age.

GUARDIAN'S FULL NAME	DATE OF BIRTH
GUARDIAN'S REGISTERED ADDRESS	POST CODE
GUARDIAN'S SIGNATURE	DATE

→ **Go to Section 3**

2. Applicant details

2. The applicant is the registered legal entity (not a business trading name) intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the registered business address of the company making the application and cannot be a post office box.

Enter the Australian Business Number (ABN); or the Australian Company Number (ACN) of the incorporated company; or the Association Number (AN) of the incorporated association; or the title and section of the legislation that gives the statutory corporation its legal status.

REGISTERED LEGAL ENTITY NAME Brisbane City Council		
TRADING NAME (IF APPLICABLE)		
REGISTERED ADDRESS GPO Box 1434, Brisbane, QLD Green Square South Tower 505 St Pauls Terrace, Fortitude Valley		POST CODE 4001
TELEPHONE 3027 4726	FASCIMILE 3334 0071	E-MAIL/WEBSITE
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) as above		POST CODE
ABN/ACN/AN OR TITLE AND SECTION OF LEGISLATION 72002765795		

Application form – Part A
General details for all applications

Principal contact or person in charge details

PRINCIPAL CONTACT/PERSON IN CHARGE FULL NAME Carl Dowthwaite		TITLE Mr
POSITION IN CORPORATION Environmental Officer		
TELEPHONE 3027 4726	FASCIMILE 3334 0071	E-MAIL/WEBSITE
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) as above		POST CODE

Authorised signatory

The authorised signatory is the person authorised to sign an application on behalf of a corporation and in doing so declares that the corporation will be bound by the conditions associated with the granting of the licence or permit.

AUTHORIZED SIGNATORY FULL NAME Greg McPherson	TITLE Mr
POSITION IN CORPORATION Senior Environmental Engineer	

3. Project details

Pre-lodgement

Have you previously attended a pre-lodgement meeting or submitted a pre-lodgement form for this project?

☒ NO ☐ YES

PROJECT NUMBER (IF APPLICABLE)

Project description

Briefly describe the proposed activities, works, development or management. Attach a separate sheet if there is insufficient space below.

DESCRIPTION

Application for a Contaminated Soil Disposal Permit for stockpiled material removed from the adjacent rock face at Howard Smith Wharf.

Application form – Part A
General details for all applications

Approvals required

Please list all Part B application forms you are attaching to this form.

<p>APPLICATION FORMS</p> <p>Application for Contaminated Soil Disposal Permit</p>

Project site

Where will the activities be conducted? Provide the street address, real property description(s) of the land(s) in which the project is located and local government area. If you require more space, attach a separate sheet.

This information should at least provide enough details to allow an EPA or QPWS officer to locate the site of the proposal.

<p>STREET ADDRESS</p> <p>Howard Smith Wharf</p> <p>175 Bowen Terrace, Fortitude Valley, 4006</p>	
<p>LOT</p> <p>4</p>	<p>PLAN</p> <p>SP 128032</p>
<p>LOCAL GOVERNMENT AREA</p> <p>Brisbane City</p>	

If possible, provide a specific location within a protected area, a property name or an attached map with the project area clearly delineated. Also include the map name/details.

Give as much information as possible to accurately locate your activity, for example maps with contextual or boundary lines on plan or GPS boundary co-ordinates.

<p>SPECIFIC LOCATION/PROPERTY NAME</p>
<p>PROTECTED AREA</p>
<p>GEOGRAPHICAL CO-ORDINATES</p>

Geographical co-ordinates can include northing/easting, longitude/latitude.

Attachments

List all attached documents, including maps containing information supporting this application in the space below. If there are no attachments mark "N/A."

Label all attachments alphabetically (e.g. 'Attachment A')

<p>ATTACHMENTS (LABEL ALL ATTACHMENTS ALPHABETICALLY – E.G. 'ATTACHMENT A')</p> <p>1. Cover Letter; 2. Application for Contaminated Soil Disposal Permit; Attachment A: Written Acceptance from Transpacific New Chum Landfill and Certificate of Title; Attachment B: Sample Location Map and Certificate of Title; Attachment C: Tabulated Analysis Results; Attachment D: Soil Analysis Lab Results; Attachment E: TCLP Lab Results.</p>

Application form – Part A
General details for all applications

4. Applicant's certification

Note: If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Freedom of Information Act 1992* and the *Evidence Act 1977*.

APPLICANT(1) SIGNATURE	s.73 I
	s.73 Irrelevant informa

Joint applicant signatures (if applicable)

APPLICANT(2) SIGNATURE

APPLICANT(3) SIGNATURE

APPLICANT(4) SIGNATURE

APPLICANT(5) SIGNATURE

DATE

Complete the following checklist.

- ☒ Application form(s) signed and completed
- ☒ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information attached (e.g. maps)

Please return your completed application kit to:

Ecoaccess Customer Service Unit
Environmental Protection Agency

PO Box 15155
City East
Queensland 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
Email: eco.access@epa.qld.gov.au

Application form

Environmental Protection Act

Application for contaminated soil disposal permit – Part B

This form sets out the specific details required for an application under s424 of the Environmental Protection Act 1994 for a permit to dispose of contaminated soil offsite. A contaminated soil disposal permit is required before you can proceed lawfully with your project and any associated activities.

1. Specific information requirements

Please provide details of site(s) from which soil is to be removed

If you require additional space, attach the information requested and make reference to that sheet here.

FULL STREET ADDRESS OF SITE(S) 175 Bowen Terrace, Fortitude Valley	
LOT(S) 4	PLAN(S) SP128032
LOCAL GOVERNMENT AREA Brisbane City	

Has a site investigation report been submitted to the Environmental Protection Agency (EPA)?

☒ NO

☐ YES

EPA PROJECT REFERENCE OR FILE NUMBER? (IF KNOWN)

Please provide a copy of the current Certificate of Title to the land

☒ ENCLOSED WITH THIS APPLICATION

☐ SUBMITTED PREVIOUSLY TO EPA AS PART OF A SITE INVESTIGATION / VALIDATION REPORT

Has the site been used for a notifiable activity as per Schedule 3 of the *Environmental Protection Act 1994*?

☐ NO

☒ YES (PLEASE SPECIFY) HAZARDOUS CONTAMINANT SITE

Is the site presently being used for a notifiable activity?

☒ NO

☐ YES (PLEASE SPECIFY)

Is the site currently on the Environmental Management Register or Contaminated Land Register?

☒ YES ☐ NO (IF NO, YOU MUST SUBMIT A NOTIFICATION FORM TO THE EPA)

Has contaminated soil been removed from this site in the past?

☒ NO (GO TO QUESTION 19) ☐ YES

Was approval for off-site disposal obtained?

☐ NO ☐ YES

What is the approximate volume (in cubic metres) of soil to be removed (allowing for excavation bulking)?

2000 m3

How did you calculate the volume of soil to be removed?

Estimation using the depth, width and length of excavation area

What are the dates between which soil will be moved to the disposal location?

FROM DATE:
10/02/2011

TO DATE:
10/07/2011

(In accordance with Section 424(7), permits will only be valid between dates stipulated in the disposal permit)

Justification of request?

State reason(s) why on-site treatment or management is not proposed

The material was removed from the adjacent rockface and excavated from fill areas onsite. There is no location where the excavated material could be reused on site.

Will validation sampling be undertaken to confirm that all soil has been removed?

☒ NO ☐ YES

Provide a description of the contamination present in the soil to be removed?

Analysis results show Zinc, Lead and Copper to be above NEPM Ecological Investigation Levels.

Please tick relevant boxes to indicate that you have attached the following information with this application?

- ☒ Scaled plan showing soil sampling locations and contamination source(s)
- ☒ Tabulation of soil analysis results
- ☒ Toxicity Characteristic Leaching Procedure (TCLP) results from relevant soil samples
- ☒ Laboratory reports and sample receipt advices for all soil analysis
- ☒ Explanation of location and depths of samples, how samples were collected, and how sample integrity was maintained

Written acceptance from owner of site receiving contaminated soil?

- (a) ☐ Soil being removed to a local government administered landfill

NAME AND ADDRESS OF LOCAL GOVERNMENT ADMINISTERED LANDFILL

- ☐ **Written acceptance from local government authority is enclosed**

- (b) ☒ Soil being removed not going to a local government-administered landfill

- ☐ Copy of Certificate of Title for the disposal location site

LOT(S) 268	PLAN(S) SP103913
FULL STREET ADDRESS OF SITE(S) 100 Chum Street, New Chum, 4303	

- ☒ Written acceptance from registered owner of site is enclosed with this application

Declaration

Note: If you do not tell the truth in this application you may be liable for prosecution under the relevant legislation.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge. I understand that it is an offence under s480 of the *Environmental Protection Act 1994* to give to the administering authority or an authorised person a document containing information that I know to be false, misleading or incomplete in a material particular; and
- I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Freedom of Information Act 1992* and the *Evidence Act 1977*.

Application form – Part B
Contaminated soil disposal permit

APPLICANT'S NAME Greg McPherson	PRINT NAME OF APPOINTED SIGNATORY (IF APPLICABLE)
APPLICANT'S SIGNATURE / APPOINTED SIGNATORY s.73 Irrelevant information	DATE 7/02/2010

Applicant checklist

- ☒ Application form(s) completed and signed
- ☒ Supporting information attached (if applicable)

Please return your completed application kit to:

Ecoaccess Customer Service Unit
Environmental Protection Agency
PO Box 15155
City East QLD 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
eco.access@epa.qld.gov.au

You may apply for an exemption from disclosing information contained in a document submitted, or proposed to be submitted with this application (see Section 564 of the *Environmental Protection Act 1994*).

Attachment A

Published on DES Disclosure Log
RTI Act 2009



7th Feb 2011

Water and Environment
Brisbane City Council - City Design

Solid Waste Division

Transpacific Waste Management
ABN: 55 120 175 635

100 Chum Street
New Chum QLD 4303
PO Box 384
BOOVAL FAIR QLD 4304
Phone: + 07 3816 2166
Fax: + 07 3816 3055

ATTENTION: ERIK DEKKER
SENIOR ENVIRONMENTAL OFFICER

Dear Erik,

RE: ACCEPTANCE OF CONTAMINATED SOIL – Brisbane River (below story bridge) 175
Bowen Terrace, Fortitude Valley 4006 (Lot 4 on SP 128032).

Following your email correspondence and provision of laboratory results, I consider we are able to accept 2000 m³ of soil for disposal to our **unlined landfill cell** from Brisbane River (below story bridge) 175 Bowen Terrace, Fortitude Valley 4006 (Lot 4 on SP 128032).

A condition of this acceptance letter being issued is that the applicant **must** inform Landfill Management of the dates that the contaminated soil will be transported to the landfill.

We consider that this material will fall within the acceptance criteria of Transpacific Waste Management's DERM Licence. Our DERM licence number is ENRE00102604 and our lot on plan is Lot 268 on SP103913. If you require any additional information please do not hesitate to contact the undersigned on (07) 3816 2166.

Yours sincerely,

s.73 Irrelevant info

Environmental/Technical Manager

Head Office: 1st Floor 159 Coronation Drive Milton QLD 4064 Australia
PO Box 1824 Milton BC QLD 4064 Australia
Telephone: + 61 7 3367 7800 | Facsimile: + 61 7 3367 7899 | www.transpacific.com.au

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 9389217

Search Date: 07/06/2010 14:29

Title Reference: 50213117

Date Created: 01/04/1998

Previous Title: 50089779
50089780

REGISTERED OWNER

Dealing No: 710871395 03/08/2007

TRANSPACIFIC WASTE MANAGEMENT PTY LTD
A.C.N. 120 175 635

ESTATE AND LAND

Estate in Fee Simple

LOT 268 SURVEY PLAN 103913
County of STANLEY Parish of GOODNA
Local Government: IPSWICH

For depth restrictions refer to Plan SP 103913

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 10031168 (POR 220)
Deed of Grant No. 10033067 (POR 219)
Deed of Grant No. 10046194 (Lot 218 on CP SL10024)
Deed of Grant No. 10046196 (POR 217)
Deed of Grant No. 10105131 (POR 264)
Deed of Grant No. 10116209 (POR 265)
Deed of Grant No. 10116210 (POR 268)
Deed of Grant No. 10118171 (POR 269)
Deed of Grant No. 17761240 (Lot 299 on CP 892008)
Deed of Grant No. 18789219 (Lot 65 on CP 816935)
2. EASEMENT IN GROSS No 601143346 (D953347) 10/11/1970
BURDENING THE LAND
TO THE QUEENSLAND ELECTRICITY GENERATING BOARD
OVER EASEMENTS B AND C ON RP126793
3. TRANSFER No 703630291 14/10/1999 at 08:19
EASEMENT IN GROSS: 601143346 (D953347)
QUEENSLAND ELECTRICITY TRANSMISSION CORPORATION LIMITED
A.C.N. 078 849 233
4. EASEMENT IN GROSS No 602211776 (D953349) 10/11/1970
burdening the land
QUEENSLAND ELECTRICITY COMMISSION
over
EASEMENT B ON RP126945
5. TRANSFER No 703675243 05/11/1999 at 07:49
EASEMENT IN GROSS: 602211776 (D953349)
QUEENSLAND ELECTRICITY TRANSMISSION CORPORATION LIMITED
A.C.N. 078 849 233

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 9389217

Search Date: 07/06/2010 14:29

Title Reference: 50213117

Date Created: 01/04/1998

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

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Requested By: External Supervisor

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Attachment B

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RTI Act 2009



MAILING ADDRESS:
GPO Box 1434
Brisbane Qld 4001

Green Square
South Tower
505 St. Paul's Terrace
Fortitude Valley Qld 4006

Telephone: (07) 3027 5550
Facsimile: (07) 3334 0225

E-mail: citydesign@brisbane.qld.gov.au



Dedicated to a better Brisbane
City Design
Brisbane City Council

LEGEND



Stockpile Area

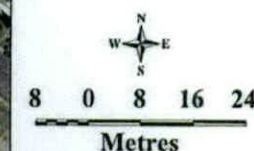


Sample Location

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Printed 7 Feb 11

Project Number	NA	Revision	1	Prepared	CD	Checked	CD
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Workspace NA

Project **Howard Smith Wharf**

Title **Sample Location Map**

From: Carl Douthwaite
To: Anderson, Candice
Date: 7/02/2011 9:26:28 am
Subject: Urgent Historical Title Search

Candice,

Could you please undertake a Historical Title Search for 175 Bowen Terrace, Fortitude Valley (Lot 4 SP128032).

Scan and send to me today thanks

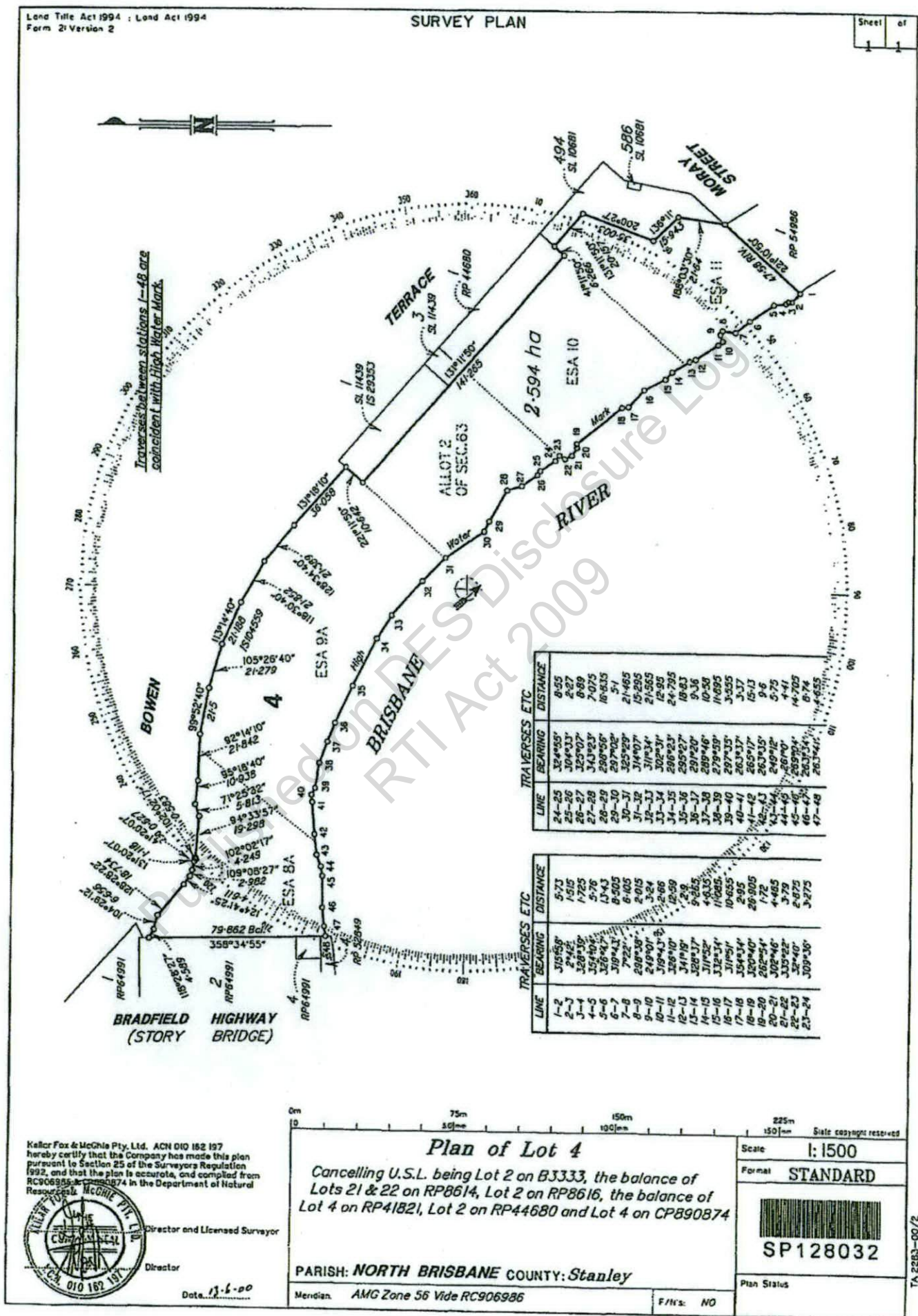
Regards,

Carl Douthwaite
Environmental Officer

Water and Environment
Brisbane City Council - City Design
Ph: 3027 4726 | Fax: 3334 0071
Email: carl.douthwaite@brisbane.qld.gov.au

CC: Dekker, Erik

Published on DES Disclosure Log
RTI Act 2009



HISTORICAL TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 10906021
Search Date: 07/02/2011 10:12

Title Reference: 50323249
Date Created: 31/07/2000

Previous Title: 40025609

REGISTERED OWNER

Dealing No: 707890862 14/07/2004

BRISBANE CITY COUNCIL

TRANSFER No 707890862
BRISBANE CITY COUNCIL
Lodged at 13:58 on 14/07/2004

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 128032
County of STANLEY Parish of NORTH BRISBANE
Local Government: BRISBANE CITY

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 40025609 (Lot 4 on SP 128032)

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
713597367	HERITGE SITE	30/11/2010 11:14	CURRENT

QUEENSLAND HERITAGE ACT 1992

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Historical Title Search **

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Requested By: External Supervisor

HISTORICAL TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 10906038
Search Date: 07/02/2011 10:12

Title Reference: 40025609
Date Created: 28/07/2000

This Title Has Been Fully Cancelled.

[Form 1.1] Title Reference: 40025609

QUEENSLAND

DEED OF GRANT OF LAND

Land Act 1994

Elizabeth the Second, by the Grace of God, Queen of Australia,
and Her other Realms and Territories, Head of the Commonwealth:-

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

WE, with the advice of the Executive Council, under the Land Act 1994,
grant in fee simple all that parcel of land described in Schedule 1 to the
person described in Schedule 2,

SUBJECT TO the reservations and conditions specified, and such other
reservations and conditions as may be contained in and declared by the
laws of the State.

Specified Reservations -

- (a) All minerals (as defined by the Mineral Resources Act 1989) on and below the surface of the land
- (b) The right of access for the purpose of searching for and working any mines (as defined by the Mineral Resources Act 1989) in any part of the land
- (c) All petroleum (as defined by the Petroleum Act 1923) on and below the surface of the land
- (d) All rights of access for the purpose of searching for and for the operations of obtaining petroleum in any part of the land, and all rights of way for access and for pipelines and other purposes requisite for obtaining and conveying petroleum in the event of petroleum being obtained in any part of the said land
- (e) All quarry material (as defined by the Forestry Act 1959) on and below the surface of the land

Specified Conditions - Nil

IN TESTIMONY WHEREOF, WE have caused this OUR grant to be sealed with the Seal of the State of Queensland.

WITNESS Our Trusty and Well-beloved His Excellency Major General Peter Arnison, Officer of the Order of Australia, Governor in and over the State of Queensland and its Dependencies, in the Commonwealth of Australia at Government House, Brisbane, in Queensland aforesaid, this 27th day of July, in the 49th Year of Our Reign and in the year of Our Lord 2000.

HISTORICAL TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 10906038

Search Date: 07/02/2011 10:12

Title Reference: 40025609

Date Created: 28/07/2000

REGISTERED OWNER

THE STATE OF QUEENSLAND (REPRESENTED BY THE DEPARTMENT
OF PUBLIC WORKS - GLR 10891)

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 128032
County of STANLEY Parish of NORTH BRISBANE
Local Government: BRISBANE CITY

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. REQUEST FOR INDEFEASIBLE TITLE No 704219938
An Indefeasible Title is requested for the land
Lodged at 10:05 on 28/07/2000
2. Rights and interests reserved to the Crown by
Deed of Grant No. 40025609 (Lot 4 on SP 128032)

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Historical Title Search **

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Requested By: External Supervisor

[Form 1.1]

Title Reference: 40025609



QUEENSLAND

DEED OF GRANT OF LAND

Land Act 1994



40025609

Elizabeth the Second, by the Grace of God, Queen of Australia,
and Her other Realms and Territories, Head of the Commonwealth:-

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

WE, with the advice of the Executive Council, under the Land Act 1994, grant in fee simple all that parcel of land described in Schedule 1 to the person described in Schedule 2.

SUBJECT TO the reservations and conditions specified, and such other reservations and conditions as may be contained in and declared by the laws of the State.

Specified Reservations -

- (a) All minerals (as defined by the Mineral Resources Act 1989) on and below the surface of the land
- (b) The right of access for the purpose of searching for and working any mines (as defined by the Mineral Resources Act 1989) in any part of the land
- (c) All petroleum (as defined by the Petroleum Act 1923) on and below the surface of the land
- (d) All rights of access for the purpose of searching for and for the operations of obtaining petroleum in any part of the land, and all rights of way for access and for pipelines and other purposes requisite for obtaining and conveying petroleum in the event of petroleum being obtained in any part of the said land
- (e) All quarry material (as defined by the Forestry Act 1959) on and below the surface of the land

Specified Conditions - Nil

IN TESTIMONY WHEREOF, WE have caused this OUR grant to be sealed with the Seal of the State of Queensland.

WITNESS Our Trusty and Well-beloved His Excellency, Major General Peter Arnison, Officer of the Order of Australia, Governor in and over the State of Queensland and its Dependencies, in the Commonwealth of Australia at Government House, Brisbane, in Queensland aforesaid, this 27th day of July, in the 49th Year of Our Reign and in the year of Our Lord 2000.

SCHEDULE 1 - DESCRIPTION OF LAND

Lot/Plan:	County	Parish
4/SP128032	STANLEY	NORTH BRISBANE
Area 2.594 Ha.		

s.73 Irrelevant information

Note: For details of description, dimensions and marking of boundaries refer to plan mentioned above.

SCHEDULE 2 - GRANTEE

THE STATE OF QUEENSLAND (REPRESENTED BY THE DEPARTMENT OF PUBLIC WORKS - GLR 10891)

Attachment C

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Table 1: Summary of Soil Analysis Results

ANALYTE	Units	LOR	Assessment Guidelines		HSW1	HSW2	HSW3	HSW4	HSW5	HSW7	HSW9	HSW11	HSW13	HSW15	HSW17	HSW19	HSW21	HSW23	HSW24	HSW27	HSW29	HSW31	HSW32	HSW33	HSW34	HSW35	HSW36	HSW37	HSW38	HSW39	HSW40	
			ETIL	HIL "A"																												
Moisture Content																																
Moisture Content (dried @ 103°C)	%	1.0	-	-	20	21	17	19	16	18	17	17	25	13	19	18	22	20	20	2.1	4.2	8.5	5.8	20	19	18	18	12	11	6.8	15	
Total Metals																																
Arsenic	mg/kg	5	20	100	15	7.7	11	8.4	14	28	8.6	6.9	31	11	7	6.9	8.9	7.1	10	9.7	12	5.9	16	13	7.7	6.7	9.2	16	8	< 2	15	
Cadmium	mg/kg	1	3	20	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8		
Chromium	mg/kg	2	-	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	8	5.1	6.2	< 5	< 5	< 5	< 5		
Copper	mg/kg	5	60	1000	24	17	25	21	23	23	20	16	930	47	16	14	25	27	22	27	13	9.1	23	32	25	29	910	9.7	10	19	32	
Lead	mg/kg	5	600	300	100	120	130	140	120	120	420	120	110	400	110	94	140	140	160	170	83	85	140	180	180	170	160	41	25	15	320	
Nickel	mg/kg	2	60	600	8.2	< 5	7	5.4	5.6	17	5.3	< 5	< 5	5.7	< 5	< 5	7.3	5.6	< 5	9.5	< 5	< 5	5.4	6.6	7.6	11	19	6	8.6	9.5	11	
Zinc	mg/kg	5	200	7000	580	500	1000	690	730	920	810	700	470	950	430	350	810	880	740	650	160	190	540	1500	1600	1900	1500	310	160	89	3000	
Mercury	mg/kg	0.1	1	15	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1	0.8	0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	
Polynuclear Aromatic Hydrocarbons																																
Acenaphthylene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Acenaphthylene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Anthracene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Benzo(a)anthracene	mg/kg	0.5	-	-	0.2	-	0.2	-	0.2	-	0.5	-	< 0.1	-	0.2	-	0.2	-	0.2	-	0.2	-	0.1	-	0.2	-	0.2	-	-	< 0.1	-	-
Benzo(a)pyrene	mg/kg	0.5	-	1	0.1	-	0.2	-	0.1	-	0.4	-	< 0.1	-	0.2	-	0.1	-	0.1	-	0.2	-	-	0.2	-	0.2	-	0.2	-	< 0.1	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	0.2	-	0.2	-	0.2	-	0.4	-	< 0.1	-	0.2	-	0.1	-	0.2	-	0.2	-	-	0.2	-	0.2	-	0.3	-	< 0.1	-	-
Benzo(g,h,i)perylene	mg/kg	0.5	-	-	0.1	-	0.2	-	0.2	-	0.3	-	< 0.1	-	0.1	-	< 0.1	-	0.1	-	0.2	-	-	0.2	-	0.2	-	0.2	-	< 0.1	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	0.2	-	< 0.1	-	0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	0.1	-	-	< 0.1	-	-	
Chrysene	mg/kg	0.5	-	-	< 0.1	-	0.2	-	0.1	-	0.4	-	< 0.1	-	0.2	-	0.1	-	0.1	-	0.1	-	-	0.1	-	0.2	-	-	< 0.1	-	-	
Dibenz(a,h)anthracene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Fluoranthene	mg/kg	0.5	-	-	0.1	-	0.3	-	0.2	-	0.8	-	< 0.1	-	0.2	-	0.2	-	0.2	-	0.2	-	-	0.2	-	0.3	-	-	< 0.1	-	-	
Fluorene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	0.1	-	0.2	-	0.1	-	0.3	-	< 0.1	-	0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	0.1	-	0.2	-	-	< 0.1	-	-	
Naphthalene	mg/kg	0.5	-	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	< 0.1	-	-	< 0.1	-	-	
Phenanthrene	mg/kg	0.5	-	-	< 0.1	-	0.1	-	< 0.1	-	0.6	-	< 0.1	-	0.1	-	< 0.1	-	< 0.1	-	< 0.1	-	-	< 0.1	-	0.1	-	-	< 0.1	-	-	
Pyrene	mg/kg	0.5	-	-	0.1	-	0.3	-	0.2	-	0.6	-	< 0.1	-	0.2	-	0.2	-	0.2	-	0.2	-	-	0.2	-	0.2	-	-	< 0.1	-	-	
Total PAH	mg/kg	-	-	20	0.9	-	2	-	1.3	-	4.5	-	< 0.1	-	1.6	-	0.9	-	1.1	-	1.3	-	-	1.4	-	2	-	-	< 0.1	-	-	

Notes:

ETIL	Urban Ecological Investigation Threshold Levels (NEPM, 1999)
HIL "A"	Health Based Investigation Level - "Standard Residential with Garden Accessible Soil" (NEPM 1999)
-	Not Available/Not Relevant

Attachment D

Published on DES Disclosure Log
RTI Act 2009

Brisbane City Council- City Design (BI)
GPO Box 2567
Brisbane
QLD 4001

Attention: Carl Douthwaite

Report
Client Reference
Received Date

288896-S
Howard Smith Wharf Disposal Permit
Feb 01, 2011

Certificate of Analysis



NATA Accredited
Laboratory Number 1261

The tests covered by this document have been performed in accordance with NATA and ISO/IEC 17025 and are traceable to national standards of measurement.
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Client Sample ID			HSW1	HSW2	HSW3	HSW4
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50221	11-FE50222	11-FE50223	11-FE50224
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 0.1	-	< 0.1	-
Acenaphthylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Benz(a)anthracene	0.1	mg/kg	0.2	-	0.2	-
Benzo(a)pyrene	0.1	mg/kg	0.1	-	0.2	-
Benzo(b)fluoranthene	0.1	mg/kg	0.2	-	0.2	-
Benzo(g,h,i)perylene	0.1	mg/kg	0.1	-	0.2	-
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	-	0.1	-
Chrysene	0.1	mg/kg	< 0.1	-	0.2	-
Dibenz(a,h)anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Fluoranthene	0.1	mg/kg	0.1	-	0.3	-
Fluorene	0.1	mg/kg	< 0.1	-	< 0.1	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	0.1	-	0.2	-
Naphthalene	0.1	mg/kg	< 0.1	-	< 0.1	-
Phenanthrene	0.1	mg/kg	< 0.1	-	0.1	-
Pyrene	0.1	mg/kg	0.1	-	0.3	-
Total PAH	0.1	mg/kg	0.90	-	2.0	-
p-Terphenyl-d14 (surr.)	1	%	93	-	116	-
2-Fluorobiphenyl (surr.)	1	%	104	-	128	-
% Moisture						
	0.1	%	20	21	17	19
Heavy Metals (7)						
Arsenic	2	mg/kg	15	7.7	11	8.4
Cadmium	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	24	17	25	21
Lead	5	mg/kg	100	120	130	140
Nickel	5	mg/kg	8.2	< 5	7.0	5.4
Zinc	5	mg/kg	580	500	1000	690
Heavy Metals						
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			HSW5	HSW7	HSW9	HSW11
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50225	11-FE50227	11-FE50229	11-FE50231
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 0.1	-	< 0.1	-
Acenaphthylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Benz(a)anthracene	0.1	mg/kg	0.2	-	0.5	-
Benzo(a)pyrene	0.1	mg/kg	0.1	-	0.4	-
Benzo(b)fluoranthene	0.1	mg/kg	0.2	-	0.4	-
Benzo(g,h,i)perylene	0.1	mg/kg	0.2	-	0.3	-
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	-	0.2	-
Chrysene	0.1	mg/kg	0.1	-	0.4	-
Dibenz(a,h)anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Fluoranthene	0.1	mg/kg	0.2	-	0.8	-
Fluorene	0.1	mg/kg	< 0.1	-	< 0.1	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	0.1	-	0.3	-
Naphthalene	0.1	mg/kg	< 0.1	-	< 0.1	-
Phenanthrene	0.1	mg/kg	< 0.1	-	0.6	-
Pyrene	0.1	mg/kg	0.2	-	0.6	-
Total PAH	0.1	mg/kg	1.3	-	4.5	-
p-Terphenyl-d14 (surr.)	1	%	104	-	88	-
2-Fluorobiphenyl (surr.)	1	%	120	-	103	-
% Moisture	0.1	%	16	18	17	17
Heavy Metals (7)						
Arsenic	2	mg/kg	14	28	8.6	6.9
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	23	23	20	18
Lead	5	mg/kg	120	120	420	120
Nickel	5	mg/kg	5.6	17	5.3	< 5
Zinc	5	mg/kg	730	920	810	700
Heavy Metals						
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			HSW13	HSW15	HSW17	HSW19
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50233	11-FE50235	11-FE50237	11-FE50239
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 1	-	< 0.1	-
Acenaphthylene	0.1	mg/kg	< 1	-	< 0.1	-
Anthracene	0.1	mg/kg	< 1	-	< 0.1	-
Benz(a)anthracene	0.1	mg/kg	< 1	-	0.2	-
Benzo(a)pyrene	0.1	mg/kg	< 1	-	0.2	-
Benzo(b)fluoranthene	0.1	mg/kg	< 1	-	0.2	-
Benzo(g,h,i)perylene	0.1	mg/kg	< 1	-	0.1	-
Benzo(k)fluoranthene	0.1	mg/kg	< 1	-	0.1	-
Chrysene	0.1	mg/kg	< 1	-	0.2	-
Dibenz(a,h)anthracene	0.1	mg/kg	< 1	-	< 0.1	-
Fluoranthene	0.1	mg/kg	< 1	-	0.2	-
Fluorene	0.1	mg/kg	< 1	-	< 0.1	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	< 1	-	0.1	-
Naphthalene	0.1	mg/kg	< 1	-	< 0.1	-
Phenanthrene	0.1	mg/kg	< 1	-	0.1	-
Pyrene	0.1	mg/kg	< 1	-	0.2	-
Total PAH	0.1	mg/kg	< 1	-	1.6	-
p-Terphenyl-d14 (surr.)	1	%	77	-	98	-
2-Fluorobiphenyl (surr.)	1	%	93	-	111	-
% Moisture	0.1	%	25	13	19	18
Heavy Metals (7)						
Arsenic	2	mg/kg	31	11	7.0	6.9
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	930	47	16	14
Lead	5	mg/kg	110	400	110	94
Nickel	5	mg/kg	< 5	5.7	< 5	< 5
Zinc	5	mg/kg	470	950	430	350
Heavy Metals						
Mercury	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1

Client Sample ID			HSW21	HSW23	HSW24	HSW27
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50241	11-FE50243	11-FE50244	11-FE50247
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 0.1	-	< 0.1	-
Acenaphthylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Benz(a)anthracene	0.1	mg/kg	0.2	-	0.2	-
Benzo(a)pyrene	0.1	mg/kg	0.1	-	0.1	-
Benzo(b)fluoranthene	0.1	mg/kg	0.1	-	0.2	-
Benzo(g,h,i)perylene	0.1	mg/kg	< 0.1	-	0.1	-
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	-	< 0.1	-
Chrysene	0.1	mg/kg	0.1	-	0.1	-
Dibenz(a,h)anthracene	0.1	mg/kg	< 0.1	-	< 0.1	-
Fluoranthene	0.1	mg/kg	0.2	-	0.2	-
Fluorene	0.1	mg/kg	< 0.1	-	< 0.1	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	< 0.1	-	< 0.1	-
Naphthalene	0.1	mg/kg	< 0.1	-	< 0.1	-
Phenanthrene	0.1	mg/kg	< 0.1	-	< 0.1	-
Pyrene	0.1	mg/kg	0.2	-	0.2	-
Total PAH	0.1	mg/kg	0.90	-	1.1	-
p-Terphenyl-d14 (surr.)	1	%	96	-	98	-
2-Fluorobiphenyl (surr.)	1	%	112	-	111	-
% Moisture	0.1	%	22	20	20	2.1
Heavy Metals (7)						
Arsenic	2	mg/kg	8.9	7.1	10	9.7
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	25	27	22	27
Lead	5	mg/kg	140	140	160	170
Nickel	5	mg/kg	7.3	5.6	< 5	9.5
Zinc	5	mg/kg	810	880	740	650
Heavy Metals						
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			HSW29	HSW31	HSW32	HSW33
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50249	11-FE50251	11-FE50252	11-FE50253
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 0.1	-	-	< 0.1
Acenaphthylene	0.1	mg/kg	< 0.1	-	-	< 0.1
Anthracene	0.1	mg/kg	< 0.1	-	-	< 0.1
Benz(a)anthracene	0.1	mg/kg	0.1	-	-	0.2
Benzo(a)pyrene	0.1	mg/kg	0.2	-	-	0.2
Benzo(b)fluoranthene	0.1	mg/kg	0.2	-	-	0.2
Benzo(g,h,i)perylene	0.1	mg/kg	0.2	-	-	0.2
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	-	-	< 0.1
Chrysene	0.1	mg/kg	0.1	-	-	0.1
Dibenz(a,h)anthracene	0.1	mg/kg	< 0.1	-	-	< 0.1
Fluoranthene	0.1	mg/kg	0.2	-	-	0.2
Fluorene	0.1	mg/kg	< 0.1	-	-	< 0.1
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	0.1	-	-	0.1
Naphthalene	0.1	mg/kg	< 0.1	-	-	< 0.1
Phenanthrene	0.1	mg/kg	< 0.1	-	-	< 0.1
Pyrene	0.1	mg/kg	0.2	-	-	0.2
Total PAH	0.1	mg/kg	1.3	-	-	1.4
p-Terphenyl-d14 (surr.)	1	%	89	-	-	96
2-Fluorobiphenyl (surr.)	1	%	103	-	-	113
% Moisture	0.1	%	4.2	8.5	5.8	20
Heavy Metals (7)						
Arsenic	2	mg/kg	12	5.9	16	13
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.6
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	13	9.1	23	32
Lead	5	mg/kg	83	85	140	180
Nickel	5	mg/kg	< 5	< 5	5.4	6.6
Zinc	5	mg/kg	160	190	540	1500
Heavy Metals						
Mercury	0.1	mg/kg	< 0.1	0.1	0.1	0.1

Client Sample ID			HSW34	HSW35	HSW36	HSW37
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50254	11-FE50255	11-FE50256	11-FE50257
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	-	< 0.1	-	-
Acenaphthylene	0.1	mg/kg	-	< 0.1	-	-
Anthracene	0.1	mg/kg	-	< 0.1	-	-
Benz(a)anthracene	0.1	mg/kg	-	0.2	-	-
Benzo(a)pyrene	0.1	mg/kg	-	0.2	-	-
Benzo(b)fluoranthene	0.1	mg/kg	-	0.3	-	-
Benzo(g,h,i)perylene	0.1	mg/kg	-	0.2	-	-
Benzo(k)fluoranthene	0.1	mg/kg	-	0.1	-	-
Chrysene	0.1	mg/kg	-	0.2	-	-
Dibenz(a,h)anthracene	0.1	mg/kg	-	< 0.1	-	-
Fluoranthene	0.1	mg/kg	-	0.3	-	-
Fluorene	0.1	mg/kg	-	< 0.1	-	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	-	0.2	-	-
Naphthalene	0.1	mg/kg	-	< 0.1	-	-
Phenanthrene	0.1	mg/kg	-	0.1	-	-
Pyrene	0.1	mg/kg	-	0.2	-	-
Total PAH	0.1	mg/kg	-	2.0	-	-
p-Terphenyl-d14 (surr.)	1	%	-	95	-	-
2-Fluorobiphenyl (surr.)	1	%	-	110	-	-
% Moisture	0.1	%	19	18	18	12
Heavy Metals (7)						
Arsenic	2	mg/kg	7.7	6.7	9.2	16
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chromium	5	mg/kg	8.0	5.1	5.2	< 5
Copper	5	mg/kg	25	29	910	9.7
Lead	5	mg/kg	180	170	160	41
Nickel	5	mg/kg	7.6	11	19	6.0
Zinc	5	mg/kg	1600	1900	1500	310
Heavy Metals						
Mercury	0.1	mg/kg	0.8	0.1	0.1	< 0.1

Client Sample ID			HSW38	HSW39	HSW40
Sample Matrix			Soil	Soil	Soil
mgt-LabMark Sample No.			11-FE50258	11-FE50259	11-FE50260
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.1	mg/kg	< 0.1	-	-
Acenaphthylene	0.1	mg/kg	< 0.1	-	-
Anthracene	0.1	mg/kg	< 0.1	-	-
Benz(a)anthracene	0.1	mg/kg	< 0.1	-	-
Benzo(a)pyrene	0.1	mg/kg	< 0.1	-	-
Benzo(b)fluoranthene	0.1	mg/kg	< 0.1	-	-
Benzo(g,h,i)perylene	0.1	mg/kg	< 0.1	-	-
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	-	-
Chrysene	0.1	mg/kg	< 0.1	-	-
Dibenz(a,h)anthracene	0.1	mg/kg	< 0.1	-	-
Fluoranthene	0.1	mg/kg	< 0.1	-	-
Fluorene	0.1	mg/kg	< 0.1	-	-
Indeno(1,2,3-cd)pyrene	0.1	mg/kg	< 0.1	-	-
Naphthalene	0.1	mg/kg	< 0.1	-	-
Phenanthrene	0.1	mg/kg	< 0.1	-	-
Pyrene	0.1	mg/kg	< 0.1	-	-
Total PAH	0.1	mg/kg	< 0.1	-	-
p-Terphenyl-d14 (surr.)	1	%	92	-	-
2-Fluorobiphenyl (surr.)	1	%	107	-	-
% Moisture	0.1	%	11	6.8	15
Heavy Metals (7)					
Arsenic	2	mg/kg	8.0	< 2	15
Cadmium	0.5	mg/kg	< 0.5	< 0.5	0.8
Chromium	5	mg/kg	< 5	< 5	< 5
Copper	5	mg/kg	10	19	32
Lead	5	mg/kg	25	15	320
Nickel	5	mg/kg	8.6	9.5	11
Zinc	5	mg/kg	160	89	3000
Heavy Metals					
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Holding Time
Polycyclic Aromatic Hydrocarbons	Oakleigh	Feb 02, 2011	14 Day
- Method: USEPA 8270C Polycyclic Aromatic Hydrocarbons			
% Moisture	Oakleigh	Feb 02, 2011	14 Day
- Method: Method 102 - ANZECC - % Moisture			
Heavy Metals (7)	Oakleigh	Feb 02, 2011	6 Month
- Method: USEPA 6010B Heavy Metals & USEPA 7470/71 Mercury			
Heavy Metals	Oakleigh	Feb 02, 2011	28 Day
- Method: USEPA 6020 Heavy Metals & USEPA 7470/71 Mercury			

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RTI Act 2009

Company Name: Brisbane City Council- City Design (BI)
Address: GPO Box 2567
Brisbane
QLD 4001

Order No.:
Report #: 288896
Phone: 07 3027 4725
Fax: 07 3334 0071

Received: Feb 1, 2011 12:00
Due: Feb 3, 2011 06:30
Priority: 2 Day
Contact name: Carl Douthwaite

Client Job No.: Howard Smith Wharf Disposal Permit

mgt-LabMark Client Manager: s.73 Irrel

Sample Detail					% Moisture	HOLD	Mercury	Polycyclic Aromatic Hydrocarbons	Heavy Metals (7)
Laboratory where analysis is conducted									
Oakleigh Laboratory - NATA Site #1261					X	X	X	X	X
Thornleigh Laboratory - NATA Site #18217									
Asquith Laboratory - NATA Site #13535									
Clayton Laboratory - NATA Site #1645									
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
HSW1	Jan 27, 2011		Soil	M11-FE50221	X		X	X	X
HSW2	Jan 27, 2011		Soil	M11-FE50222	X		X		X
HSW3	Jan 27, 2011		Soil	M11-FE50223	X		X	X	X
HSW4	Jan 27, 2011		Soil	M11-FE50224	X		X		X
HSW5	Jan 27, 2011		Soil	M11-FE50225	X		X	X	X
HSW6	Jan 27, 2011		Soil	M11-FE50226		X			
HSW7	Jan 27, 2011		Soil	M11-FE50227	X		X		X
HSW8	Jan 27, 2011		Soil	M11-FE50228		X			
HSW9	Jan 27, 2011		Soil	M11-FE50229	X		X	X	X

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Sample Detail					% Moisture	HOLD	Mercury	Polycyclic Aromatic Hydrocarbons	Heavy Metals (7)
Laboratory where analysis is conducted									
Oakleigh Laboratory - NATA Site #1261					X	X	X	X	X
Thornleigh Laboratory - NATA Site #18217									
Asquith Laboratory - NATA Site #13535									
Clayton Laboratory - NATA Site #1645									
HSW10	Jan 27, 2011		Soil	M11-FE50230		X			
HSW11	Jan 27, 2011		Soil	M11-FE50231	X		X		X
HSW12	Jan 27, 2011		Soil	M11-FE50232		X			
HSW13	Jan 27, 2011		Soil	M11-FE50233	X		X	X	X
HSW14	Jan 27, 2011		Soil	M11-FE50234		X			
HSW15	Jan 27, 2011		Soil	M11-FE50235	X		X		X
HSW16	Jan 27, 2011		Soil	M11-FE50236		X			
HSW17	Jan 27, 2011		Soil	M11-FE50237	X		X	X	X
HSW18	Jan 27, 2011		Soil	M11-FE50238		X			
HSW19	Jan 27, 2011		Soil	M11-FE50239	X		X		X

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Sample Detail					% Moisture	HOLD	Mercury	Polycyclic Aromatic Hydrocarbons	Heavy Metals (7)
Laboratory where analysis is conducted									
Oakleigh Laboratory - NATA Site #1261					X	X	X	X	X
Thornleigh Laboratory - NATA Site #18217									
Asquith Laboratory - NATA Site #13535									
Clayton Laboratory - NATA Site #1645									
HSW20	Jan 27, 2011		Soil	M11-FE50240		X			
HSW21	Jan 27, 2011		Soil	M11-FE50241	X		X	X	X
HSW22	Jan 27, 2011		Soil	M11-FE50242		X			
HSW23	Jan 27, 2011		Soil	M11-FE50243	X		X		X
HSW24	Jan 27, 2011		Soil	M11-FE50244	X		X	X	X
HSW25	Jan 27, 2011		Soil	M11-FE50245		X			
HSW26	Jan 27, 2011		Soil	M11-FE50246		X			
HSW27	Jan 27, 2011		Soil	M11-FE50247	X		X		X
HSW28	Jan 27, 2011		Soil	M11-FE50248		X			
HSW29	Jan 27, 2011		Soil	M11-FE50249	X		X	X	X

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Sample Detail					% Moisture	HOLD	Mercury	Polycyclic Aromatic Hydrocarbons	Heavy Metals (7)
Laboratory where analysis is conducted									
Oakleigh Laboratory - NATA Site #1261					X	X	X	X	X
Thornleigh Laboratory - NATA Site #18217									
Asquith Laboratory - NATA Site #13535									
Clayton Laboratory - NATA Site #1645									
HSW30	Jan 27, 2011		Soil	M11-FE50250		X			
HSW31	Jan 27, 2011		Soil	M11-FE50251	X		X		X
HSW32	Jan 27, 2011		Soil	M11-FE50252	X		X		X
HSW33	Jan 27, 2011		Soil	M11-FE50253	X		X	X	X
HSW34	Jan 27, 2011		Soil	M11-FE50254	X		X		X
HSW35	Jan 27, 2011		Soil	M11-FE50255	X		X	X	X
HSW36	Jan 27, 2011		Soil	M11-FE50256	X		X		X
HSW37	Jan 27, 2011		Soil	M11-FE50257	X		X		X
HSW38	Jan 27, 2011		Soil	M11-FE50258	X		X	X	X
HSW39	Jan 27, 2011		Soil	M11-FE50259	X		X		X

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Sample Detail					% Moisture	HOLD	Mercury	Polycyclic Aromatic Hydrocarbons	Heavy Metals (7)
Laboratory where analysis is conducted									
Oakleigh Laboratory - NATA Site #1261					X	X	X	X	X
Thornleigh Laboratory - NATA Site #18217									
Asquith Laboratory - NATA Site #13535									
Clayton Laboratory - NATA Site #1645									
HSW40	Jan 27, 2011		Soil	M11-FE50260	X		X		X
HSW41	Jan 27, 2011		Soil	M11-FE50261		X			
HSW42	Jan 27, 2011		Soil	M11-FE50262		X			

mgt-LabMark Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis.
7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001)

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as an RPD

UNITS

mg/kg: milligrams per Kilogram	mg/L: milligrams per litre
µg/l: micrograms per litre	ppm: Parts per million
ppb: Parts per billion	%: Percentage
org/100ml: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units

TERMS

Dry:	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR:	Limit Of Reporting.
SPIKE:	Addition of the analyte to the sample and reported as percentage recovery.
RPD:	Relative Percent Difference between two Duplicate pieces of analysis.
LCS:	Laboratory Control Sample - reported as percent recovery.
CRM:	Certified Reference Material - reported as percent recovery.
Method Blank:	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate:	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate:	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate:	A second piece of analysis from a sample outside of the client's batch of samples but run within the laboratory batch of analysis.
Batch SPIKE:	Spike recovery reported on a sample from outside of the client's batch of samples but run within the laboratory batch of analysis.
USEPA:	U.S Environmental Protection Agency
APHA:	American Public Health Association
ASLP:	Australian Standard Leaching Procedure (AS4439.3)
TCLP:	Toxicity Characteristic Leaching Procedure
COC:	Chain Of Custody
SRA:	Sample Receipt Advice

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-20%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data below the LOR with a positive RPD
- eg: LOR 0.1, Result A = <0.1 (raw data is 0.02) & Result B = <0.1 (raw data is 0.03) resulting in a RPD of 40% calculated from the raw data.

Quality Control Results

Sample, Test, Result Reference	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Codes
Method Blank						
Polycyclic Aromatic Hydrocarbons USEPA 8270C Polycyclic A						
Acenaphthene	mg/kg	< 0.1		0.1	Pass	
Acenaphthylene	mg/kg	< 0.1		0.1	Pass	
Anthracene	mg/kg	< 0.1		0.1	Pass	
Benz(a)anthracene	mg/kg	< 0.1		0.1	Pass	
Benzo(a)pyrene	mg/kg	< 0.1		0.1	Pass	
Benzo(b)fluoranthene	mg/kg	< 0.1		0.1	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.1		0.1	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.1		0.1	Pass	
Chrysene	mg/kg	< 0.1		0.1	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.1		0.1	Pass	
Fluoranthene	mg/kg	< 0.1		0.1	Pass	
Fluorene	mg/kg	< 0.1		0.1	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1		0.1	Pass	
Naphthalene	mg/kg	< 0.1		0.1	Pass	
Phenanthrene	mg/kg	< 0.1		0.1	Pass	
Pyrene	mg/kg	< 0.1		0.1	Pass	
Method Blank						
Heavy Metals (7) USEPA 6010B Heavy Metals & USEPA 7470/7						
Arsenic	mg/kg	< 2		2	Pass	
Cadmium	mg/kg	< 0.5		0.5	Pass	
Chromium	mg/kg	< 5		5	Pass	
Copper	mg/kg	< 5		5	Pass	
Lead	mg/kg	< 5		5	Pass	
Nickel	mg/kg	< 5		5	Pass	
Zinc	mg/kg	< 5		5	Pass	
Method Blank						
Heavy Metals USEPA 6020 Heavy Metals & USEPA 7470/71 Me						
Mercury	mg/kg	< 0.1		0.1	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons USEPA 8270C Polycyclic A						
		Result 1				
Acenaphthene	%	100		70-130	Pass	
Acenaphthylene	%	103		70-130	Pass	
Anthracene	%	109		70-130	Pass	
Benz(a)anthracene	%	93		70-130	Pass	
Benzo(a)pyrene	%	108		70-130	Pass	
Benzo(b)fluoranthene	%	99		70-130	Pass	
Benzo(g,h,i)perylene	%	108		70-130	Pass	
Benzo(k)fluoranthene	%	103		70-130	Pass	
Chrysene	%	103		70-130	Pass	
Dibenz(a,h)anthracene	%	120		70-130	Pass	
Fluoranthene	%	93		70-130	Pass	
Fluorene	%	105		70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	108		70-130	Pass	
Naphthalene	%	100		70-130	Pass	
Phenanthrene	%	107		70-130	Pass	
Pyrene	%	95		70-130	Pass	
LCS - % Recovery						
Heavy Metals (7) USEPA 6010B Heavy Metals & USEPA 7470/7						
		Result 1				
Arsenic	%	112		80-120	Pass	
Cadmium	%	95		80-120	Pass	
Chromium	%	90		80-120	Pass	
Nickel	%	91		80-120	Pass	
LCS - % Recovery						
Heavy Metals USEPA 6020 Heavy Metals & USEPA 7470/71 Me						
		Result 1				
Mercury	%	103		75-125	Pass	
[Duplicate of 11-FE50221]						
Polycyclic Aromatic Hydrocarbons						
		Result 1	Result 2	RPD		
Acenaphthene	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Acenaphthylene	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Anthracene	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Benz(a)anthracene	mg/kg	0.2	0.1	6	30%	Pass
Benzo(a)pyrene	mg/kg	0.1	0.1	6	30%	Pass

Sample, Test, Result Reference	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Codes
Benzo(b)fluoranthene	mg/kg	0.2	0.1	15	30%	Pass	
Benzo(g,h,i)perylene	mg/kg	0.1	0.2	3	30%	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.1	< 0.1	8	30%	Pass	
Chrysene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Fluoranthene	mg/kg	0.1	0.1	4	30%	Pass	
Fluorene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	2	30%	Pass	
Naphthalene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Phenanthrene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Pyrene	mg/kg	0.1	0.1	2	30%	Pass	
[Duplicate of 11-FE50221]							
Heavy Metals (7)		Result 1	Result 2	RPD			
Arsenic	mg/kg	15	9.8	42	30%	Fail	Q15
Cadmium	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chromium	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	mg/kg	24	22	8	30%	Pass	
Lead	mg/kg	100	130	25	30%	Pass	
Nickel	mg/kg	8.2	5	48	30%	Fail	Q15
Zinc	mg/kg	580	490	15	30%	Pass	
[Duplicate of 11-FE50221]							
Heavy Metals		Result 1	Result 2	RPD			
Mercury	mg/kg	< 0.1	< 0.1	19	30%	Pass	
[Duplicate of 11-FE50237]							
Heavy Metals (7)		Result 1	Result 2	RPD			
Arsenic	mg/kg	7	8	13	30%	Pass	
Cadmium	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chromium	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	mg/kg	16	17	7	30%	Pass	
Lead	mg/kg	110	110	7	30%	Pass	
Nickel	mg/kg	< 5	5.9	40	30%	Fail	Q15
Zinc	mg/kg	430	430	1	30%	Pass	
[Duplicate of 11-FE50237]							
Heavy Metals		Result 1	Result 2	RPD			
Mercury	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
[Duplicate of 11-FE50254]							
Heavy Metals (7)		Result 1	Result 2	RPD			
Arsenic	mg/kg	7.7	7.7	<1	30%	Pass	
Cadmium	mg/kg	< 0.5	< 0.5	46	30%	Fail	Q15
Chromium	mg/kg	8	< 5	100	30%	Fail	Q15
Copper	mg/kg	25	23	6	30%	Pass	
Lead	mg/kg	180	160	13	30%	Pass	
Nickel	mg/kg	7.6	6.1	22	30%	Pass	
Zinc	mg/kg	1600	1300	18	30%	Pass	
[Duplicate of 11-FE50254]							
Heavy Metals		Result 1	Result 2	RPD			
Mercury	mg/kg	0.8	0.2	100	30%	Fail	
[Duplicate of 11-FE50255]							
Polycyclic Aromatic Hydrocarbons		Result 1	Result 2	RPD			
Acenaphthene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Acenaphthylene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Anthracene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Benz(a)anthracene	mg/kg	0.2	0.2	3	30%	Pass	
Benzo(a)pyrene	mg/kg	0.2	0.2	4	30%	Pass	
Benzo(b)fluoranthene	mg/kg	0.3	0.2	18	30%	Pass	
Benzo(g,h,i)perylene	mg/kg	0.2	0.2	1	30%	Pass	
Benzo(k)fluoranthene	mg/kg	0.1	0.1	1	30%	Pass	
Chrysene	mg/kg	0.2	0.2	6	30%	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Fluoranthene	mg/kg	0.3	0.2	15	30%	Pass	
Fluorene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	0.2	0.2	4	30%	Pass	
Naphthalene	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Phenanthrene	mg/kg	0.1	0.1	1	30%	Pass	
Pyrene	mg/kg	0.2	0.2	11	30%	Pass	
[Spike of 11-FE50221] - % Recovery							

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
Polycyclic Aromatic Hydrocarbons		Result 1					
Acenaphthene	%	121			70 - 130	Pass	
Acenaphthylene	%	122			70 - 130	Pass	
Anthracene	%	117			70 - 130	Pass	
Benz(a)anthracene	%	116			70 - 130	Pass	
Benzo(a)pyrene	%	115			70 - 130	Pass	
Benzo(b)fluoranthene	%	119			70 - 130	Pass	
Benzo(g,h,i)perylene	%	98			70 - 130	Pass	
Benzo(k)fluoranthene	%	107			70 - 130	Pass	
Chrysene	%	123			70 - 130	Pass	
Dibenz(a,h)anthracene	%	97			70 - 130	Pass	
Fluoranthene	%	113			70 - 130	Pass	
Fluorene	%	125			70 - 130	Pass	
Indeno(1,2,3-cd)pyrene	%	95			70 - 130	Pass	
Naphthalene	%	114			70 - 130	Pass	
Phenanthrene	%	119			70 - 130	Pass	
Pyrene	%	114			70 - 130	Pass	
[Spike of 11-FE50221] - % Recovery							
Heavy Metals (7)		Result 1					
Arsenic	%	82			75 - 125	Pass	
Cadmium	%	90			75 - 125	Pass	
Chromium	%	82			75 - 125	Pass	
Copper	%	102			75 - 125	Pass	
Lead	%	80			75 - 125	Pass	
Nickel	%	75			75 - 125	Pass	
[Spike of 11-FE50221] - % Recovery							
Heavy Metals		Result 1					
Mercury	%	90			70 - 130	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	No
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code Description

Q15 The RPD reported passes mgt-LabMark's Acceptance Criteria as stipulated in AS-POL-002. Refer to Glossary Page of this report for further details

Authorised By

s.73 Irrelevant information

s.73 Irrelevant in

NATA Signatory

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

mgt-LabMark shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall mgt-LabMark be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Attachment E

Published on DES Disclosure Log
RTI Act 2009

Brisbane City Council- City Design (BI)
GPO Box 2567
Brisbane
QLD 4001

Attention: Carl Douthwaite

Report 288922-S
Client Reference Howard Smith Wharf Disposal Permit - ASLP
Received Date Feb 01, 2011

Certificate of Analysis



NATA Accredited
Laboratory Number 1261

The tests covered by this document have been performed in accordance with NATA and ISO/IEC 17025 and are traceable to national standards of measurement.
This document shall not be reproduced, except in full.

Client Sample ID			HSW1-26	HSW27-32	HSW33-42
Sample Matrix			ASLP - pH 5.0	ASLP - pH 5.0	ASLP - pH 5.0
mgt-LabMark Sample No.			11-FE50481	11-FE50482	11-FE50483
Date Sampled			Jan 27, 2011	Jan 27, 2011	Jan 27, 2011
Test/Reference	LOR	Unit			
% Moisture	0.1	%	20	5.8	17
Heavy Metals (7)					
Arsenic	0.01	mg/L	< 0.01	< 0.01	< 0.01
Cadmium	0.01	mg/L	< 0.01	< 0.01	< 0.01
Chromium	0.01	mg/L	< 0.01	< 0.01	< 0.01
Copper	0.01	mg/L	0.01	0.02	0.01
Lead	0.01	mg/L	0.21	0.08	0.16
Nickel	0.01	mg/L	0.01	< 0.01	0.02
Zinc	0.01	mg/L	6.0	2.3	13
Australian Standard Leaching Procedure (ASLP)					
Leachate Fluid		comment	1.0	1.0	1.0
pH (ASLP - off)	0.1	units	5.3	5.2	5.2
pH (Leachate fluid)	0.1	units	5.0	5.0	5.0
Heavy Metals					
Mercury	0.001	mg/L	< 0.001	< 0.001	< 0.001

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Holding Time
% Moisture - Method: Method 102 - ANZECC - % Moisture	Oakleigh	Feb 03, 2011	14 Day
Heavy Metals (7) - Method: USEPA 6010B Heavy Metals & USEPA 7470/71 Mercury	Oakleigh	Feb 03, 2011	6 Month
Heavy Metals - Method: USEPA 6020 Heavy Metals & USEPA 7470/71 Mercury	Oakleigh	Feb 03, 2011	28 Day

Published on DES Disclosure Log
RTI Act 2009

Company Name: Brisbane City Council- City Design (BI)
Address: GPO Box 2567
Brisbane
QLD 4001

Order No.:
Report #: 288922
Phone: 07 3027 4725
Fax: 07 3334 0071

Received: Feb 1, 2011 12:00
Due: Feb 3, 2011 06:30
Priority: 2 Day
Contact name: Carl Dowthwaite

Client Job No.: Howard Smith Wharf Disposal Permit - ASLP

mgt-LabMark Client Manager: s.73 Irrelevant

Sample Detail					% Moisture	Mercury	Heavy Metals (7)	Australian Standard Leaching Procedure (ASLP)
Laboratory where analysis is conducted								
Oakleigh Laboratory - NATA Site #1261					X	X	X	X
Thornleigh Laboratory - NATA Site #18217								
Asquith Laboratory - NATA Site #13535								
Clayton Laboratory - NATA Site #1645								
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
HSW1-26	Jan 27, 2011		ASLP - pH 5.0	M11-FE50481	X	X	X	X
HSW27-32	Jan 27, 2011		ASLP - pH 5.0	M11-FE50482	X	X	X	X
HSW33-42	Jan 27, 2011		ASLP - pH 5.0	M11-FE50483	X	X	X	X

mgt-LabMark Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis.
7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001)

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as an RPD

UNITS

mg/kg: milligrams per Kilogram	mg/L: milligrams per litre
µg/l: micrograms per litre	ppm: Parts per million
ppb: Parts per billion	%: Percentage
org/100ml: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units

TERMS

Dry:	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR:	Limit Of Reporting.
SPIKE:	Addition of the analyte to the sample and reported as percentage recovery.
RPD:	Relative Percent Difference between two Duplicate pieces of analysis.
LCS:	Laboratory Control Sample - reported as percent recovery.
CRM:	Certified Reference Material - reported as percent recovery.
Method Blank:	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate:	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate:	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate:	A second piece of analysis from a sample outside of the client's batch of samples but run within the laboratory batch of analysis.
Batch SPIKE:	Spike recovery reported on a sample from outside of the client's batch of samples but run within the laboratory batch of analysis.
USEPA:	U.S Environmental Protection Agency
APHA:	American Public Health Association
ASLP:	Australian Standard Leaching Procedure (AS4439.3)
TCLP:	Toxicity Characteristic Leaching Procedure
COC:	Chain Of Custody
SRA:	Sample Receipt Advice

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-20%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data below the LOR with a positive RPD
- eg: LOR 0.1, Result A = <0.1 (raw data is 0.02) & Result B = <0.1 (raw data is 0.03) resulting in a RPD of 40% calculated from the raw data.

Quality Control Results

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
Method Blank							
Heavy Metals (7) USEPA 6010B Heavy Metals & USEPA 7470/71							
Arsenic	mg/L	< 0.01			0.01	Pass	
Cadmium	mg/L	< 0.01			0.01	Pass	
Chromium	mg/L	< 0.01			0.01	Pass	
Copper	mg/L	< 0.01			0.01	Pass	
Lead	mg/L	< 0.01			0.01	Pass	
Nickel	mg/L	< 0.01			0.01	Pass	
Zinc	mg/L	< 0.01			0.01	Pass	
Method Blank							
Heavy Metals USEPA 6020 Heavy Metals & USEPA 7470/71 Mer							
Mercury	mg/L	< 0.001			0.001	Pass	
LCS - % Recovery							
Heavy Metals (7) USEPA 6010B Heavy Metals & USEPA 7470/71		Result 1					
Arsenic	%	97			80-120	Pass	
Cadmium	%	97			80-120	Pass	
Chromium	%	97			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	97			80-120	Pass	
Nickel	%	98			80-120	Pass	
Zinc	%	100			80-120	Pass	
LCS - % Recovery							
Heavy Metals USEPA 6020 Heavy Metals & USEPA 7470/71 Mer		Result 1					
Mercury	%	86			75-125	Pass	
[Duplicate of 11-FE00310 - BATCH]							
Heavy Metals (7)		Result 1	Result 2	RPD			
Arsenic	mg/L	0.024	0.025	6.3	30%	Pass	
Cadmium	mg/L	< 0.01	< 0.01	39	30%	Fail	Q15
Chromium	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Copper	mg/L	0.021	0.021	1.4	30%	Pass	
Lead	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Nickel	mg/L	< 0.01	< 0.01	4.9	30%	Pass	
Zinc	mg/L	0.57	0.59	2	30%	Pass	
[Duplicate of 11-FE00903 - BATCH]							
Heavy Metals		Result 1	Result 2	RPD			
Mercury	mg/L	< 0.001	< 0.001	<1	30%	Pass	
[Spike of 11-FE00310 - BATCH] - % Recovery							
Heavy Metals (7)		Result 1					
Arsenic	%	96			75 - 125	Pass	
Cadmium	%	90			75 - 125	Pass	
Chromium	%	94			75 - 125	Pass	
Copper	%	90			75 - 125	Pass	
Lead	%	91			75 - 125	Pass	
Nickel	%	90			75 - 125	Pass	
Zinc	%	98			75 - 125	Pass	
[Spike of 11-FE00903 - BATCH] - % Recovery							
Heavy Metals		Result 1					
Mercury	%	98			70 - 130	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	No
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code Description

Q15 The RPD reported passes mgt-LabMark's Acceptance Criteria as stipulated in AS-POL-002. Refer to Glossary Page of this report for further details

Authorised By

s.73 Irrelevant information

s.73 Irrelevant i

NATA Signatory

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

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Mortleman Amy

From: Carl Dowthwaite [Carl.Dowthwaite@brisbane.qld.gov.au]
Sent: Wednesday, 9 February 2011 10:47 AM
To: Johns Allen
Cc: Mortleman Amy
Subject: Howard Smith Wharf - Disposal Permit

Attachments: W4_Howard_Smith_Wharf_Soil_Disposal_Permit_cd_2011 02 07.pdf



W4_Howard_Smith
_Wharf_Soil_Dis...

Allen,

Please process ASAP.

Thanks,

Carl Dowthwaite
Environmental Officer

Water and Environment
Brisbane City Council - City Design
Ph: 3027 4726 | Fax: 3334 0071
Email: carl.dowthwaite@brisbane.qld.gov.au

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Please direct all enquiries to the message author.

☐ Regional Information & Filing

☒ Regional Action Required

Admin. Office: Contaminated Land Unit, Southern Region

Project No: 330380

Client No: 306596

EMR/CLR ID No: 31053

Permit No: CLEA 00046609

Ecoaccess Customer Service Unit

CROW No: 14197

Application for Assessment of a Site Investigation Report (Contaminated Land) Checklist

Date Received:

01/10/09

Date Application Deemed Valid:

17/11/09

Due Date (20 Business Days
After Application Deemed
Valid):

14/12/09

Due Date for report that has had
a Third Party Review (5 Business
Days after received): This applies
to sites requesting removal from
the Register.

(If TPR recommends an SMP refer
to Contam Land ASAP!)

Due Date for Decision of IPA Application
(20 Business Days):

Third Party Reviewer:

Applicant Name: Brisbane City Council Contact: Greg McPherson

Location: 5 Boundary St Brisbane Coordinator: Nathan Sivil

Receipt details: Fees correct ☒ N/A ☐

Receipt No: Date:/...../2009

Amount Paid \$ 2096.00

Receipt sent to client Yes ☒ No ☐

Payment Method: 2 payments

Cheque ☒ EFT ☒ Cash ☐ Credit ☐

Cheque No: 293639

Drawer (if other than the applicant):

COST CENTRE/CODE:

Client has paid \$96 is this required? If not could you
arrange a refund.
Regards Denise

Record of consultation

Applicant name:

2110	Date	Person Contacted:		Phone No:	
	Information Requested: Requires \$96.00 \$2000 paid - need receipt				
	Response: documents forwarded				
	Ecoaccess CSU Staff:		Nathan Siu		

	Date	Person Contacted:		Phone No:	
	Information Requested:				
	Response:				
	Ecoaccess CSU Staff:				

	Date	Person Contacted:		Phone No:	
	Information Requested:				
	Response:				
	Ecoaccess CSU Staff:				

	Date	Person Contacted:		Phone No:	
	Information Requested:				
	Response:				
	Ecoaccess CSU Staff:				

Department of Environment & Resource
 Management (Environmental Protection)
 160 ANN ST, BRISBANE
 PO Box 15155
 CITY EAST, QLD, 4002
 ABN: 87221158786

COPY

Tax Invoice/ Receipt

Tax Invoice Number: 1400031766

Receipt Number: 1400031766

Tax Invoice Date: 11/11/2009

Date Printed: 11/11/2009

Contact Details

Contact: Christopher Watts

Email: Chris.Watts@ssa.qld.gov.au

Payment Information

Additional Identifier:	Head Office - CSQ	BSB Number:	064000
Payment Mode:	Cheque		
Cheque/Money Order Number:	355626		
Drawer/Card Name/Money Order No.:	BRISBANE CITY COUNCIL		

Details

Supply Date	Account	Item	Company	Total amount Payable excluding GST	GST Amount Payable	Total Amount Payable including GST
11/11/2009	433019	433019 9091084 CONTAMINATED LAND - SITE	1401	\$96.00	\$0.00	\$96.00
TOTAL				\$96.00	\$0.00	\$96.00

Total Amount Payable excluding GST \$ 96.00

GST Amount Payable \$ 0.00

Total Amount Payable including GST \$ 96.00

Payment Received

TOTAL PAID includes GST	\$ 96.00
Net Amount Due	\$ 0.00

If you require any further information regarding this tax invoice/receipt, please refer to the contact details above.

PRIVACY STATEMENT

The Queensland Government is committed to protecting your privacy. Your personal details will be securely stored on a Queensland Government database which will only be accessible by authorised persons of government agencies where the disclosure is necessary to fulfil statutory, administrative or other public responsibilities. The personal information will only be used for the purpose for which you provide it and will not be given to another person or body without your consent, or unless required by law. Details of the Queensland Government Privacy Scheme can be accessed through <http://www.justice.qld.gov.au/dept/privacy.htm>.

From: Greg McPherson
To: Carl Dowthwaite; Stephanie Mania
Date: 23/10/2009 4:28:05 pm
Subject: Fwd: Council Ref - CD/W4-080520 Site Investigation

Steph,

Can you please organise for payment to DERM of the \$96 balance indicated below.

Cheers,

Greg

>>> "Nathan Sirl" <nathan.sirl@derm.qld.gov.au> 2/10/2009 2:08 pm >>>
Good Afternoon Greg

Brisbane City Council has submitted an application for assessment of a site investigation for 5 Boundary Street, Brisbane and 175 Bowen Tce, Fortitude Valley.

Just wanting to confirm a few whether the payment of the site investigation (of which you have attached a copy of the money receipt) was made by money order. If so was a receipt every received by yourself regarding your payment.

Secondly, the actually price is \$1048 per lot for a site investigation. Therefore, the actual payment of \$2000.00 is \$96 short of the full price.

I am just trying to find the receipting information to attach to the application, so any knowledge of when it actually was paid and how would be a big help.

If BCC want to pay the difference by EFT Transfer, it may take a little longer to match it up with the application, alternatively a credit card payment can be taken over phone.

If you have any further questions please contact me on the number below.

Regards

Nathan

Nathan Sirl
Eco Access Customer Service Unit
Department of Environment and Resource Management

Phone - 1300 368 326
Fax - 3115 9600
Email - nathan.sirl@derm.qld.gov.au

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*Fees paid.
check for apps.*

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RECEIVED
10 NOV 2009
SSA REVENUE

Nathan Sirl

From: Greg McPherson [Greg.McPherson@brisbane.qld.gov.au]
Sent: Monday, 5 October 2009 8:48 AM
To: Nathan Sirl
Cc: Carl Dowthwaite
Subject: Re: Council Ref - CD/W4-080520 Site Investigation

Nathan,

Not sure whether we received a receipt however according to our records the cheque was recorded as being presented in June 2008.

Re the balance I will arrange payment in due course.

Cheers,

Greg

Greg McPherson

Senior Environmental Engineer
Environmental Management Team
Water & Environment, CITY DESIGN

(302) 74724

>>> "Nathan Sirl" <nathan.sirl@derm.qld.gov.au> 2/10/2009 2:08 pm >>>
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If you have any further questions please contact me on the number below.

Regards

Nathan

Nathan Sirl
Eco Access Customer Service Unit
Department of Environment and Resource Management

Phone - 1300 368 326
Fax - 3115 9600
Email - nathan.sirl@derm.qld.gov.au

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Please direct all enquiries to the message author.

This message has passed through an insecure network.
Please direct all enquiries to the message author.

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RTI Act 2009

Nathan Sirl

From: Nathan Sirl
Sent: Friday, 2 October 2009 2:09 PM
To: 'greg.mcperson@brisbane.qld.gov.au'
Subject: Council Ref - CD/W4-080520 Site Investigation

Good Afternoon Greg

Brisbane City Council has submitted an application for assessment of a site investigation for 5 Boundary Street, Brisbane and 175 Bowen Tce, Fortitude Valley.

Just wanting to confirm a few whether the payment of the site investigation (of which you have attached a copy of the money receipt) was made by money order. If so was a receipt every received by yourself regarding your payment.

Secondly, the actually price is \$1048 per lot for a site investigation. Therefore, the actual payment of \$2000.00 is \$96 short of the full price.

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If you have any further questions please contact me on the number below.

Regards

Nathan

Nathan Sirl
Eco Access Customer Service Unit
Department of Environment and Resource Management

Phone - 1300 368 326

Fax - 3115 9600

Email - nathan.sirl@derm.qld.gov.au

Nathan Sirl

From: Nathan Sirl
Sent: Friday, 2 October 2009 2:27 PM
To: 'Chris.Watts@ssa.qld.gov.au'
Subject: Site Investigation Fee

Hi Chris

I work in Eco Access (exEPA) trying to track down a payment made. Would have been received by Brisbane City Council on the 2/6/09 for a sum of \$2000 (most likely direct deposit).

If you could find this that would be a big help!

Thanks

Nathan Sirl
Eco Access Customer Service Unit
Department of Environment and Resource Management

Phone - 1300 368 326
Fax - 3115 9600
Email - nathan.sirl@derm.qld.gov.au

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QNTIME Version 1.5

[QNTIME](#) > [Specific Parcel Search](#) > [Specific Parcel Report](#)**Specific Parcel Report**Lot: 3 on Plan: SP190810
Parcel: on Segment:**DCDB:****Tenure:****FH****Description:****FREEHOLD****CISP:****Previous Plan Details:**

Plan	Registered Description
SP190810 07/01/2008	LOTS 1 & 3 (VOLUMETRIC) CANCELLING LOT 3 ON SP128031
DP190809 25/07/2007	LOT 12 (VOLUMETRIC); PLAN OF LOT 251 ON SL1589 AND LOT 3 ON SP128031 CANCELLING USL (PART OF THE BRISBANE RIVER, KANGAROO POINT AND FORTITUDE VALLEY ADJACENT TO LOT 251 ON SL1589 AND LOT 3 ON SP128031)
AP14996	LOTS 1-4; & PART OF ADJOINING LOT 3 ON SP128031, LOT 4 ON SP128032 AND LOT 4 ON RP52849 CANCELLING PART OF BRISBANE RIVER
IS193482	LOT 1-4 ON RP64991, LOT 1&2 ON RP64992, LOT 3&4 ON RP52770, LOT 2 ON RP57889, LOT 4 ON RP52849, LOT 1 ON RP104509, LOT 3 ON SP128031, LOT 5 ON RP891235, LOT 2&3 ON RP116467, LOT 13 ON RP47078(ETC.)
SP150140 17/07/2002	EMT B IN LOT 3 ON SP128031
SP128031 28/07/2000	LOT 3 CANCELLING LOT 6 ON RP8569, LOT 2 ON RP40998, LOT 3 ON RP52849 AND LOT 400 ON SL1404
IS155578	LOT 400 ON SL1404
RC906985	LOT 400 CANCELLING LOT 6 ON RP8569, LOT 2 ON RP40998, LOT 3 ON RP52849 & LOT 400 ON SL1404
RC110280	LOTS 1-4 CANCELLING LOT 400 ON SL1404, LOT 2 ON B3333, LOT 6 ON RP8569, LOTS 21-22 ON RP8614, LOT 2 ON RP44680
RP64992 22/02/1950	LOTS 1 AND 2 AND EMT A IN LOTS 400 AND 419 ON SL1404, LOT 6 ON RP8569, LOTS 1 AND 3 ON RP52848 AND IN LOT 3 ON RP52849 CANCELLING LOT 2 ON RP52848
RP52849 16/07/1936	LOTS 2 - 4 CANCELLING LOTS 4 - 5 ON B3342
SL1404 17/04/1936	POR. 400 & 419
RP40998 06/02/1925	LOTS 1-2 CANCELLING LOT 11 ON RP8567
RP8568 29/07/1915	LEASE A IN LOT 11 ON RP8567
B3342 29/10/1901	SUB OF ESA.888A; RESUB A OF SUB 1 & 2 OF ESA.9A (FOR B.334.2 SEE SL11143)
RP8567 16/04/1865	LOT 11 CANCELLING LOT 9007 ON B12346
RP8569 16/05/1864	LOT 6 CANCELLING LOT 9007 ON B12346
B12346 01/01/1801	ESA.6A,7A,8A,9A & 10A; ESA.6A,7A,8A,9A & 10A

ATS:

Title Reference:	50700219
Registered Owner:	BRISBANE CITY COUNCIL
Tenure Reference:	
Original Deed of Grant:	1. 10985174 (ESA 8A) 2. 11981103 (POR 400) 3. 19549108 (ESA 7A)

Lease Purpose:**Reserve Purpose:****Area:**

Lease Conditions:**Commencement Date:****Trustees:****Interests:**

EASEMENT IN GROSS 705796394 16/07/2002 12:30:46

Previous Title References:

50323248

QVAS:**Registered Owner:**

BRISBANE CITY COUNCIL

Address:

5-5A BOUNDARY ST, BRISBANE CITY QLD 4000

Primary Land Use Code:

WAREHOUSE & BULK STORES(28)

Secondary Land Use Code:

NONE(0)

TAS:

No TAS data found.

[View on Keymap](#)[Back to Search](#)

Logged in as markhamk

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[Queensland Government Gateway](#)



QNTIME Version 1.5

[QNTIME](#) > [Specific Parcel Search](#) > [Specific Parcel Report](#)
Specific Parcel Report

Lot: 4 on Plan: SP128032
Parcel: on Segment:

DCDB:**Tenure:****FH****Description:****FREEHOLD****CISP:****Previous Plan Details:**

Plan	Registered Description
AP14996	LOTS 1-4; & PART OF ADJOINING LOT 3 ON SP128031, LOT 4 ON SP128032 AND LOT 4 ON RP52849 CANCELLING PART OF BRISBANE RIVER
RC172119	LOT 1; PLAN OF LOT 4 ON SP128032 & LOT 900 ON SP134601 CANCELLING USL(PART OF THE BRISBANE RIVER ADJACENT TO LOT 4 ON SP128032 & LOT 900 ON SP134601)
SP128032 28/07/2000	LOT 4 CANCELLING LOT 2 ON B3333, BAL OF LOTS 21 & 22 ON RP8614, LOT 2 ON RP8616, BAL OF LOT 4 ON RP41821, LOT 2 ON RP44680 AND LOT 4 ON CP890874
RC906986	LOT 22 CANCELLING LOT 2 ON RP8616, LOT 2 ON RP44680, LOT 4 ON RP60570, LOT 2 ON B3333, THE BALANCE OF LOTS 21 & 22 ON RP8614 & THE BALANCE OF LOT 4 ON RP41821
CP890874 24/02/1995	LOT 4 CANCELLING LOT 4 ON RP60570
IS104559	LOT 4 (PART) ON RP41821, LOTS 21 AND 22 (PART) ON RP8614, LOT 2 (PART) ON RP44680, LOT 2 (PART) ON B3333, LOT 4 (PART) ON RP60570, LOTS 1 AND 3 (PART) ON RP52848, LOT 2 (PART) ON RP64992
RP8598 22/06/1978	LOTS 1 AND 2 CANCELLING LOT 1 ON RP8574 AND LOT 1 ON RP8582
RC110280	LOTS 1-4 CANCELLING LOT 400 ON SL1404, LOT 2 ON B3333, LOT 6 ON RP8569, LOTS 21-22 ON RP8614, LOT 2 ON RP44680
RP60570 19/12/1949	LOTS 1-4 CANCELLING LOT 1 ON RP8578, LOT 3 ON RP8595, LOT 2 ON RP8596 AND LOT 2 ON RP52849
RP52849 16/07/1936	LOTS 2 - 4 CANCELLING LOTS 4 - 5 ON B3342
RP44680 11/07/1927	LOTS 1 TO 2 CANCELLING LOT 4 ON RP8603 & LOT 8 ON RP8607
IS201944	LOTS 21 & 22 ON RP8614 & LOTS 1 & 2 ON RP48092 (NOPLAN - FIELD NOTES ONLY)
RP41821 05/08/1925	LOTS 1 AND 3-4 CANCELLING LOT 23 ON RP8616
RP8578 16/12/1920	LOTS 1-2 CANCELLING LOT 1 ON RP8598 & LOT 9009 ON B3342
RP8616 09/03/1918	LOTS 1 & 2 CANCELLING LOT 23 ON RP8614
B3342 29/10/1901	SUB OF ESA.888A; RESUB A OF SUB 1 & 2 OF ESA.9A (FOR B.334.2 SEE SL11143)
B3333 14/05/1901	ALLOT 2 OF SEC.63;;ALLOT 2 OF SEC.63;
RP8574 02/08/1881	LOTS 1-2 CANCELLING LOT 10-13 ON RP8573
RP8594 01/09/1878	LOTS 1-4 CANCELLING LOT 9009 ON B3342
RP8614 26/04/1872	LOTS 21-25 CANCELLING PART OF LOT 11 ON B12342
RP8596 06/04/1872	LOTS 1 AND 2 CANCELLING LOTS 1 AND 2 ON RP8595
RP8603 30/05/1869	LOT 4 CANCELLING LOT 901 ON B12346
RP8573 09/03/1866	LOT 10-13 CANCELLING LOT 8 ON B12342
RP8607 03/01/1865	LOT 8,10 CANCELLING LOT 910 ON B12346
RP8595 06/05/1864	LOTS 1-3 CANCELLING LOTS 1-4 ON RP8594
B12342 01/01/1801	ESA.1-62;R.1289 & R.989
B12346 01/01/1801	ESA.6A,7A,8A,9A & 10A;ESA.6A,7A,8A,9A & 10A

ATS:**Title Reference:****50323249**

Registered Owner: BRISBANE CITY COUNCIL
Tenure Reference:
Original Deed of Grant: 1. 40025609
Lease Purpose:
Reserve Purpose:
Area:
Lease Conditions:
Commencement Date:
Trustees:
Interests:
Previous Title References: 40025609

QVAS:

Registered Owner: BRISBANE CITY COUNCIL
Address: 5-5A BOUNDARY ST, BRISBANE CITY QLD 4000
Primary Land Use Code: WAREHOUSE & BULK STORES(28)
Secondary Land Use Code: NONE(0)

TAS:

No TAS data found.

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ENVIRONMENTAL PROTECTION AGENCY

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1169546 EMR Site Id: 31053 02 October 2009

This response relates to a search request received for the site:

Lot: 4 Plan: SP128032

SEARCH RESULT

The site you have searched is a lot resulting from the amalgamation of the following sites, which are included on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR), as indicated below. Further details for these sites are available by contacting this Agency.

Lot	Plan	
2	B3333	EMR
2	RP44680	EMR
2	RP8616	EMR
4	RP41821	EMR
21	RP8614	EMR
22	RP8614	EMR

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

To execute a new search, select the "Back" button on the browser twice

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ENVIRONMENTAL PROTECTION AGENCY

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1169547 EMR Site Id: 78499 02 October 2009

This response relates to a search request received for the site:

Lot: 3 Plan: SP190810

EMR RESULT

The above site IS included on the Environmental Management Register.
The site you have searched has been subdivided from the following site, which is included on the EMR. Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the contaminating activity.

Lot: 400 Plan: SL1404
Address: BOUNDARY STREET
BRISBANE 4000

The site has been subject to contamination from a hazardous contaminant as follows:
HAZARDOUS CONTAMINANT - This site has been subject to a hazardous contaminant.
Refer to the summary given below.
Please contact this Department for further details.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website
www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

To execute a new search, select the "Back" button on the browser twice

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Cont site



Phone direct: 3027 4724
Dedicated to a better Brisbane
Fax direct: 333 40071
Mobile: s.73 Irrelevant
Email: greg.mcpherson@brisbane.qld.gov.au
Reference: CD/W4-080520

DEPARTMENT OF ENVIRONMENT
AND RESOURCE MANAGEMENT
- 2 OCT 2009
BNE 2009 / 9282

6 June 2008

Ecoaccess
Environmental Protection Agency
PO Box 15155
City East QLD 4002

Attention: Kim Barry

RECEIVED
01 OCT 2009
EPA

Re: Submission of an Application for Assessment of a Site Investigation

Please find attached an application for the assessment of a site investigation report for Howard Smith Wharf.

Also enclosed is the City Design Environmental Management (CDEM) Report Review of the Howard Smith Wharf Site (May 2008) which outlines the results of previous assessments relevant to the Howard Smith Wharf site and applies statistical techniques to the results obtained by City Design - Geotechnical and Environmental Engineering (1999) in order to assess the significance of residual contamination at the site.

As part of the process, CDEM reviewed EPA File No 901727 and from this was able to confirm that significant assessment and remediation of the site had occurred during 1996 including the development of a site management plan for the site. Neither the draft of final Stage II Contamination Assessment Report or the site management plan, which were referenced in the EPA file, were able to be located during a search by EPA officers therefore CDEM has developed new SMPs for each of the lots being considered.

On the basis of the review, CDEM is seeking a determination from the EPA that the site (Lot 3 on SP 128031 and Lot 4 on SP 128032) is suitable for any use, subject to implementation of the attached Site Management Plans.

Yours faithfully

s.73 Irrelevant information

Greg McPherson
Senior Environmental Engineer
City Design
Brisbane City Council

Brisbane City Council ABN 72 002 765 795

RECEIVED
1 OCT 2009
EPA SOUTHERN REGION

Application Form

Part A

General details for all applications

OFFICIAL USE ONLY

DATE RECEIVED

--	--	--

FILE REF

--

PROJECT REF

--

COMPLETE FORM

☐

ENTERED BY (SIGNATURE)

DATE

--	--	--

RECEIPTING DETAILS ONLY

DATE RECEIVED

--	--	--

RECEIPT NUMBER

--

AMOUNT RECEIVED

\$

PROCESSED BY (INITIALS AND NAME)

--

GUIDE

- The applicant is the person intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the address of a person and cannot be a post office box.

If more than one applicant as part of a partnership, complete the "Joint applicant details" form and attach to this PART A form.

Important information for applicants

This form asks for general applicant details and a description of the proposed project and any associated activities. The completed form must be submitted together with relevant activity specific [Part B] forms and any other associated forms included in your application kit.

Specific details must accompany this form to enable your application to be processed. The guide provided will help you complete your application correctly. If you have any difficulties completing the form, contact the Ecoaccess Customer Service Unit desk on 1300 368 326. Please number all attachments alphabetically (e.g. 'Attachment A').

(Commercial and confidential information must be marked clearly. If subsequent activities are added to the project, you will be required to resubmit this application with details of the additional activity).

Tick relevant boxes below if the applicant(s) are:

- ☐ an individual or sole trader
- ☐ individuals in a partnership
- ☐ individual(s) acting on behalf of an unincorporated organisation
- **Go to Section 1**
- ☒ an incorporated company
- ☐ an incorporated association
- ☐ a statutory authority
- ☐ a body politic
- **Go to Section 2**

1. Individual applicant(s) details⁽¹⁾

APPLICANT'S FULL NAME		TITLE	DATE OF BIRTH
REGISTERED ADDRESS			POST CODE
TELEPHONE	FACSIMILE	E-MAIL	
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)			POST CODE

Guardian details (if applicable)

A parent or legal guardian must complete the following details if an applicant is under 18 years of age.

GUARDIAN'S FULL NAME	DATE OF BIRTH
GUARDIAN'S REGISTERED ADDRESS	POST CODE
GUARDIAN'S SIGNATURE	DATE

→ Go to Section 3

2. Applicant details

2. The applicant is the registered legal entity (not a business trading name) intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the registered business address of the company making the application and cannot be a post office box.

Enter the Australian Business Number (ABN); or the Australian Company Number (ACN) of the incorporated company; or the Association Number (AN) of the incorporated association; or the title and section of the legislation that gives the statutory corporation its legal status.

REGISTERED LEGAL ENTITY NAME Brisbane City Council		
TRADING NAME (IF APPLICABLE)		
REGISTERED ADDRESS GPO Box 1434, Brisbane, Qld		POST CODE 4001
TELEPHONE 3027 5453	FACSIMILE	E-MAIL/WEBSITE
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) as above		POST CODE
ABN/ACN/AN OR TITLE AND SECTION OF LEGISLATION 72002765795		

Principal contact or person in charge details

PRINCIPAL CONTACT/PERSON IN CHARGE FULL NAME Greg McPherson		TITLE Mr
POSITION IN CORPORATION Senior Environmental Engineer		
TELEPHONE 3027 4724	FASCIMILE	E-MAIL/WEBSITE
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) as above		POST CODE

Authorised signatory

The authorised signatory is the person authorised to sign an application on behalf of a corporation and in doing so declares that the corporation will be bound by the conditions associated with the granting of the licence or permit.

AUTHORIZED SIGNATORY FULL NAME Greg McPherson	TITLE Mr
POSITION IN CORPORATION Senior Environmental Engineer	

3. Project details

Pre-lodgement

Have you previously attended a pre-lodgement meeting or submitted a pre-lodgement form for this project?

☒ NO ☐ YES

PROJECT NUMBER (IF APPLICABLE)

Project description

Briefly describe the proposed activities, works, development or management. Attach a separate sheet if there is insufficient space below.

DESCRIPTION Assessment of site investigation report - remove land from EMR

Approvals required

Please list all Part B application forms you are attaching to this form.

APPLICATION FORMS

Application for assessment of a site investigation/validation report

Project site

Where will the activities be conducted? Provide the street address, real property description(s) of the land(s) in which the project is located and local government area. If you require more space, attach a separate sheet.

This information should at least provide enough details to allow an EPA or QPWS officer to locate the site of the proposal.

STREET ADDRESS

1. 5 Boundary St Brisbane
2. 175 Bowen Tce Fortitude Valley

LOT

1. Lot 3 2. Lot 4

PLAN

1. SP190810 2. SP128032

LOCAL GOVERNMENT AREA

Brisbane

If possible, provide a specific location within a protected area, a property name or an attached map with the project area clearly delineated. Also include the map name/details.

Give as much information as possible to accurately locate your activity, for example maps with contextual or boundary lines on plan or GPS boundary co-ordinates.

SPECIFIC LOCATION/PROPERTY NAME

Howard Smith Wharf

PROTECTED AREA

GEOGRAPHICAL CO-ORDINATES

Geographical co-ordinates can include northing/easting, longitude/latitude.

Attachments

List all attached documents, including maps containing information supporting this application in the space below. If there are no attachments mark "N/A."

Label all attachments alphabetically (e.g. 'Attachment A')

ATTACHMENTS (LABEL ALL ATTACHMENTS ALPHABETICALLY – E.G. "ATTACHMENT A")

Attachment A - Application form Part B
Attachment B - Checklist for B2000
Attachment C - Statutory declaration
Attachment D - Report - Report Review document and map
Attachment E - Title insurance policy
Attachment F - Map of site

4. Applicant's certification

Note: If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Freedom of Information Act 1992* and the *Evidence Act 1977*.

APPLICANT(1) SIGNATURE	s.73 Irrelevant informa
------------------------	-------------------------

Joint applicant signatures (if applicable)

APPLICANT(2) SIGNATURE

APPLICANT(3) SIGNATURE

APPLICANT(4) SIGNATURE

APPLICANT(5) SIGNATURE

DATE

Complete the following checklist.

- ☒ Application form(s) signed and completed
- ☒ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information attached (e.g. maps)

Please return your completed application kit to:

**Ecoaccess Customer Service Unit
Environmental Protection Agency**

PO Box 15155
City East
Queensland 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
Email: eco.access@epa.qld.gov.au

Attachment A

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Application form — Part B

Sections 375 & 390 — *Environmental Protection Act 1994*

Application for assessment of a site investigation / validation report

This form asks for activity specific details in relation to an application under Sections 375 and 390 of the *Environmental Protection Act 1994* for an assessment of a site investigation/validation report. Please read the information sheets and any guidelines included with your application kit to understand the environmental management and conservation issues, policies and procedures that relate to the activities proposed.

Note: Your application must be accompanied by a General Details – Part A form.

1. Lodgement details

Complete this section only if form not lodged by applicant

NAME	TELEPHONE
COMPANY/ORGANISATION	
POSTAL ADDRESS	
EMAIL	FACSIMILE

2. Site owner's details

An Agent's address is not acceptable.

NAME Brisbane City Council	TELEPHONE 3027 4727
POSTAL ADDRESS GPO Box 1434 Brisbane Qld 4001	FACSIMILE

3. Site details

If you require additional space, attach the information on a separate sheet marked "Site Details."

STREET ADDRESS 5 Boundary St Brisbane	
LOT(S) Lot 3	PLAN(S) SP 190810
LOCAL GOVERNMENT AUTHORITY Brisbane	

Application for assessment of a site investigation / validation report

NOTIFIABLE ACTIVITY/POSSIBLE CONTAMINATING ACTIVITY Hazardous Contaminant	
CURRENT LAND USE Bikepath/footpath linking Ivory Lane to the floating walkway along the Brisbane River (adjacent to Storey Bridge, Fortitude Valley) with several buildings	PROPOSED LAND USE Commercial precinct
STREET ADDRESS 175 Bowen Tce Fortitude Valley	
LOT(S) Lot 4	PLAN(S) SP 128032
LOCAL GOVERNMENT AUTHORITY Brisbane	
NOTIFIABLE ACTIVITY/POSSIBLE CONTAMINATING ACTIVITY HAZARDOUS CONTAMINANT	
CURRENT LAND USE BIKEPATH/FOOTPATH LINKING IVORY LANE TO THE FLOATING WALKWAY ALONG THE BRISBANE RIVER (ADJACENT TO STOREY BRIDGE, FORTITUDE VALLEY) WITH SEVERAL BUILDINGS	PROPOSED LAND USE COMMERCIAL PRECINCT

4. Details of report

4.1 Is a development application pending under the *Integrated Planning Act 1997*?☒ NO☐ YES

4.2 The attached report contains (as per Guidelines for the Assessment and Management of Contaminated Land in Queensland)

☐ Stage 1 and Stage 2 investigation☐ Stage 3 and Stage 4 remediation and validation report

If previous submissions have been made quote:

Ref no. _____

4.3 Is a response required from the EPA at this time or is further information following?

☒ Response required☐ Further information following

5. Payment

The applicable fee¹ of \$ 2000¹ The fee is \$445.30 per lot where the land is used exclusively for residential purposes and is not the subject of a development application. For any other lot the fee is \$1000 per lot.

Application for assessment of a site investigation / validation report

- ☒ is enclosed with this application (cheque, money order etc.); or
☐ was paid by electronic funds transfer (EFT) on _____ ; and
details required in the information sheet *Electronically paying fees to the EPA* were included.

The payment was for:

- ☐ this application only and the EFT identification code is: _____ / / _____ ; or
☐ this and other applications. A payment notification (from the final page of the information sheet *Electronically paying fees to the EPA*²) was sent to the EPA and a copy is attached.

Note: An incomplete application (including applications that do not include the fee, or sufficient detail to show that the fee has been paid where fees are paid by EFT) may be invalid. Invalid applications will be returned without processing and will only be processed if resubmitted with all invalidating issues addressed.

6. Applicant checklist

- ☒ Application form(s) completed and signed.
- ☒ Permit fees paid or enclosed (if applicable).
- ☒ Enclosed statutory declarations by investigators, preparers and owners as per Section 383 of the *EP Act*.
- ☒ Enclosed signed consultant's report (as per Guidelines for the Assessment and Management of Contaminated Land in Queensland).
- ☒ Enclosed legible copy/copies of proof of ownership of site/s clearly showing the full name(s) of the registered proprietor(s) e.g. current certificates of Title or Title Searches.
- ☒ Enclosed legible copy/copies of all relevant registered plans (available from the Titles Section, Department Natural Resources and Mines) clearly showing location of the site/s and current registered plan details.
- ☒ Enclosed copy of a street map/area map clearly showing location of property.

Please return your completed application kit to:

**Ecoaccess Customer Service Unit
Environmental Protection Agency**

PO Box 15155
City East
Queensland 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
eco.access@epa.qld.gov.au

² Available at www.epa.qld.gov.au or through the Ecoaccess Customer Service Unit (phone 1300 368 326).

Application for assessment of a site investigation/validation report

OFFICE USE ONLY

Account code: 9090411/433019

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Attachment B

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RTI Act 2009



BRISBANE CITY COUNCIL
CITY FUND ACCOUNT

CommonwealthBank

Commonwealth Bank of Australia
240 QUEEN STREET, BRISBANE, QLD



PAY THE SUM OF

TWO THOUSAND DOLLARS AND ZERO CENTS

TO THE ORDER OF

ENVIRONMENTAL PROTECTION AGENCY
PO BOX 15155
CITY EAST QLD 4002

NOT NEGOTIABLE
A/C PAYEE ONLY

293639

Date

02/06/2008

\$ *****2000.00

For and on behalf of Brisbane City Council City Fund Account

s.73 Irrelevant information

⑈ 293639⑈ 064⑈000⑈ 1045⑈9600⑈

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RTI Act 2009

Attachment C

Published on DES Disclosure Log
RTI Act 2009

STATUTORY DECLARATION

(INVESTIGATION REPORT PREPARER)

Address of Site Investigated: 3 Boundary Street Brisbane, Queensland 4000 and 175 Bowen Terrace Fortitude Valley, Queensland 4006

Real Property Descriptions: Lot 3 on SP 190810 and Lot 4 on SP 128032

Title of Report: Report Review Howard Smith Wharf
May 2008

I, Gregory James McPherson of Brisbane City Council, Level 1, Green Square, South Tower, 505 St Paul's Terrace, Fortitude Valley, in the State of Queensland, do solemnly and sincerely declare that;

- I was the investigator and preparer of the report described above;
- I am a member of Environment Institute of Australia and New Zealand (EIANZ); and my qualifications and experience as previously submitted to the Environmental Protection Agency are relevant to this investigation,
- I have not knowingly included any false, misleading or incomplete information in the report;
- I have not knowingly failed to reveal any relevant information or document to the administering authority; and

I certify that:

- The report addresses the relevant matters for the investigation and is factually correct; and
- The opinions expressed in it are honestly and reasonably held.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*

Signature

s.73 Irrelevant information

Name

GREGORY JAMES MCPHERSON

Taken and Declared before me at BRISBANE this 29TH day of MAY 2008.

Witness (Justice of the Peace/Commissioner for Declarations)

Signature

s.73 Irrelevant information

Jeffrey James Dowling
JP (Qual) 29926

s.73 Irrelev

Name (& JP Number if applicable).....

Attachment D

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RTI Act 2009

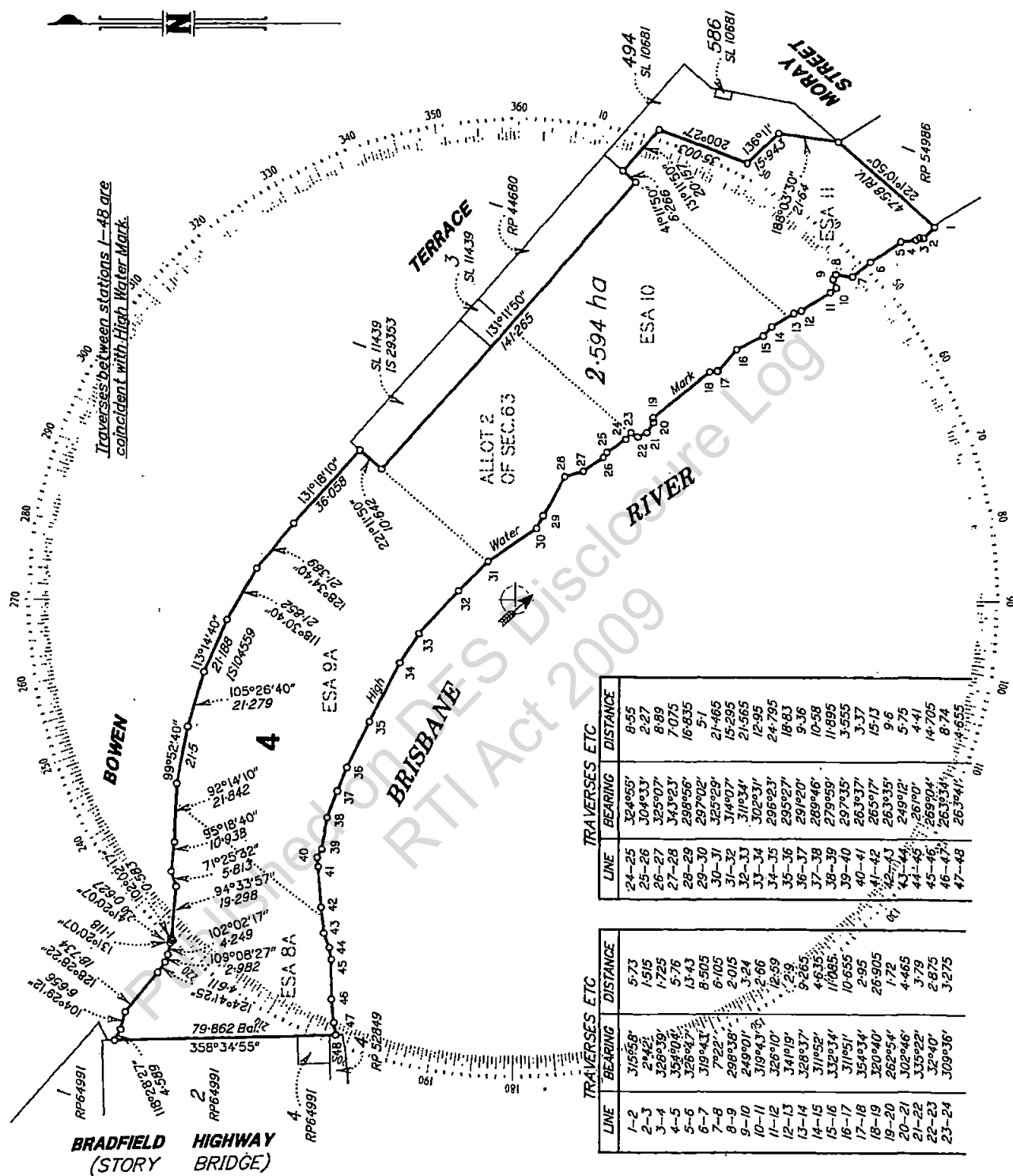
Attachment E

Published on DES Disclosure Log
RTI Act 2009

Land Use Act 1994 : Land Act 1994
Form 21 Version 2

SURVEY PLAN

Sheet 1 of 1



Kellar Fox & McGhie Pty. Ltd. ACN 010 162 197
hereby certify that the Company has made this plan
pursuant to Section 25 of the Surveyors Regulation
1992, and that the plan is accurate, and compiled from
RC906986 & CP890874 in the Department of Natural
Resources.



Director and Licensed Surveyor

Director

Date: 11-6-00

0m 75m 150m 225m
0 50mm 100mm 150mm State copyright reserved

Plan of Lot 4

Cancelling U.S.L. being Lot 2 on B3333, the balance of
Lots 21 & 22 on RP8614, Lot 2 on RP8616, the balance of
Lot 4 on RP41821, Lot 2 on RP44680 and Lot 4 on CP890874

PARISH: NORTH BRISBANE COUNTY: Stanley

Meridian: AMG Zone 56 Vide RC906986

F/N's: NO

Scale: 1:1500

Format: STANDARD



SP128032

Plan Status

704127834

BE 494

NO FEE
23/08/2000 15:58

IDealing No 1

WARNING : Folded or Mutilated Plans will not be accepted.
Plans may be rolled.
Information may not be placed in the outer margins.

Registered

s. Lodged by
~~Mel Cowley~~
Senior Property Analyst
Portfolio and Housing Unit
Department of Public Works
GPO Box 2457, Brisbane Q 4001
Phone: 3404 3787
(Include address, phone number, reference, and Lodger Code)Bernie Maguire
Property Service
Lvl 14, AXA
Ph: X78110

525

1. Certificate of Registered Owners or Lessees.

I/We

Existing			Created		
Title Reference	Lot	Plan	Lots	Emis	Road
U. 5 L					

(Names in full)

* as Registered Owners of this land agree to this plan and dedicate the Public Use
Land as shown hereon in accordance with Section 50 of the Land Title Act 1994.

* as Lessees of this land agree to this plan.

Signature of * Registered Owners * Lessees

APPROVED

s.73 Irrelevant

S.73

Douglas James Fergusson
Delegate of the Minister for Natural Resources

19/6/00.

* Rule out whichever is inapplicable

2. Local Government Approval.

hereby approves this plan in accordance with the :
%

Dated this .. day of

* Insert the name of the Local Government % Insert Integrated Planning Act 1997 or
Insert designation of signatory or delegation Local Government (Planning & Environment) Act 1990

3. Plans with Community Management Statement :

CMS Number

Name :

4. References :

Dept File : BRI/000369

Local Govt :

Surveyor : TA 2283-00

ESAs 8A,
9A, 10 & 11
and Allot 2
of Sec. 63

4

Orig

Lots

7. Portion Allocation :

8. Map Reference :

9543-33313

9. Locality :

FORTITUDE VALLEY

10. Local Government :

BRISBANE C. C.

11. Passed & Endorsed :

By : Kellar Fox & McGhie Pty. Ltd.

ACN 010 162 197

Date : 18.6.00

Signed : S.73

Designation : Liaison Officer

12. Building Format Plans only.

I certify that :

- * As far as it is practical to determine, no part of the building shown on this plan encroaches onto adjoining lots or road;
- * Part of the building shown on this plan encroaches onto adjoining * lots and road

Licensed Surveyor/Director * Date
* delete words not required

13. Lodgement Fees :

Survey Deposit

Lodgement

New Titles

Photocopy

Postage

TOTAL

FEE \$ 37.00

\$

\$

\$

\$

\$ 87.00

14. Insert
Plan
Number

SP128032

CURRENT TITLE SEARCH

NATURAL RESOURCES AND WATER, QUEENSLAND

Request No: 4127531

Search Date: 03/06/2008 13:23

Title Reference: 50323249

Date Created: 31/07/2000

Previous Title: 40025609

REGISTERED OWNER

Dealing No: 707890862 14/07/2004

BRISBANE CITY COUNCIL

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 128032

County of STANLEY

Parish of NORTH BRISBANE

Local Government: BRISBANE CITY

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Deed of Grant No. 40025609 (Lot 4 on SP 128032)

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

** End of Current Title Search **

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Requested By: D APPLICATIONS GLOBAL X

Page 1/1

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CURRENT TITLE SEARCH

NATURAL RESOURCES AND WATER, QUEENSLAND

Request No: 4127462

Search Date: 03/06/2008 13:19

Title Reference: 50700219

Date Created: 07/01/2008

Previous Title: 50323248

REGISTERED OWNER

Dealing No: 711289700 19/12/2007

BRISBANE CITY COUNCIL

ESTATE AND LAND

Estate in Fee Simple

LOT 3 SURVEY PLAN 190810

County of STANLEY

Parish of NORTH BRISBANE

Local Government: BRISBANE CITY

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Deed of Grant No. 11981103 (POR 400)
Deed of Grant No. 19549108 (ESA 7A)
2. EASEMENT IN GROSS No 705796394 16/07/2002 at 12:30
burdening the land
BRISBANE CITY COUNCIL
over
EASEMENT B ON SP150140

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

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Land Title Act 1994; Land Act 1994
Form 21 Version 2

SURVEY PLAN

Sheet
1 of 2

REFERENCE MARKS

STN	TO	ORIGIN	BEARING	DIST
1	O.Screw in Conc	4/15193482	177°58'45"	1.741
2	O.Nail	13/RP64991	358°42'40"	1.497
14	O.Screw in Kerb	24/15193482	344°50'	7.421
14	O.Screw in Kerb	24/15193482	66°42'	21.078
14	O.Screw in Conc	24/15193482	77°08'40"	37.779
14	O.Cor Building	24/15193482	96°37'	37.885

PERMANENT MARKS

PM	ORIGIN	BEARING	DIST	NO
1-OPM (New Conn.)	12/15193482	109°50'	72.6	16370
14-OPM	24/15193482	239°45'15"	94.548	131399

DATUM FOR LEVELS

PM13/399
RL=2.05m AHD (Der.)

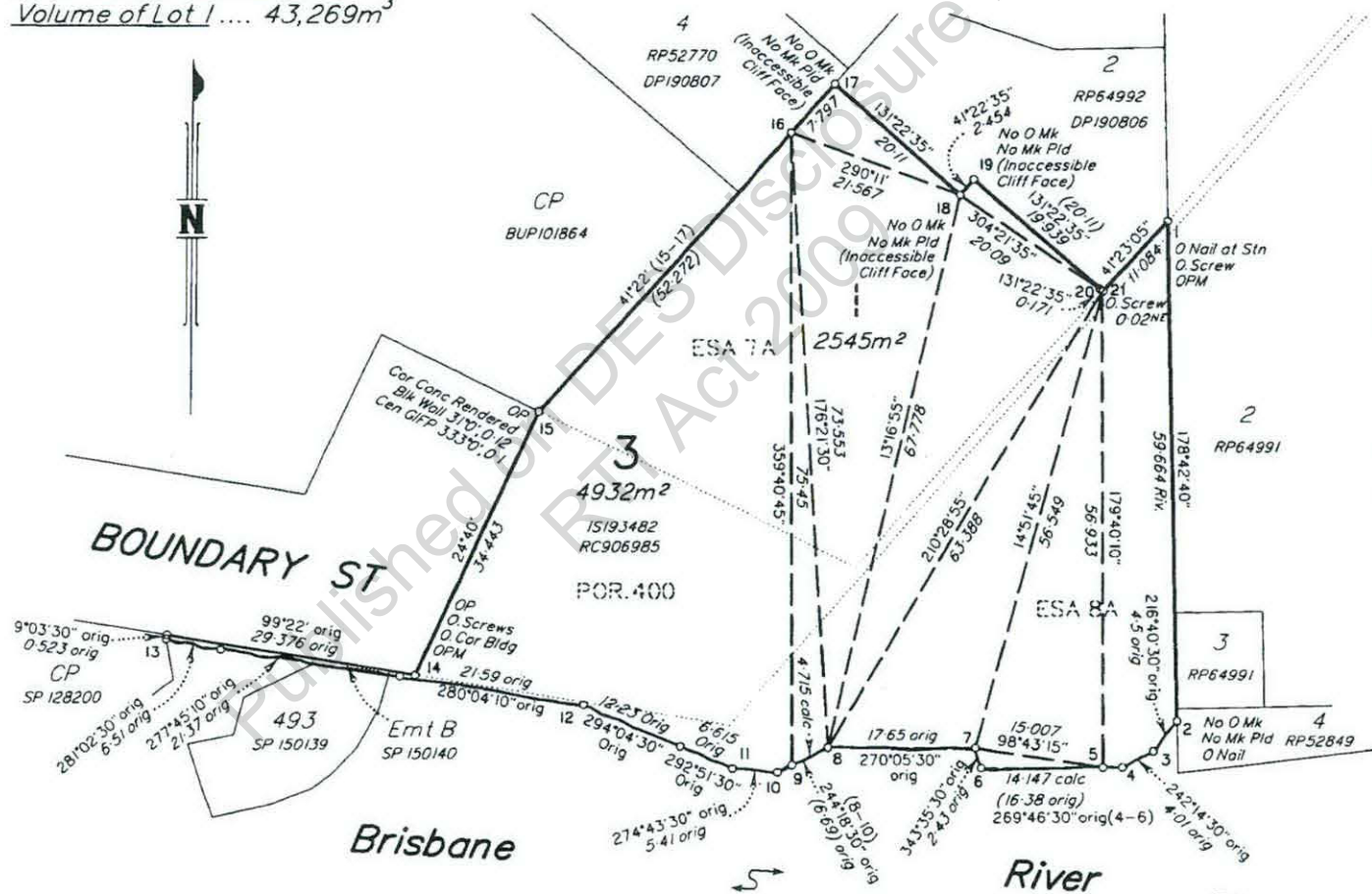
Lot 3 is a Standard Format Lot

Lot 1 is Bounded by vertical planes

No Marks placed for Lot 1 as all new corners are underground and inaccessible.

Original information compiled from 15193482 in the Department of Natural Resources and Water.

Original Traverse between Stns. 2-13 coincident with High Water Mark (H.W.M.)

Area of Footprint of Lot 1 2,545m²Volume of Lot 1 43,269m³Direction of
Isometric View
SEE SHEET 2

JONES FLINT & PIKE PTY. LTD. (ACN 050 414 045) hereby certify that the land comprised in this plan was surveyed by the corporation, by Fabian Bruno SALVATI, Surveying Graduate, for whose work the corporation accepts responsibility, under the supervision of Mark Thomas FITZGERALD, Cadastral Surveyor, and that the plan is accurate, that the said survey was performed in accordance with the Survey and Mapping Infrastructure Act 2003 and Surveyors Act 2003 and associated Regulations and Standards and that the said survey was completed on 6/6/06



s.73 Irrelevant in

Director

s.73 Irrelevant

Director

Date 27/10/06

Plan of Lots 1 & 3

Cancelling Lot 3 on SP128031

PARISH: NORTH BRISBANE COUNTY: Stanley

Meridian: MGA 94 Vide 15193482

F/N's: No

Scale: 1:600

Format: VOLUMETRIC



SP190810

Plan Status:

Attachment F

Published on DES Disclosure Log
RTI Act 2009



Howard Smith Wharf

Scale = 1:3,417

Metres 50 100 150

Date : Jun 3, 2008

User : 068575

Disclaimer:

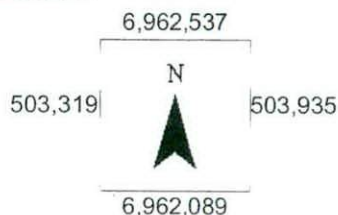
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Report Review Howard Smith Wharf

May 2008

Prepared on behalf of:
City Planning - Brisbane City Council

Prepared by:
Environmental Management
Water and Environment Group
Brisbane City Council



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Issue No.	Date of Issue	Amdt	Prepared By (Author/s)		Edited and Proofread By		Reviewed By		Approved for Issue (Project Director)	
			Name	Initial	Name	Initials	Name	Initials	Name	Initials
1	16-3-2008		Greg McPherson		Kate Atkins		Greg McPherson		Michael Lane	
2	26-5-2008		Greg McPherson	s.73 Irrelev	Kate Atkins	s.73 Irrelev	Greg McPherson	s.73 Irrelev	Michael Lane	s.73 Irrelev

Executive Summary

In order to assist in the preliminary application for a material change of use for the Howard Smith Wharf Site, City Design - Environmental Management (CDEM) was commissioned by City Planning to undertake a review of previous contamination assessment reports and to prepare a submission to the EPA (including Draft Site Management Plans (SMPs) if required).

The specific scope undertaken by CDEM and described in this report included:

- Review of available information pertaining to the site including EPA File No 901727 and previous contamination assessment (Howard Smith Wharf, Fortitude Valley Site Contamination Assessment Draft Report March 1999);
- Provision of recommendations including an application to the EPA to remove the site from the EMR if the results of the review warrant this action; and
- Development of appropriate Site Management Plans (SMPs) in the event that the lots are not removed from the EMR;

The history of the site as reported by City Design Geotechnical and Environmental Engineering (1999) indicates a range of activities having been historically conducted at the site including:

- General stevedoring;
- Naval ship maintenance, and storage and loading of supplies during wartime;
- As a base for the Water Police and Police Diving Squad;
- As a police impoundment area for stolen cars and as a holding area for property to be used in court cases;
- Government stores for equipment being held for auction;
- Vehicle maintenance and refuelling;
- Storage of low level radioactive waste; and
- Various other small scale maintenance and engineering purposes.

There was no indication from the site history of any specific notifiable activity ever having been conducted at the Howard Smith Wharf site with the exception of the historical presence of an underground fuel storage tank which was reportedly decommissioned and removed from site prior to 1996.

It is further understood from review of the 1999 City Design report and EPA file No 901727 that Queensland Health undertook radiation monitoring in the shed used for storage of low level radioactive waste and found no evidence of radiation levels exceeding National Health and Medical Research Council (NHMRC) guidelines.

During the assessment conducted by City Design -Geotechnical & Environmental Engineering in 1999, a total of 54 boreholes were drilled over the 3.6 hectare area of the Howard Smith Wharf site. A total of 50 soil samples were collected during the assessment with 34 selected samples subsequently dispatched to the laboratory for analysis.

A statistical interpretation of the laboratory results obtained by City Design – Geotechnical and Environmental & Environmental Engineering in 1999 was undertaken as part of the review conducted by CDEM.

On the basis of the review of the available information CDEM concludes the following:

- No specific notifiable activities are known to have occurred at the site with the exception of the historical presence of a single underground fuel storage tank which was reportedly decommissioned and removed from site prior to 1996;
- Significant remediation of the site including the off-site disposal of approximately 2200m³ of Total Petroleum Hydrocarbons (TPH) and heavy metal contaminated soil appears to have been conducted by Golder Associates in late 1996;
- A Site Management Plan was also developed by Golder in 1996. It would appear from correspondence between the DoE and Golder in late 1996 that the SMP was accepted by the DoE;
- The EPA was unable to locate either a copy of the SMP or the Stage II Contamination Assessment report pertaining to the site during a search in late 2007;
- Discreet samples collected by City Design in 1999 returned concentrations for various heavy metal contaminants exceeding environmental investigation levels;
- The 95% upper confidence level (UCL) for the mean concentration for all heavy metals analysed with the exception of zinc were below the EIL;
- The 95% upper confidence level (UCL) for the mean zinc concentration while exceeding the EIL was well below the health based investigation level for standard residential land use;
- While isolated samples returned TPH, Total Polycyclic Aromatic Hydrocarbons (PAH) and benzo(a)pyrene concentrations exceeding guideline values, the sample analysis for these samples was highly targeted and the resulting exceedances obtained are not considered representative of the soil/fill at the site in general;
- Given the shallow depth to bedrock at the site there is little potential for significant volumes of contaminated soil to exist at the site and little potential for contaminants to migrate to depth;
- None of the contamination concentration exceedances reported were sufficiently elevated to raise serious concerns with respect to human health or the environment given the overall exposure potential at the site and given any future land use; and
- The site is therefore considered suitable for any land use subject to implementation of the provisions of the draft SMPs provided in **Attachment D**.

On the basis of this review it is recommended that this report be forwarded to the Director of the Queensland Environmental Protection Agency along with a recommendation that the site (Lot 3 on SP 190810 and Lot 4 on SP 128032) is suitable for any use, subject to implementation of the attached Site Management Plans.

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Appendix A – Site Contamination Assessment Draft Report- Geotechnical and Environmental Engineering, March 1999.

Appendix B – Summary of Soil Analysis Results and Statistical Analysis

Appendix C Photographs

Appendix D Draft Site Management Plans

1.0 Introduction

City Policy and Strategy Division is undertaking a planning study and compiling a preliminary application for a material change in use for the Howard Smith Wharves site at Boundary Street, Brisbane.

The site considered in the planning study/preliminary application includes eight lots (Lots 1 and 2 on RP.64992, Lot 3 on SP 190810 (formerly Lot 3 on SP.128031), Lot 2 on RP.64991, Lots 3 and 4 on RP.64991, Lot 4 on RP.52849 and Lot 4 on SP.128032). Lot 3 on SP.190810 and Lot 4 on SP.128032 are listed on the Environmental Protection Agency's (EPA) Environmental Management Register (EMR) for a notifiable activity (hazardous contaminant site).

In order to assist in the preliminary applications City Design - Environmental Management (CDEM) was commissioned by City Planning to undertake a review of previous contamination assessment reports and to prepare a submission to the EPA (including a Site Management Plan (SMP) if required) for the Howard Smith Wharf site.

The specific scope undertaken by CDEM and described in this report included:

- Review of available information pertaining to the site including the previous contamination assessment (Howard Smith Wharf, Fortitude Valley Site Contamination Assessment Draft Report March 1999);
- Provision of recommendations including an application to the EPA to remove the site from the EMR if the results of the review warrant this action; and
- Development of appropriate Site Management Plans (SMPs) in the event that the lots are not removed from the EMR;

In addition to the above scope a site inspection for the Howard Smith Wharf site was undertaken in order to assess the current state of the site.

2.0 Review of available information

The following reports and information were reviewed as part of the scope of works undertaken by CDEM:

- Howard Smith Wharf, Fortitude Valley Site Contamination Assessment Draft Report, City Design – Geotechnical and Environmental Engineering, March 1999;
- City Design Geotechnical and Environmental Engineering File Number 98-155;
- Brisbane City Council WeBbasx database; and
- EPA File No 901 727.

A copy of the *Howard Smith Wharf, Fortitude Valley Site Contamination Assessment Draft Report*, City Design – Geotechnical and Environmental Engineering, March 1999 is provided in **Appendix A**.

A summary of the information from the above sources and relevant to this review is provided below.

The real property description of the site at the time of the contamination assessment conducted in 1999 consisted of the following lots:

Lot 400 on SL1404; *Haz Contaminant*
Lot 2 on RP 40998; *Not listed*
Lot 2 on RP64992; *NL*
Lots 1,2,3 and 4 on RP64991; *NL*
Lot 6 on RP8569; *NL*
Lots 3 and 4 on RP52849; *NL*
Lot 4 on RP60570; *NL*
Lot 2 on B3333; *Haz Cont.*
Lot 2 on RP44680; *Haz Cont.*
Lots 21 and 22 on RP8614; and *Haz Cont. x 2*
Lot 4 on RP41821. *Haz Cont.*

Of these sites, Lot 400 on SL1404, Lot 2 on RP44680, Lots 21 and 22 on RP8614 and Lot 4 on RP41821 were listed on the EPA's Environmental Management Register (EMR) at the time of the 1999 assessment.

The size of site covered by the 1999 assessment was reported to be approximately 3.6 hectares.

Review of Councils WebBASX/IBimap system confirms that the majority of the site covered by the 1999 contamination assessment was subsequently re-configured to form Lot 3 on SP 128031 and Lot 4 on SP 128032. Lot 3 on SP128031 was again re-configured in January 2008 to form Lot 3 on SP 190810.

Specifically:

- Lot 400 on SL1404 (1,181m²) became part of Lot 3 on SP128031(4,931m²) which was in turn re-configured to form Lot 3 on SP 190810 (4,932m²);

- Lot 2 on RP44680 (5,094 m²), Lot 21 on RP8614 (1,893 m²), Lot 22 on RP8614 (1,539 m²); and Lot 4 on RP41821(1071 m²) became part of Lot 4 on SP 128032 (25,940 m²).

The geology of the site consists of a thin veneer of soil or fill (generally less than 1 metre depth) overlying bedrock.

The history of the site as reported by City Design Geotechnical and Environmental Engineering (1999) indicates a range of activities having been historically conducted at the site including:

- General stevedoring;
- Naval ship maintenance, and storage and loading of supplies during wartime;
- As a base for the Water Police and Police Diving Squad;
- As a police impoundment area for stolen cars and as a holding area for property to be used in court cases;
- Government stores for equipment being held for auction;
- Vehicle maintenance and refuelling;
- Storage of low level radioactive waste; and
- Various other small scale maintenance and engineering purposes.

There is no indication from the site history with respect to any specific notifiable activity ever having been conducted at the Howard Smith Wharf site with the exception of the historical presence of an underground fuel storage tank (UST) which was reportedly decommissioned and removed from site prior to 1996.

It is understood from review of the 1999 City Design report that Queensland Health undertook radiation monitoring in the shed used for storage of low level radioactive waste in 1994 and found no evidence of radiation levels exceeding National Health and Medical Research Council (NHMRC) guidelines.

During the assessment conducted by City Design –Geotechnical & Environmental Engineering in 1999, a total of 54 boreholes were drilled over the 3.6 hectare area of the Howard Smith Wharf site. A total of 50 soil samples were collected during the assessment with 34 selected samples subsequently dispatched to the laboratory for analysis.

2.1 Review of EPA File No 901727

EPA file (Reference No 901 727) was reviewed by CDEM on 19 November 2007.

The information obtained during this review is summarised below:

A letter dated 5 February 1996 from the Environmental Health - Radiation Health branch confirmed that there were no radiation levels exceeding NHMRC guidelines detected at the site.

A letter dated 16 May 1996 from the Department of Public Works and Housing to the Hazardous Waste and Contaminated Sites Section of the Department of Environment (DoE) indicated the following enclosures:

1. An Application for Site Contamination Report;
2. A cheque for \$440.00 being the statutory fee;
3. A site history and Stage II testing proposal by Golder Associates;
4. Extract from the Government Land Register;
5. Real Property descriptions; and
6. Street Map.

A letter dated 18 June 1996 from Gary O'Connor (DoE) to Mr J Furner from the Dept of Public Works and Housing provided recommended/required:

1. *Validation of walls of the former UST excavation;*
2. *Clarification of the use of the large steel mains beneath the sheds; and*
3. *Validation of the soils immediately downslope of the aboveground tank near the water police office.*

The correspondence further indicated that:

"Subject to the above comments the Stage II sampling proposal is acceptable".

A document transmittal dated 12 September 1996 indicated transmittal of a Draft Stage II Contamination Assessment Report and Site Management Plan (Reference 96638197 (c)) from Golder Associates to DoE.

Correspondence dated 19 September 1996 from Gary O'Connor (DoE) to Mr R Morphet from Golder Associates provided "Comments re Draft Site Contamination Assessment and Site Management Plan" including a request for further clarification regarding the zinc clean up criteria proposed for the site by Golder Associates.

Correspondence dated 30 September from Golder to DoE "queried" the risk assessment required by DoE.

A letter dated 8 October 1996 from Gary O'Connor (DoE) to R Morphet (Golder Associates Pty Ltd) provided further clarification regarding the DoE risk assessment requirements.

A document Transmittal dated 20 November 1996 indicated transmittal of Stage II Contamination Assessment Report and Site Management Plan from Golder Associates to DoE.

Correspondence dated 2 December 1996 from Gary O'Connor (DoE) to Golder Associates acknowledged that DoE comments regarding the draft report had been satisfactorily addressed in the final report.

Correspondence from Mr Russel Miller from the Brisbane City Council Hazardous Waste section to Chris McMahon from Golder Associates confirmed acceptance of 2210m³ of heavy metal and Total Petroleum Hydrocarbon (TPH) contaminated soil.

Correspondence dated 5 December 1996 from Gary O'Connor (DoE) to R Morphet (Golder Associates) confirmed DoE approval for off-site disposal of 2,200m³ of contaminated soil.

Note: Only the Laboratory Results Table from the Stage II Contamination Assessment report was found in the EPA file reviewed. Neither the draft or the final Stage II contamination reports or the Site Management Plan referenced in the file were able to be located and a subsequent search by the EPA failed to find copies of these documents. A copy of the Stage I Contamination Assessment report compiled by Golder Associates was contained in the file. A summary of the findings of this report is provided in Section 2.2.1 below.

2.1.1 Review of Stage 1 Contamination Assessment Report

The EPA file contained the following report;

Site Contamination Assessment

Stage 1

Howard Smith Wharf

Fortitude Valley Brisbane

Golder Associates April 1996.

Conclusions contained in this report included the following:

"Four areas of the Howard Smith Wharf Site were identified as potentially contaminated in the site history studies:

- *The location of the former underground fuel tank.*
- *Imported fill near the site entrance.*
- *Fill on the New Farm end of the site.*
- *Wooden structural materials in the former wharf facilities."*

The former underground fuel tank had been found to be decommissioned and removed however 40m³ of hydrocarbon contaminated sand fill remains in the tank pit. Sampling has indicated that contamination in this area is likely to be confined to the tank pit however additional in situ clay material (100mm) will need to be removed in any remedial operations to ensure that only clean materials remain.....

Various contaminated materials were identified at the site. These are summarised as follows:

- *Recently introduced fill (from Transit Centre) near site entrance A lead and zinc "hot spot" of around 300m³ which also contains significant concentrations of dieldrin";*
- *A zinc "hot spot" at the New Farm end which may represent up to 1500m³ of material;*
- *Moderately contaminated ash layer of unknown extent which contains significant lead and zinc concentrations and may represent up to 400m³; and*
- *Possibly 150m³ of broken rock material moderately elevated in zinc."*

Identified options included:

- Leaving material in situ resulting in a "restricted" classification; and
- Remediation to a "former" classification.

Further characterisation was recommended.

The history contained in the Stage 1 report was generally consistent with the history reported by City Design in 1999.

It was noted that the No 5 shed at the site had been occupied by Australian Gypsum Product Pty Ltd, a plaster manufacturer, up to 1944 and Australian Plaster Industries from 1945 until 1972 when the shed was demolished and removed.

The most significant TPH contamination levels reported for the Stage 1 Assessment was 138mg/kg for the C₆-C₁₀ TPH fraction.

Lead concentrations ranging between 532mg/kg and 2430mg/kg were recorded in fill at the site entrance while zinc concentrations of between 430mg/kg and 1370mg/kg were reported for the fill from the Transit Centre.

3.0 Site Inspection - CDEM

A contaminated land professional from CDEM conducted a site inspection on 11 October 2007.

Photographs taken at the time of the inspection are reproduced in **Appendix C**.

The observations made during this inspection are summarised below:

- The majority of the site is paved with either bitumen or concrete;
- Lot 3 is separated from Lot 4 by the deck width of the story bridge;
- A walkway/cycleway bisects the sites;
- Several buildings are present on the southern side of the walkway/cycle way;
- The building labelled as Building No 4 in the 1999 assessment had been demolished;
- The diesel AST previously identified at the site remained in situ;
- Areas to the north of the walkway were fenced and secured from the remainder of the site;
- There were no obvious signs of any significant contamination at the site observed during the site inspection; and
- There were no notifiable activities observed to be occurring at the site at the time of the inspection.

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4.0 Interpretation of Laboratory Results (City Design – Geotechnical and Environmental Engineering, 1999)

4.1 Assessment Guidelines

To assess the significance of the results obtained during environmental investigations, laboratory results for soil testing are commonly compared to criteria developed or applied by regulatory authorities. These criteria are developed through research and represent concentrations of contaminants within the environment that may lead to adverse health or environmental effects.

In the case of soil investigations, The National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM) Urban Ecological Investigation Levels (EILs) have been used in the first instance as the regulatory criteria with the NEPM health based soil investigation levels (HIL) guidelines used where contaminant levels exceed EIL. These criteria specify different exposure settings (ranging from residential to industrial land use) enabling the application of more site-specific criteria to a particular site depending on its land use.

The criteria specified within this assessment have been developed with consideration to Queensland EPA guidelines and the NEPM for Assessment of Site Contamination. These guidelines are subject to change with the further development of the NEPMs and through the updating of scientific knowledge with respect to potential health and environmental risks.

4.2 Statistical Assessment and Discussion

A statistical interpretation of the laboratory results obtained by City Design – Geotechnical and Environmental & Environmental Engineering in 1999 was undertaken as part of the review conducted by CDEM.

A summary of the Soil Analysis Results including mean and standard deviation calculations is provided in **Appendix B**.

The review of the laboratory results indicates the following:

- Various “low level” discreet exceedances of environmental investigation levels (EIL’s) for heavy metals were reported for various samples;
- The 95% upper confidence level (UCL) for the mean concentration for all heavy metals analysed, with the exception of zinc, were below the EIL;
- The 95% UCL for the mean for zinc (364 mg/kg), while exceeding the EIL, is well below the health based threshold for standard residential land use of 7000mg/kg;

- The 95% UCL for TPH (C₁₀-C₁₄ fraction) exceeds the EPA's standard investigation threshold for this TPH fraction of 100 mg/kg. The mean value of the TPH (C₁₀-C₁₄ fraction) concentration is however below the adopted threshold level;
- The 95% UCL for benzo(a)pyrene exceeds the EPA's health based investigation threshold for standard residential land use however the mean value reported for benzo(a)pyrene was below the EPA's health based investigation threshold for standard residential land use;
- Limited targeted analysis was conducted for TPH (10 samples analysed only) and polycyclic aromatic hydrocarbons including benzo(a)pyrene (six samples analysed only). (Only fill samples where ash was noted were analysed for PAH constituents); and
- None of the contamination concentration exceedances reported were sufficiently elevated to raise serious concerns with respect to human health or the environment given the overall exposure potential at the site and given any future land use.

Samples BH1-0.2 and BH22-0.2 which returned concentrations for benzo(a)pyrene of 1.2 mg/kg and 1.9 mg/kg were among 5 fill samples noted to contain ash material. None of the other 50 samples collected were noted to contain any traces of ash. Given the specific targeting of the PAH analysis and the generally low concentrations of PAH and benzo(a) pyrene reported despite this targeting, it is unlikely that the PAH concentrations reported are indicative of any significant risk to human health or the environment given any subsequent land use of the site.

Soil samples selected for TPH analysis were generally targeted on the basis of visual assessment and/or proximity to areas where petroleum products were suspected to have been historically stored. Samples BH51-0.2 and BH52-0.2 which returned concentrations for TPH exceeding EPA guideline values were collected at shallow depth in an area described in the 1999 report as possibly previously housing fuel storage tanks and associated pipework. Samples collected from a further four sampling locations in this vicinity returned concentrations for TPH below EPA guideline values. Sample BH44-0.2 which was collected from adjacent to the diesel AST returned TPH concentrations below EPA guideline values.

Given the time that has elapsed since the City Design 1999 assessment and now, and given that hydrocarbon storage at the site had ceased in about 1999 it is likely that any residual hydrocarbons within shallow soil/fill at the site will have reduced/attenuated on those levels recorded in 1999.

5.0 Conclusions

On the basis of the review of the available information CDEM concludes the following:

- No specific notifiable activities are known to have occurred at the site with the exception of the historical presence of a single underground fuel storage tank which was reportedly decommissioned and removed from site prior to 1996;
- Significant remediation of the site including the off-site disposal of approximately 2200m³ of TPH and heavy metal contaminated soil appears to have been conducted by Golder Associates in late 1996;
- A Site Management Plan (SMP) was also developed by Golder in 1996. It would appear from correspondence between the DoE and Golder in late 1996 that the SMP was accepted by the DoE;
- The EPA was unable to locate either a copy of the SMP or the Stage II Contamination Assessment report pertaining to the site during a search in late 2007;
- Discreet samples collected by City Design in 1999 returned concentrations for various heavy metal contaminants exceeding environmental investigation levels;
- The 95% upper confidence level (UCL) for the mean concentration for all heavy metals analysed with the exception of zinc were below the EIL;
- The 95% upper confidence level (UCL) for the mean zinc concentration while exceeding the EIL was well below the health based investigation level for standard residential land use;
- While isolated samples returned TPH, total PAH and benzo(a)pyrene concentrations exceeding guideline values, the sample analysis for these samples was highly targeted and the resulting exceedances obtained are not considered representative of the soil/fill at the site in general;
- Given the shallow depth to bedrock at the site there is little potential for significant volumes of contaminated soil to exist at the site and little potential for contaminants to migrate to depth;
- None of the contamination concentration exceedances reported were sufficiently elevated to raise serious concerns with respect to human health or the environment given the overall exposure potential at the site and given any future land use; and
- The site is therefore considered suitable for any land use subject to implementation of the provisions of the draft SMPs provided in **Attachment D**.

6.0 Recommendations

On the basis of this review it is recommended that this report be forwarded to the Director of the Queensland Environmental Protection Agency along with a recommendation that the site (Lot 3 on SP 190810 and Lot 4 on SP 128032) is suitable for any use, subject to implementation of the attached Site Management Plans.

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RTI Act 2009

**Appendix A – Site Contamination Assessment Draft
Report- Geotechnical and Environmental
Engineering, March 1999.**

Published on DES Disclosure Log
RTI Act 2009

HOWARD SMITH WHARF, FORTITUDE VALLEY

SITE CONTAMINATION ASSESSMENT

DRAFT REPORT

Distribution:

2 Copies: City Planning

1 Copy: Geotechnical and Environmental Engineering

Reference: 98155(B)

Date Issued: 9 March 1999

EXECUTIVE SUMMARY

City Planning commissioned City Design to complete a site contamination assessment of Howard Smith Wharf at Boundary St, Fortitude Valley.

The purpose of the investigation is to assess the contamination status of the site to provide City Planning with information required as part of the proposed transfer of ownership of the site from State Government to Brisbane City Council. The site contamination assessment is also being prepared for submission, if requested by City Planning, to the Department of Environment and Heritage (DEH), for issuance of a Suitability Statement for the intended future use and/or to identify the remediation/management requirements of the site.

The results of soil sampling and laboratory analysis indicate some low level heavy metals contamination at the site, with two sampling locations exceeding Queensland DEH health-based guidelines for lead. Some low level petroleum hydrocarbon contamination was also found in one area, with two sampling locations exceeding Qld CHEM Unit guidelines for Total Petroleum Hydrocarbons.

The site is considered suitable for high to medium density residential, commercial / industrial or open space / recreational subject to either remediation of contaminated areas or by managing future use of the site under a Site Management Plan.

It is recommended that a Site Management Plan be developed and submitted to DEH for approval prior to commencement of site development works.

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1.0 INTRODUCTION

In December 1998, City Design was commissioned by City Planning to carry out a site contamination assessment of Howard Smith Wharf, under the Story Bridge in Brisbane City.

The assessment was carried out in accordance with the *DEH Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998*. The purpose of the assessment is to assess the contamination status of the site to provide City Planning with information required as part of the proposed transfer of ownership of the site from State Government to Brisbane City Council. The site contamination assessment is also being prepared for submission, if requested by City Planning, to the Department of Environment and Heritage (DEH), for issuance of a Suitability Statement for the intended future use and/or to identify the remediation/management requirements of the site.

1.1 Objective and Scope of Work

The objective of the site contamination assessment is to provide City Planning with the necessary information on the contamination status of the site to enable the transfer of property ownership in accordance with statutory and due diligence requirements.

The scope of the work carried out for the site contamination assessment, comprises four stages:

- Stage 1 - Preliminary Site Investigation (Completed)
Includes site description and site history
- Stage 2 - Detailed Site Investigation (Completed)
Includes sampling and testing for contaminants
Defining contaminant boundaries
- Stage 3 - Health and environmental assessment and determination of remediation plan (Future if required)
- Stage 4 - Implementation of agreed remediation plan and validation sampling (Future if required)

2.0 SITE DESCRIPTION

2.1 Property Description

The site is located at Boundary Street, Fortitude Valley under the Story Bridge and comprises the following lots in the Parish of North Brisbane:

Lot 400 on SL1404;
Lot 2 on RP40998;
Lot 2 on RP64992;
Lots 1,2,3 and 4 on RP64991;
Lot 6 on RP8569;
Lots 3 and 4 on RP52849;
Lot 4 on RP60570;
Lot 2 on B3333;
Lot 2 on RP44680;
Lots 21 and 22 on RP8614; and
Lot 4 on RP41821.

The site covers a total area of approximately 3.6 Ha. The actual wharf area is currently zoned "Commercial" with the remainder of the site being zoned "Special Development" under the Brisbane Town Plan.

2.2 Site Layout and Surrounding Land Use

The site currently contains 9 permanent buildings and approximately 10 mobile storage sheds or demountable buildings. Four of the permanent buildings are large wharf storage sheds, with parts of each shed being located on wharf areas which extend out over the Brisbane River. These buildings are constructed of timber, steel, corrugated iron and tin, with raised timber floors. In addition, there are 4 bomb shelters dating back to the Second World War located at the base of the cliffs throughout the site. There are 2 fenced off areas within the site as well as 2 lockable gates (excluding the entrance gate) which enable other sections within the site to be fenced off.

The surrounding land use and owners are:

North : Residential houses and a small park above the cliffs
South : Brisbane River
East : Residential houses above the cliffs
West : Block of residential units, car park, Boundary Street

2.3 Site Operations

The site has been vacant for several months, however it is currently used by the Police as a carpark. Various items of equipment and materials are currently temporarily stored on-site by the State Government.

2.4 Topography and Geology

The site is bounded on the northern side by cliffs, which are understood to have been formed as the result of quarrying operations carried out in the 1930's. The site is flat, and surface runoff drains directly into Brisbane River via a number of drains running under the wharf buildings.

A shallow channel runs between the edge of the concrete hardstand and the base of the cliff, from the western boundary of the site to the bomb shelter located opposite Building No. 3 (refer Figure 1). Surface water has ponded in this channel.

According to regional geology maps (City of Brisbane Geological Map, Sheet 3), the site is located on the boundary of two rock formations. These are the Palaeozoic age Neranleigh-Fernvale Beds (comprising greywacke, siltstone, shale, chert, jasper and basic volcanics) and the Mesozoic age Brisbane Tuff (comprising rhyolitic tuff, conglomerate, breccia and minor sandstone and shale). The interface between these two formations is evident in the cliff face, and was also observed during drilling investigations and sampling undertaken as part of the assessment.

The majority of the site is founded on a rock base overlain by a fill layer, the depth of which was found to vary up to approximately 1m. A large proportion of the fill observed during sampling was consistent with the geological composition of the cliff face described above, indicating that the fill possibly originated as a result of previous quarrying activities on site.

Rapid water infiltration was observed in boreholes during sampling conducted following a period of heavy rainfall, especially in areas located near to the cliff face. This was evidence of runoff flowing from the cliff face through the fill layer towards Brisbane River.

2.5 EPA Contaminated Land Register

EPA have advised that the following lots are currently registered on the Contaminated Land Register, in accordance with Schedule 8.3 of the Environmental Protection Act, 1997, the reason for which being described as "Hazardous Contaminant":-

- Lot 400 on SL1404;
- Lot 2 on RP44680;
- Lots 21 and 22 on RP8614; and
- Lot 4 on RP41821.

3.0 SITE HISTORY AND SITE INSPECTION

3.1 Site History

A site history was established by reviewing information supplied by various personnel who have had previous involvement with or knowledge regarding the site, and aerial photographs of the site dating back to 1964. References to buildings or features of the site in the following site history description can be found on Figure 1.

Review of aerial photographs indicated that:-

1964 - The site and surrounding area was generally as it appears today, however, there appears to be a number of small buildings located in the area at the eastern end of the site now used as the open storage area.

1974 - As above, however, this photo was taken during the Brisbane River Floods and the site appears to be completely inundated by flood waters.

An historical title search for the property was conducted by Brisbane City Legal Practice, Paralegal unit. The history of ownership of the site is quite complex due to the large number of individual lots which comprise the site. However, information received to date indicates that various lots within the site were generally privately owned until around the turn of the century, or in some cases until around the late 1920's. Qld National Bank Limited also owned some portions of the site at the beginning of the century. Brisbane Wharves Limited owned a number of lots for varying periods within 1901 and 1936. The Bureau of Industry also owned some lots from 1936 to 1950. Lots 1-4 of RP64991 were leased to Howard Smith Ltd from 1935 to 1956. The Department of Public Works currently owns the site, owning some lots from as early as 1946.

From the findings of the historical title search and anecdotal evidence from State Government personnel, it appears that the wharves on-site have been in use for the majority of this century. The wharves were used in wartime by the Navy for ship maintenance and storage and loading of supplies. Personal communication with ex-Navy personnel suggests that neither storage nor loading of munitions occurred at the site.

The following lots are identified as Prescribed Purpose Sites on BCC's Bimap system:-

- Lot 2 on B3333;
- Lot 2 on RP44680;
- Lots 21 and 22 on RP8614; and
- Lot 4 on RP41821.

Personal communication with the Contaminated Land Unit within BCC identified previous preliminary site investigation works which have been undertaken. Details of these investigations are unclear, however, it is believed that elevated metals of lead, copper and zinc were identified on some or all of the above lots. The registering of four of the above lots on the EPA Contaminated Land Register (refer Section 2.5) may be linked to the results of these site investigations, however, this is unconfirmed. The following description of site history is discussed on an area-by-area basis.

Personal communication with police personnel from Valley Police indicated that the Water Police and Police Diving Squad used part of the site as a base for their activities for some 20 years before relocating to the mouth of the Brisbane River approximately 3 months ago. Building No. 1 was used for administrative purposes, while Building No. 2 was used for storage purposes. It is possible that drums of oil and / or fuel may have also been stored on-site. General maintenance of police boats occurred while moored in the Brisbane River, and a bunded above-ground diesel tank located adjacent to Building No. 1 was used for police boat refuelling. This tank is still in place.

The fenced off area located opposite the Water Police building was used by Police as an impoundment area for seized and stolen cars, and for property to be used as evidence in court cases.

Building No. 3 was previously used as a general government store for government plant and equipment being held for auction. The State Works Department (now known as Q Build) also used the building for storage of plant, equipment and material such as stone masonry pieces.

Building No. 4 was previously used by multiple government departments as a general storage area. The building is currently approximately 90% vacant, however, is still used as a storage area for obsolete and old medical equipment awaiting transport to other countries. A government garage was also located in the eastern end of Building No. 4. Here servicing and maintenance of government vehicles occurred. Personal communication with State Government personnel indicates that refuelling of vehicles occurred at the garage, however, information regarding the fuel storage tanks is limited. There is a bunded area outside the garage area which possibly held a fuel storage tank and a concrete pad located opposite the garage area may also indicate the previous location of a fuel storage tank or bowsers.

A disused small amenities block containing toilets and showers is located opposite the government garage. This building was not connected to sewer, however, effluent was temporarily stored in holding tanks located outside the block. The effluent was pumped out and tankered off-site on a weekly basis. The amenities block was apparently used mainly by the Police Diving Squad.

An area outside the eastern end of Building No. 4 was used by Q Build for diamond sawing of silica sandstone blocks. A silica sand trap still located on-site was used to collect the effluent generated by the use of water for cooling purposes. This effluent comprised silica dust mixed with water and was temporarily stored in holding tanks located next to the trap. The holding tanks were pumped out and tankered off-site as needed.

A fenced off storage shed located opposite Building No. 4 adjacent to the base of the cliffs, was previously used as a storage area for low level radioactive hospital waste. It is believed that the types of waste stored included such items as hospital gowns and medical equipment used in radioactive procedures such as X-Rays. Storage of this type of waste ceased approximately 10 years ago and is now located near Maleny, north of Brisbane. Personal communication with Bruce Wallace from Queensland Health, indicates that radiation monitoring inside the storage shed was carried out in 1994 by Queensland Health, however, there was no evidence that radiation levels exceeded NHMRC Guidelines.

Building No. 5 was previously used by the Police Diving Squad for storage and general operations such as tank and boat maintenance. It is not known whether any hazardous substances were stored here.

Located east of Building No. 5 and bounded by the cliff and Brisbane River is an open area which is partially unconcreted. This area has been previously used as a general bulk storage area for various government activities and projects. When the quantity of material stored had accumulated sufficiently, government auctions were apparently held to clear the area.

3.2 Site Inspection

From site visits, the following site characteristics have been observed or inferred, based on a visual "walkover" assessment along with discussions with various personnel providing information.

The site has been fully vacated except for some areas where residual storage of some material / rubbish still occurs. It is expected that this material will be gradually removed from site. The site is presently used as a minor carpark by the Police.

Approximately two-thirds of the site is covered by a concrete hardstand which is expected to have prevented the downward migration of contaminants into underlying soils. No significant cracking or failure of the concrete hardstand was observed during the site inspection.

A bunded aboveground diesel storage tank is located next to Building No.1. From site history investigations this was apparently used by Water Police for boat refuelling. Staining of the concrete under the tank was evident. A large drum of waste oil and 2 small drums of oil/fuel were observed outside the bunded area. These drums were slightly leaking.

A number of empty drums were also observed inside the car impoundment area located opposite the Water Police buildings. What appears to be a drum of oil was also present and slightly leaking. A leaking drum of oil was also observed next to the eastern pylon of the Story Bridge. Three leaking drums of oil were also observed adjacent to the cliff opposite Building No.3. The extent of oil contamination on the concrete hardstand in this area is quite significant, and was observed to be draining into the small channel running in between the edge of the hardstand and the cliff base. The oil has ponded in this channel and does not appear to be draining from the channel.

A disused incinerator which appears to have been gas-fired is located next to the diesel tank described above.

Differing portions of each wharf building extend over Brisbane River. Each building is supported on timber pylons, with a raised timber floor, with some areas in Buildings 2 (Water Police) and 4 (government garage) also covered by plywood. These plywood areas appear to be stained by oil, which indicates the servicing and maintenance of engines. Building No.2 also contains a sign on the wall "SUPER ONLY" possibly indicating that drums of fuel were stored here. Signage also indicates that welding took place within this building.

Each wharf building contains some abandoned furniture or fittings, and rubbish. Building No. 4 is still used as a storage area for medical equipment awaiting shipment overseas.

A concrete pad is located at the base of the cliff opposite the area used as a government garage. There appears to have been a trench approximately 0.4m wide dug through the concrete hardstand which may indicate the presence of previous fuel storage tanks and associated pipework. A bunded area was also observed next to the garage area which may have contained an aboveground fuel storage tank.

A dismantled building which appears to be an old storage shed was observed adjacent to the cliff opposite building No. 4. The building was apparently abandoned due to termite damage, which were subsequently treated before dismantling the building.

The store shed located opposite Building No. 4 and adjacent to what appears to be an old bomb shelter is fenced off and padlocked. This is apparently the store shed used for storage of low level radioactive hospital waste.

The open air storage area located at the south-east of the site is quite overgrown, however, there is a small amount of stone masonry and equipment currently stored there. A number of empty and / or corroded drums were scattered throughout the site, especially in the open air storage area.

4.0 SAMPLING PLAN

Based on the above information a sampling program was developed to access the nature and extent of soil contamination within the site. The sampling program comprised drilling of boreholes and collection of soil samples at 54 locations. The sampling locations were identified on a grid measuring approximately 20m x 20m. A site plan showing the sampling locations is shown on **Figure 2**. Due to various site conditions during sample collection (eg. water inflow, shallow base rock), samples were able to be taken from 41 of the 54 sampling locations. 33 sampling locations were on the concrete hardstand.

The number of sampling locations was determined from AS4482.1-1997 *Guide to the sampling and investigation of potentially contaminated soil*, and site-specific information obtained from site history investigations.

Sampling was undertaken on 27 January 1999, 29 January 1999, and 2 February 1999. Drilling of boreholes and concrete drilling was conducted under supervision by Schneider Drilling Pty Ltd.

Table 1 below describes the lithology, samples taken, and analytes for each sampling location. Selected soil samples were analysed for one or more of the following:

- heavy metals including arsenic, cadmium, chromium, copper, lead, and zinc;
- pH;
- Total Petroleum Hydrocarbons (TPH);
- Benzene, Toluene, Ethyl-benzene, Xylene (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAH); and
- Organochlorine and Organophosphorus Pesticides (OC/OP).

Table 1 Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH1	0.0 - 0.2	0.2	1	(Fill) ash, underlying thin layer of asphalt	1,2,4,5
	0.2-0.9	0.5	2	Weathered Tuff, possible fill sourced on-site, yellow brown	1,2
	0.9			Base rock	
BH2	0.0-0.4	0.3		Weathered Tuff, possible fill sourced on-site, yellowy brown	
	0.4			Base rock	
BH3	0.0-0.2	0.2	3	Weathered Tuff, possible fill sourced on-site, yellowy brown	1,2
	0.2			Base rock	
BH4	0-0.15	0.1	4	(Fill) ash	1,2,4
	0.15			Base rock	

Table 1 (Cont) Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH5	0-0.1	0.1		Weathered Tuff, possible fill sourced on-site, yellowy brown Base rock	
BH6	0.0-0.2 0.2-0.6 0.6	0.2	5	(Fill) gravelly sand, brown (Fill) broken glass Base rock	1,2,5
BH7	0.0-0.9 0.9	0.35 0.5	6	(Fill) sandy clay, some gravel, trace ash and glass, mottled browns Base rock	1,2,3,4
BH8	0.0-0.2 0.2-0.8 0.8	0.2	7	(Fill) gravelly sand, some glass, yellowy light brown Weathered Tuff, possible fill sourced on-site, light brown Base rock	1,2
BH9	0.0-0.2 0.2	0.2		Weathered Tuff, possible fill sourced on-site, light brown Base rock	
BH10	0.0-0.9 0.9	0.5	8	Weathered Tuff, possible fill sourced on-site, light brown Base rock	1,2,3,5
BH11	0.0-0.1 0.1-0.5	0.2		(Fill) Gravel, up to 30mm diameter Weathered tuff, light brown	
BH12	0.0-0.2 0.2-0.9 0.9	0.2 0.5	9	(Fill) sandy gravel, up to 30mm diameter, grey (Fill) gravelly sand, some clay, light brown Base rock	1,2 Increase in moisture content observed with depth, saturated above base rock
BH13					Inaccessible
BH14	0.0-0.2 0.2	0.2		Concrete (Fill) gravel, well-graded, some sand Base rock	Rapid inflow observed
BH15	0.0-0.2 1.2	0.2	10	Concrete (Fill) sandy clay Base rock	1,2 Further samples unavailable due to saturation
BH16	0.0-0.2 0.8	0.2		Concrete (Fill) clayey sand, some gravel Base rock	Water observed, further samples unavailable due to saturation

Table 1 (Cont) Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH17	0.0-0.2 0.4	0.2	11	Concrete (Fill) gravel, well-graded Base rock	1,2 Inflow observed at 0.2m
BH18					No sample – water at surface
BH19	0.0-0.1 0.1			(Fill) gravel Base rock	No sample (rock fill)
BH20	0.0-0.02 0.02-1.1 1.1	0.2	12	Topsoil, grass Weathered Tuff Base rock	1,2,5 Inflow observed at 0.25m
BH21	0.0-0.6 0.6-0.95 0.95	0.2	13	(Fill) clayey sand, some gravel Extremely weathered phyllite - clay, some gravel, grey Base rock	1,2,3 Inflow observed at 0.3m
BH22	0.0-0.2 0.2-0.5	0.2 0.5	14 15	(Fill) silty sand, ash, slight amount of tar-like material, black (Fill) silty sand, light brown	1,2,3,4 Slightly odourous (diesel) 1,2,3
BH23	0.0-0.2 0.2-0.3 0.3	0.2	16	Concrete (Fill) gravelly clay, grey Weathered phyllite Base rock	1,2,3
BH24	0.0-0.2 0.2-0.4 0.4	0.2		Concrete (Fill) gravelly (well-graded) clay, light brown Weathered phyllite Base rock	
BH25	0.0-0.2 0.2-0.5 0.5-1.3 1.3	0.2 0.5	17	Concrete (Fill) sandy clay, some gravel, brown (Fill) sandy clay, some gravel, brown, mottled orange, grey Weathered phyllite Base rock	1,2
BH26	0.0-0.25 0.25-0.5	0.2		Concrete (Fill) gravelly clay, green grey, mottled orange Weathered phyllite	Saturated at 0.5m

Table 1 (Cont) Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH27	0.0-0.2	0.2	18	Concrete (Fill) gravelly clay, light brown. Mottled orange, grey, dark brown	1,2
	0.2-1.0	0.5		Weathered phyllite, light brown/orange, stiffness increasing with depth	
BH28	0.0-0.1		19	Concrete (Fill) gravel	Water observed directly under concrete 1,2
	0.1-1.0	0.5 1.0		Weathered phyllite – clay, mottled grey, orange, green, stiffness increasing with depth	
BH29	0.0-0.05 0.05			Concrete (Fill) gravel Base rock, some weathering	No sample
BH30	0.0-0.1 0.1			Topsoil, grass Base rock, some weathering	No sample
BH31	0.0			Concrete Base rock under concrete	No sample
BH32	0.0			Concrete Base rock under concrete	No sample
BH33	0.0-0.05 0.05-0.4 0.4	0.2	20	Concrete (Fill) gravel, some clay Weathered phyllite Base rock	1,2
BH34	0.0-0.5 0.5	0.2	21	Concrete Weathered phyllite Base rock	1,2,5
BH35	0.0-0.2 0.2	0.2		Concrete (Fill) gravel, some clay Base rock	
BH36	0.0-0.1	0.1	22	Concrete (Fill) sand, medium to coarse grain, possible bedding sand	1,2,3
	0.1			Base rock	
BH37	0.0-0.1 0.1	0.1	23	Concrete Weathered phyllite Base rock	1,2
BH38	0.0-0.2	0.2		Concrete (Fill) sand, medium to coarse grain, possible bedding sand	Water inflow observed at 0.2m
	0.2			Base rock	

Table 1 (Cont) Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH38A	0.0-0.05 0.05			Concrete (Fill) gravel Base rock	No sample
BH39	0.0-0.1 0.1	0.1	24	Concrete (Fill) sandy gravel Weathered phyllite, stiffness increasing with depth	1,2,3
BH39A	0.0-0.1 0.2			Concrete Weathered phyllite Base rock	No sample
BH40	0.0-0.05 0.05			Concrete (Fill) gravel Base rock	No sample
BH41	0.0-0.05 0.05	0.2	25	Concrete (Fill) gravel Weathered phyllite, stiffness increasing with depth	1,2
BH42	0.0-0.02 0.02			Concrete (Fill) Gravel Weathered phyllite	No sample
BH43	0.0-0.2 0.2-0.9	0.2	26	Concrete (Fill) gravelly clay, light brown, grey, mottled red, dark red Extremely weathered phyllite	1,2,4,5
BH44	0.0-0.5 0.5-1.5	0.2 1.0	27 28	Concrete (Fill) silty sand, some clay, brown (All.) sandy clay, brown, light brown	1,2,3 1,2
BH45				Concrete rubble fill	No sample
BH46	0.0-0.2 0.2-1.5 1.5-	0.2 0.5 1.5	29 30	(Fill) weathered phyllite (All.) sandy clay, brown, moisture increasing with depth Residual clay, green, light brown, mottled grey, dark brown	1,2 1,2
BH47	0.0-0.2 0.2	0.2		Concrete Weathered phyllite Base rock	
BH48	0.0-0.1 0.1-0.2 0.2	0.1	31	Concrete (Fill) sand, medium to coarse grain, possible bedding sand Weathered rock Base rock	1,2

Table 1 (Cont) Sampling Location Descriptions

Sampling Location Number	Depth (m)	Sample Interval (m)	Seq No.	Lithology	Analytical Parameters / Comments
BH49	0.0-0.02 0.02			Concrete (Fill) gravel Base rock	No sample
BH50	0.0-0.2 0.4	0.12	32	Concrete (Fill) sand, medium to coarse grain, possible bedding sand Base rock	1,2 Water inflow observed at 0.2m
BH51	0.0-	0.2	33	Concrete Weathered phyllite, increasing in stiffness with depth	1,2,3
BH52	0.0-0.2 0.2	0.2	34	Ash, some gravel Base rock	1,2,3,4 Water observed, not odourous

Notes: (1) pH
 (2) Heavy metal analysis (As, Cd, Cr, Cu, Pb, Zn)
 (3) TPH/BTEX analysis
 (4) OC/OP Pesticides
 (5) PAH
 (All.) = Alluvium

5.0 LABORATORY ANALYSIS

5.1 Analytical Results

50 soil samples at 41 sampling locations were collected. 34 samples were selected and despatched to laboratory for analysis. Remaining samples were stored under refrigeration at BCC Geotechnical & Environmental Engineering Laboratory. Laboratory analysis was undertaken by BCC Scientific Analytical Services and Australian Laboratory Services.

Soil analytical results have been compared to the environmental and health-based investigation thresholds outlined in the *DEH Draft Guidelines for the Assessment & Management of Contaminated Land in Queensland, May 1998*. The health-based investigation thresholds specified in the guidelines are based upon the proposed end land use of the site. The proposed end land use of the Howard Smith Wharf site has not been finalised, however, it is understood that the site will likely be used for a combination of commercial/industrial and open space recreational uses. For this reason, the conservative values of Category E (Parks, Recreational Open Space) health-based investigation thresholds were considered when discussing the analytical results. Draft guidelines prepared by the Qld CHEM Unit in 1991 provide a guideline for the assessment of hydrocarbon contamination in soil. Where guidelines for certain contaminants are not available, Dutch guidelines which provide intervention levels have been used (*Environmental Quality Objectives in the Netherlands, Ministry of Housing, Spatial Planning and the Environment, 1994*). United States EPA Preliminary Remediation Goals were also used for comparison purposes.

Summary soil analysis results for the site are presented in **Table 2** in **Appendix A**. Concentrations above guideline levels are highlighted in **Table 2**, and **Figure 3** shows these concentrations on a site plan.

Heavy Metals

All samples despatched to the laboratory were analysed for the presence of selected heavy metals. Nine samples had reported concentrations above DEH environmental investigation thresholds for lead, zinc, cadmium and arsenic. The following two samples reported concentrations exceeding health-based investigation thresholds:

- BH10 (0.5m) – lead concentration 710 mg/kg; and
- BH20 (0.2m) – lead concentration 650 mg/kg,

slightly above the health-based investigation threshold for lead - 600 mg/kg.

All other metal results were below the relevant DEH environmental guidelines.

Organochlorine and Organophosphorus Pesticides

Six samples were analysed for organochlorine and organophosphorus pesticides. All pesticide levels were below the limit of reporting specified by the analytical laboratory.

Total Petroleum Hydrocarbons (TPH)

Eleven samples were analysed for TPH. The following two samples reported concentrations exceeding CHEM Unit guidelines:

- BH51 (0.2m) – C₁₀-C₁₄ fraction concentration of 127 mg/kg; and
- BH52 (0.2m) – C₁₀-C₁₄ fraction concentration of 274 mg/kg
C₁₅-C₂₈ fraction concentration of 1830 mg/kg,

above the CHEM Unit guidelines for C₁₀-C₁₄ fraction of 100 mg/kg and C₁₅-C₂₈ fraction of 1000 mg/kg.

Slightly elevated TPH levels were also observed in BH22 (0.2m), however these levels are below health based threshold levels. This result coincided with the observation of hydrocarbon odours in the surface soil at BH22.

BTEX

Eleven samples were analysed for benzene, toluene, ethylbenzene and xylene (BTEX). All samples were below the limit of reporting specified by the analytical laboratory.

Polycyclic Aromatic Hydrocarbons (PAH)

Six samples were analysed for PAH. All samples were below health-based investigation thresholds for benzo(a)pyrene and total PAH.

5.2 Discussion of Results

From the analytical results of the soil samples, low level heavy metal contamination of fill exists in parts of the site. The majority of the contamination reported was in the open storage area located at the south-eastern end of the site. No heavy metal concentrations above investigation thresholds were reported in any of the samples obtained from under the concrete hardstand.

Hydrocarbon concentrations above guideline levels were reported in the samples obtained from the area opposite the government garage. Anecdotal evidence suggests that refuelling of vehicles may have occurred in this area. Low concentrations of hydrocarbons were detected in BH22 at 0.2m, however the sample taken from 0.5m was free from detectable hydrocarbons. BH51, located under the concrete hardstand also contained concentrations above guideline levels. These findings suggests that hydrocarbon contamination is confined to the surface layers, however, may have migrated under the concrete. The depth to base rock in this area was found to vary from 0.2m to approximately 1m.

6.0 QUALITY ASSURANCE / QUALITY CONTROL

6.1 Field Decontamination

In order to reduce the potential for cross contamination between sampling locations, all drilling equipment was washed after completion of sampling at each borehole. Latex gloves were also discarded between each sampling location to reduce potential cross contamination between samples.

6.2 Sampling and Analysis

All soil samples were collected in acid-washed, solvent-rinsed glass bottles supplied by SAS, placed in an esky containing ice immediately upon collection. Samples were stored under refrigeration in BCC Geotechnical & Environmental Engineering Laboratory until delivery to the analytical laboratory.

Laboratory analysis of soil samples was performed by Brisbane Water Scientific Analytical Services (SAS) and Australian Laboratory Services Pty Ltd (ALS). Both laboratories are National Association of Testing Authorities (NATA) accredited to perform the selected analyses. All sample containers and accompanying Chain of Custody records were marked with a unique identifying number. Copies of the Chain of Custody forms are presented in Appendix C.

6.3 Health and Safety

A Health & Safety Plan (HSP) was prepared for use by Geotechnical and Environmental Engineering personnel and contractors, during the site contamination assessment.

The purpose of this document is to inform all parties who will be involved in the site contamination assessment of expected site conditions, potential hazards, personal protective equipment and safety precautions required, decontamination procedures, and the emergency response plan.

7.0 REMEDIATION OPTIONS & RECOMMENDATIONS

It is evident from the soil sampling and laboratory testing detailed in this report that low level contamination by heavy metals and petroleum hydrocarbons is present within the site. As specified in the *DEH Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland*, levels of contaminants above the health investigation levels for the proposed use will require remediation or development of an appropriate plan for managing the contamination. The following options are available for remediation / management of the Howard Smith Wharf site:

1. Do nothing option ie. leave the site in its current state

This option is not recommended as a requirement of the DEH Draft Guidelines is that contamination exceeding health investigation levels be remediated or managed.

2. Removal of contaminated soil for disposal to landfill

This option is not recommended due to the uncertainty of the extent of contamination and the fact that the contaminant levels identified are considered to be acceptable, subject to proper site management (refer Option 4) for the proposed commercial / recreational final land use.

3. Conduct further sampling and laboratory testing

Due to the results obtained from this assessment, this option is not considered necessary.

4. Development and implementation of a site management plan

A site management plan (SMP) is a stand-alone public document which summarises the contamination issues and conditions associated with the use of the site. The objective of a site management plan (SMP) is to manage the chemical contamination on the site in manner which protects human health and the environment and ensures that the site is suitable for the specified use.

This is the recommended option, as development and implementation of an SMP will enable the contamination to remain on-site thus reducing the costs of remediating contaminated areas. Also, as the end land use for the site is not yet finalised, the SMP could be developed in consideration of the most sensitive proposed land uses (Category D – High/Medium Density Residential; Category E – Parks, Recreational Open Space; Category F – Commercial/Industrial Use). The contamination would be managed by a combination of the following:

- The placement and maintenance of a barrier which safely separates users of the site and the contamination as well as minimising surface water infiltration and restricting contaminant migration; and
- The application of procedures in order to control any site excavation and development works.

SMPs are submitted to DEH for approval and recording on the Environmental Management Register.

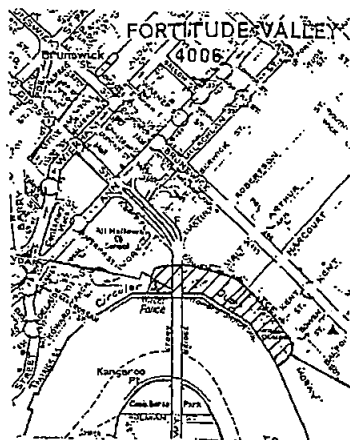
8.0 REFERENCES

AS4482.1-1997 Guide to the sampling and investigation of potentially contaminated soil

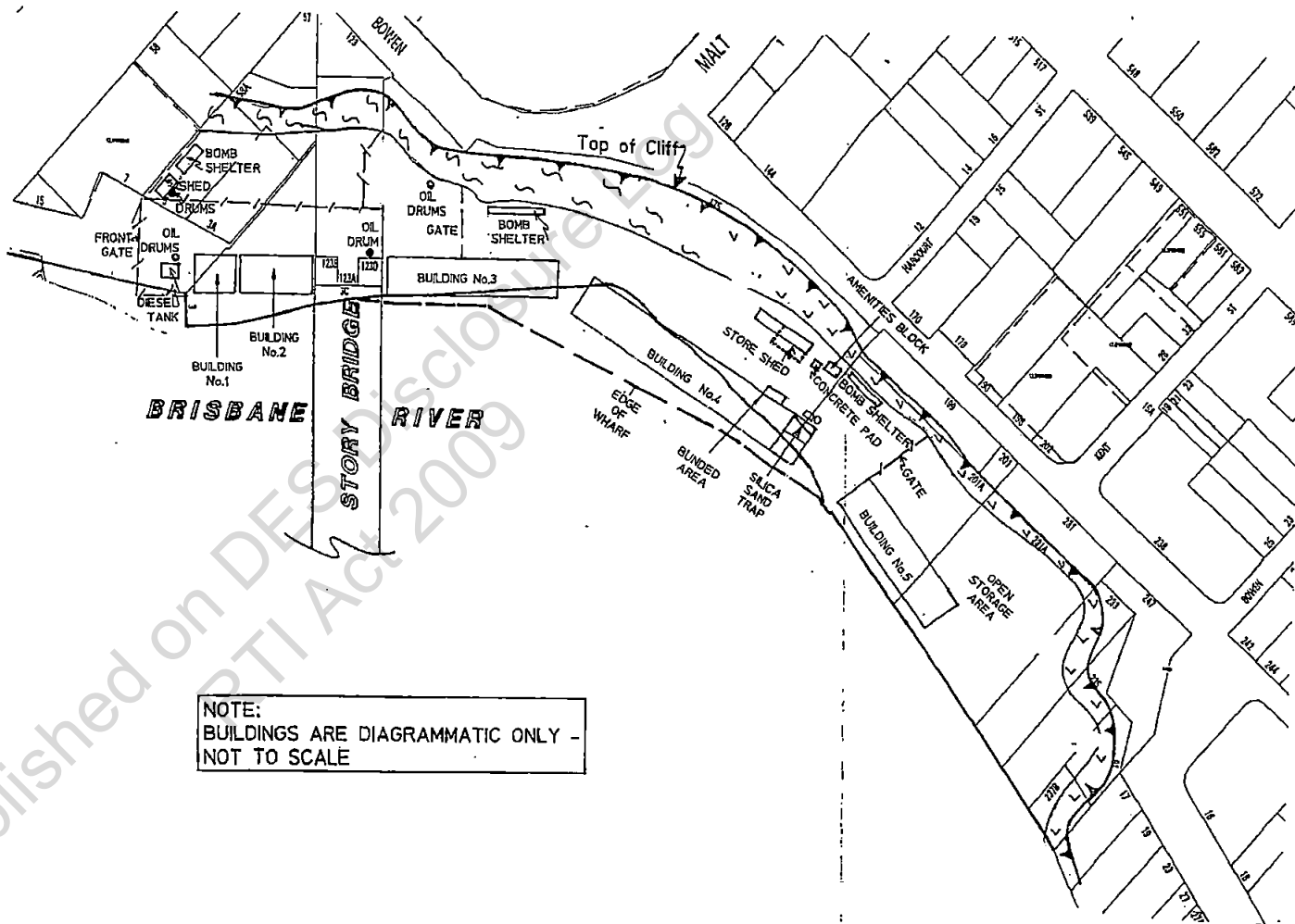
Department of Environment & Heritage, Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998

Environmental Quality Objectives in the Netherlands, Ministry of Housing, Spatial Planning and the Environment, 1994

Guidelines for the Assessment of Contaminated Land in Queensland, CHEM Unit, 1992



LOCALITY PLAN



LEGEND



BRISBANE TUFF



NERANLEIGH-FERNVALE BEDS



FENCE

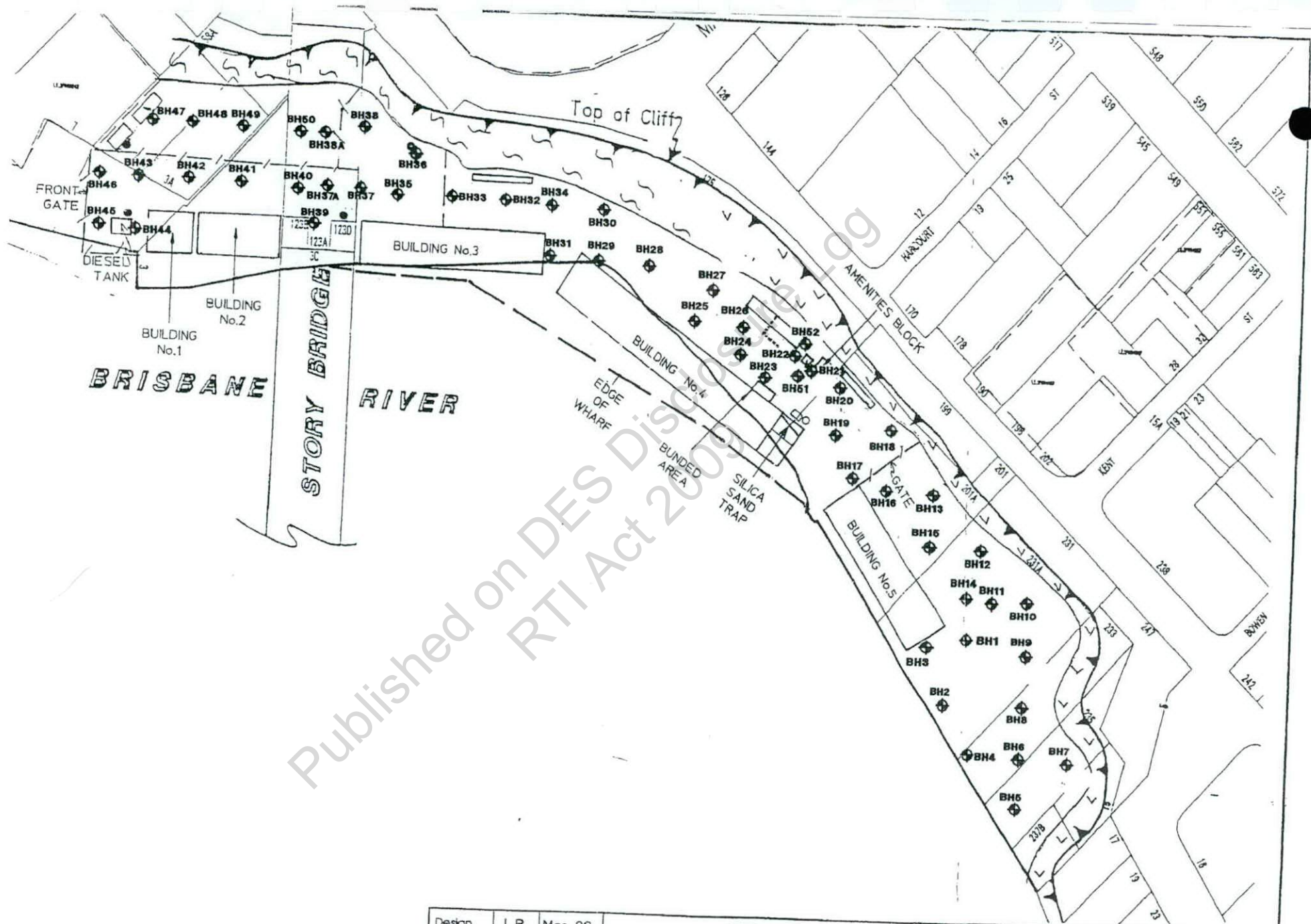
NOTE:
BUILDINGS ARE DIAGRAMMATIC ONLY -
NOT TO SCALE

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CITY DESIGN
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SITE CONTAMINATION ASSESSMENT
HOWARD SMITH WHARF
SITE PLAN



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ENGINEERING
Project No. 00155
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Figure No.

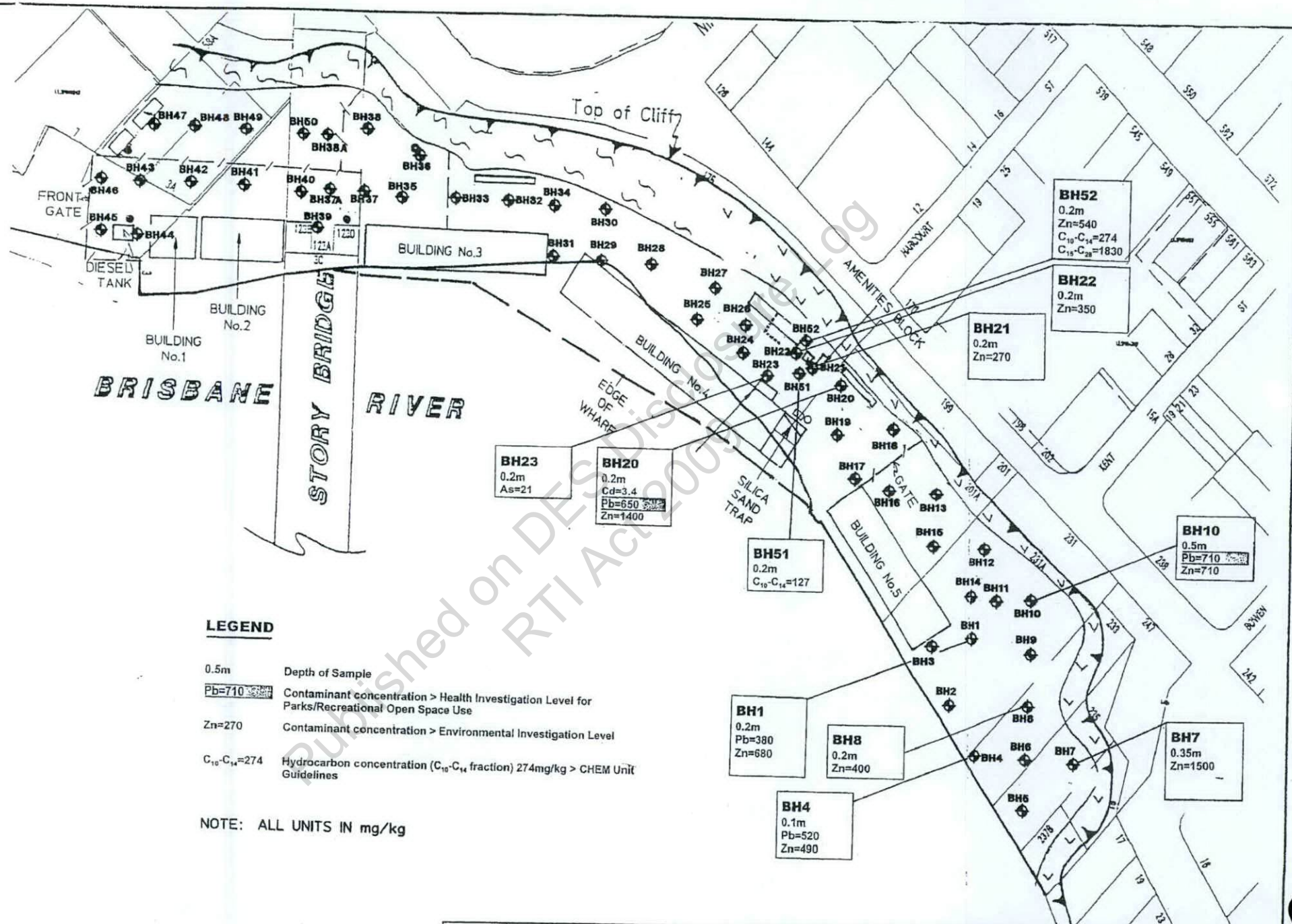


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 HOWARD SMITH WHARF
 SAMPLING LOCATIONS



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 Figure No. 2



LEGEND

- 0.5m Depth of Sample
- Pb=710 Contaminant concentration > Health Investigation Level for Parks/Recreational Open Space Use
- Zn=270 Contaminant concentration > Environmental Investigation Level
- C₁₀-C₁₄=274 Hydrocarbon concentration (C₁₀-C₁₄ fraction) 274mg/kg > CHEM Unit Guidelines

NOTE: ALL UNITS IN mg/kg

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Figure No. 3

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**APPENDIX A
SUMMARY ANALYTICAL RESULTS**

Table 2 - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	DEH Guidelines			Sample Locations						
Sequence No.			Background	Environmental	Health (E)	1	2	3	4	5	6	7
Borehole No.						BH1	BH1	BH3	BH4	BH6	BH7	BH8
Depth (m)						0.2	0.5	0.2	0.1	0.2	0.35	0.2
Metals												
Arsenic (Tot.) as As	mg/kg	10	0.2-30	20	200	<10	<10	<10	<10	<10	<10	<10
Cadmium (Tot.) as Cd	mg/kg	1	0.04-2	3	40	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0
Chromium (Tot.) as Cr	mg/kg	2	0.5-110	50	200	16	3.1	2.3	17	7.3	19	8.5
Copper (Tot.) as Cu	mg/kg	1	1-190	60	2000	84	4.0	6.7	58	11	18	22
Lead (Tot.) as Pb	mg/kg	10	<2-200	300	600	380	53	99	520	38	210	100
Zinc (Tot.) as Zn	mg/kg	5	2-180	200	14000	680	70	120	490	120	1500	400
Percent Moisture	%					[NT]	[NT]	[NT]	[NT]	[NT]	11.8	[NT]
pH 1:5 Extract			6 - 8			7.8	8.1	7.7	7.0	9.4	8.6	8.1

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

E - Parks/Recreational Open Space health based criteria

NT - Not tested

Bold values indicate levels exceeding DEH environmental investigation threshold level

Shaded values indicate levels exceeding DEH health based investigation threshold level

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	DEH Guidelines			Sample Locations						
Sequence No.			Background	Environmental	Health (E)	8	9	10	11	12	13	14
Borehole No.						BH10	BH12	BH15	BH17	BH20	BH21	BH22
Depth (m)						0.5	0.5	0.2	0.2	0.2	0.2	0.2
Metals												
Arsenic (Tot.) as As	mg/kg	10	0.2-30	20	200	<10	<10	<10	<10	<10	<10	<10
Cadmium (Tot.) as Cd	mg/kg	1	0.04-2	3	40	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0
Chromium (Tot.) as Cr	mg/kg	2	0.5-110	50	200	15	2.8	<2.0	4.4	19	3.3	7.1
Copper (Tot.) as Cu	mg/kg	1	1-190	60	2000	23	3.1	6.1	5.9	35	9.4	29
Lead (Tot.) as Pb	mg/kg	10	<2-200	300	600	710	36	100	48	650	110	130
Zinc (Tot.) as Zn	mg/kg	5	2-180	200	14000	710	71	67	84	1400	270	350
Percent Moisture	%					9.5	[NT]	[NT]	[NT]	[NT]	12.6	11.8
pH 1:5 Extract			6 - 8			8.7	8.1	8.1	8.5	7.3	9.0	8.9

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

E - Parks/Recreational Open Space health based criteria

NT - Not tested

Bold values indicate levels exceeding DEH environmental investigation threshold level

Shaded values indicate levels exceeding DEH health-based investigation threshold level

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	DEH Guidelines			Sample Locations						
Sequence No.			Background	Environmental	Health (E)	15	16	17	18	19	20	21
Borehole No.						BH22	BH23	BH25	BH27	BH28	BH33	BH34
Depth (m)						0.5	0.2	0.2	0.2	0.5	0.2	0.1
Metals												
Arsenic (Tot.) as As	mg/kg	10	0.2-30	20	200	<10	21	<10	<10	<10	<10	<10
Cadmium (Tot.) as Cd	mg/kg	1	0.04-2	3	40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium (Tot.) as Cr	mg/kg	2	0.5-110	50	200	<2.0	<2.0	24	3.2	2.8	<2.0	<2.0
Copper (Tot.) as Cu	mg/kg	1	1-190	60	2000	8.7	8.9	2.9	3.1	<1.0	9.9	15
Lead (Tot.) as Pb	mg/kg	10	<2-200	300	600	11	<10	24	12	<10	<10	<10
Zinc (Tot.) as Zn	mg/kg	5	2-180	200	14000	100	77	50	69	37	100	84
Percent Moisture	%					4.6	14.7	[NT]	[NT]	[NT]	[NT]	[NT]
pH 1:5 Extract			6 - 8			9.4	9.3	5.5	8.8	6.2	9.1	9.6

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

E - Parks/Recreational Open Space health based criteria

NT - Not tested

Bold values indicate levels exceeding DEH environmental investigation threshold level

Strikethrough values indicate levels exceeding DEH health-based investigation threshold level

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	DEH Guidelines			Sample Locations						
Sequence No.			Background	Environmental	Health (E)	22	23	24	25	26	27	28
Borehole No.						BH36	BH37	BH39	BH41	BH43	BH44	BH44
Depth (m)						0.2	0.2	0.1	0.2	0.2	0.2	1.0
Metals												
Arsenic (Tot.) as As	mg/kg	10	0.2-30	20	200	<10	<10	<10	<10	<10	<10	<10
Cadmium (Tot.) as Cd	mg/kg	1	0.04-2	3	40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium (Tot.) as Cr	mg/kg	2	0.5-110	50	200	6.6	2.4	5.0	3.0	20	28	40
Copper (Tot.) as Cu	mg/kg	1	1-190	60	2000	5.1	19	12	26	8.5	8.3	9.7
Lead (Tot.) as Pb	mg/kg	10	<2-200	300	600	19	11	31	14	<10	16	<9.9
Zinc (Tot.) as Zn	mg/kg	5	2-180	200	14000	74	110	110	130	39	44	46
Percent Moisture	%					8.3	[NT]	7.6	[NT]	[NT]	12.9	[NT]
pH 1:5 Extract			6 - 8			9.1	9.2	9.8	8.4	8.5	8.2	6.2

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

E - Parks/Recreational Open Space health based criteria

NT - Not tested

Bold values indicate levels exceeding DEH environmental investigation threshold level

Shaded values indicate levels exceeding DEH health based investigation threshold level

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	DEH Guidelines			Sample Locations					
Sequence No.			Background	Environmental	Health (E)	29	30	31	32	33	34
Borehole No.						BH46	BH46	BH48	BH50	BH51	BH52
Depth (m)						0.2	0.5	0.1	0.2	0.2	0.2
Metals											
Arsenic (Tot.) as As	mg/kg	10	0.2-30	20	200	<10	<10	<10	<10	<10	<10
Cadmium (Tot.) as Cd	mg/kg	1	0.04-2	3	40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium (Tot.) as Cr	mg/kg	2	0.5-110	50	200	6.9	28	5.4	7.8	<2.0	19
Copper (Tot.) as Cu	mg/kg	1	1-190	60	2000	13	6.8	12	25	8.0	43
Lead (Tot.) as Pb	mg/kg	10	<2-200	300	600	23	20	11	18	21	180
Zinc (Tot.) as Zn	mg/kg	5	2-180	200	14000	99	56	56	51	94	540
Percent Moisture	%					[NT]	[NT]	[NT]	[NT]	7.3	23.8
pH 1:5 Extract			6 - 8			9.5	6.1	8.5	9.3	9.3	7.3

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

E - Parks/Recreational Open Space health based criteria

NT - Not tested

Bold values indicate levels exceeding DEH environmental investigation threshold level**Shaded values indicate levels exceeding DEH health-based investigation threshold level**

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	Guidelines		Sample Locations							
Sequence No.			CHEM Unit	Dutch	6	8	13	14	15	16	22	24
Borehole No.					BH7	BH10	BH21	BH22	BH22	BH23	BH36	BH39
Depth (m)					0.35	0.5	0.2	0.2	0.5	0.2	0.2	0.1
TPH												
C ₆ -C ₉ Fraction	mg/kg	2	100		<2	<2	<2	<2	<2	<2	<2	<2
C ₁₀ - C ₁₄ Fraction	mg/kg	50	100		<50	<50	<50	<50	<50	<50	<50	<50
C ₁₅ - C ₂₈ Fraction	mg/kg	100	1000		<100	<100	<100	240	<100	<100	<100	<100
C ₂₉ - C ₃₆ Fraction	mg/kg	100	1000		<100	<100	<100	<100	<100	<100	<100	<100
Total C ₁₀ - C ₃₆ Fraction				5000				240				
			DEH Environmental									
BTEX												
Benzene	mg/kg	0.2	1		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethylbenzene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Meta- & para-xylene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
ortho-Xylene	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Notes:

LOR - Limit of Reporting

Bold values indicate levels exceeding CHEM Unit/DEH guidelines

CHEM Unit- Draft guidelines for TPH contamination

DEH - Draft Guidelines investigation thresholds

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	Guidelines		Sample Locations		
Sequence No.			CHEM Unit	Dutch	27	33	34
Borehole No.					BH44	BH51	BH52
Depth (m)					0.2	0.2	0.2
TPH							
C ₆ -C ₉ Fraction	mg/kg	2	100		<2	<2	<2
C ₁₀ - C ₁₄ Fraction	mg/kg	50	100		<50	127	274
C ₁₅ - C ₂₈ Fraction	mg/kg	100	1000		<100	265	1830
C ₂₉ - C ₃₆ Fraction	mg/kg	100	1000		<100	<100	862
Total C ₁₀ - C ₃₆ Fraction				5000		392	2966
			DEH Environmental				
BTEX							
Benzene	mg/kg	0.2	1		<0.2	<0.2	<0.2
Toluene	mg/kg	0.2			<0.2	<0.2	<0.2
Chlorobenzene	mg/kg	0.2			<0.2	<0.2	<0.2
Ethylbenzene	mg/kg	0.2			<0.2	<0.2	<0.2
Meta- & para-xylene	mg/kg	0.2			<0.2	<0.2	<0.2
ortho-Xylene	mg/kg	0.2			<0.2	<0.2	<0.2

Notes:

LOR - Limit of Reporting

CHEM Unit- Draft guidelines for TPH contamination

DEH - Draft Guidelines investigation thresholds

Bold values indicate levels exceeding CHEM Unit/DEH guidelines

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	Guidelines		Sample Locations					
Sequence No.			DEH Health(E)	USEPA	1	5	8	12	21	26
Borehole No.					BH1	BH6	BH10	BH20	BH34	BH43
Depth (m)					0.2	0.2	0.5	0.2	0.2	0.2
Organochlorine Pesticides										
alpha-BHC	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
HCB	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC & gamma-BHC	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	mg/kg	0.05	20		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlordane - cis	mg/kg	0.05	100	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.05	20	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDE	mg/kg	0.05		5.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDD	mg/kg	0.05		7.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT	mg/kg	0.2	400	5.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

USEPA - United States Environmental Protection Agency Region IX Preliminary Remediation Goals (PRGs) for Industrial Land Uses

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	Guidelines		Sample Locations					
Sequence No.			DEH Health(E)	USEPA	1	5	8	12	21	26
Borehole No.					BH1	BH6	BH10	BH20	BH34	BH43
Depth (m)					0.2	0.2	0.5	0.2	0.2	0.2
Organophosphorus Pesticides										
Dichlorvos	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
demeton-s-methyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos E	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos Z	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
fenamiphos	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos-methyl	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

USEPA - United States Environmental Protection Agency Region IX Preliminary Remediation Goals (PRGs) for Industrial Land Uses

Table 2 (Cont) - SUMMARY OF LABORATORY ANALYTICAL RESULTS (SOIL)

Analysis	Units	LOR	Guidelines		Sample Locations					
Sequence No.			DEH Health(E)	USEPA	1	4	6	14	26	34
Borehole No.					BH1	BH4	BH7	BH22	BH43	BH52
Depth (m)					0.2	0.2	0.35	0.2	0.2	0.2
PAH Analysis										
Naphthalene	mg/kg	0.5		800	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylnaphthalene	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chloronaphthalene	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	mg/kg	0.5		360	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5		300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5			1.4	0.5	<0.5	1.5	<0.5	0.7
Anthracene	mg/kg	0.5		19	<0.5	<0.5	<0.5	0.8	<0.5	<0.5
Fluorathene	mg/kg	0.5			2.0	0.9	<0.5	4.1	<0.5	<0.5
Pyrene	mg/kg	0.5		20,000	2.1	0.9	<0.5	4.0	<0.5	<0.5
N-2-Fluorenylacetamide	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5			1.0	0.5	<0.5	2.6	<0.5	<0.5
Chrysene	mg/kg	0.5		24	1.3	1.2	<0.5	2.5	<0.5	<0.5
Benzo(b) & (k)fluoranthene	mg/kg	1		2.6 to 26	2	1	<1	4	<1	<1
7,12-Dimethylbenz(a)anthracene	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	2	0.26	1.2	<0.5	<0.5	1.9	<0.5	<0.5
3-Methylcholanthrene	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.5			0.6	<0.5	<0.5	1.0	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5		26	<0.5	<0.5	<0.5	0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5			0.7	<0.5	<0.5	0.9	<0.5	<0.5
TOTAL PAH	mg/kg		40		12.3	5	0	23.8	0	0.7

Notes:

LOR - Limit of Reporting

DEH - Draft Guidelines investigation thresholds

USEPA - United States Environmental Protection Agency Region IX Preliminary Remediation Goals (PRGs) for Industrial Land Uses

Published on DES Disclosure Log
RTI Act 2009

APPENDIX B
LABORATORY ANALYTICAL RESULTS

**SCIENTIFIC ANALYTICAL SERVICES LABORATORY****Scientific Analytical Services**
240 Donaldson Road
Rocklea Brisbane Qld 4106Telephone 07 3403 2611
Facsimile 07 3403 2646

A unit of the Brisbane City Council

Attention: Liz Boczek
Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Sampling Date: 02/02/99

Sampled By: Client

Sampling Method: Grab

Sample Matrix: Solid

Batch Number: 99/0933

Registration Date: 4 February 1999

Date of Report: 5 March 1999

Sequence Number	Sample Description
/1	BH1 0.2 M
/2	BH1 0.5 M
/3	BH3 0.2 M
/4	BH4 0.2 M
/5	BH6 0.2 M
/6	BH7 0.35 M
/7	BH8 0.2 M
/8	BH10 0.5 M
/9	BH12 0.5 M
/10	BH15 0.2 M
/11	BH17 0.2 M
/12	BH20 0.2 M
/13	BH21 0.2 M
/14	BH22 0.2 M
/15	BH22 0.5 M
/16	BH23 0.2 M
/17	BH25 0.2 M
/18	BH27 0.2 M
/19	BH28 0.5 M
/20	BH33 0.2 M

Please note that the above results refer only to the samples tested,
and not to the batches from which they were drawn.

Client: City Design, Ground Engineering
Job Name: 08155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Sequence Number	Sample Description
/21	BH34 0.2 M
/22	BH36 0.2 M
/23	BH37 0.2 M
/24	BH39 0.1 M
/25	BH41 0.2 M
/26	BH43 0.2 M
/27	BH44 0.2 M
/28	BH44 1.0 M
/29	BH46 0.2 M
/30	BH46 0.5 M
/31	BH48 0.1 M
/32	BH50 0.2 M
/33	BH51 0.2 M
/34	BH52 0.2 M

TPH/BTEX, PAH's and OC/OP Pesticides analysis performed by ALS EB19245.
This report supersedes any previous report of the same batch number.

Please note that the above results refer only to the samples tested,
and not to the batches from which they were drawn.

Page 2 of 9

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/1	/2	/3	/4
5.002	pH 1:5 Extract		7.8	8.1	7.7	7.0
External	Hydrocarbon Banding		[NR]	[NR]	[NR]	[NR]
External	BTEX		[NR]	[NR]	[NR]	[NR]
External	Polyaromatic Hydrocarbons		Complete	[NR]	[NR]	Complete
External	OC/OP Pesticides		Complete	[NR]	[NR]	[NR]
Method	Test	Units	/5	/6	/7	/8
5.002	pH 1:5 Extract		9.4	8.6	8.1	8.7
External	Hydrocarbon Banding		[NR]	Complete	[NR]	Complete
External	BTEX		[NR]	Complete	[NR]	Complete
External	Polyaromatic Hydrocarbons		[NR]	Complete	[NR]	[NR]
External	OC/OP Pesticides		Complete	[NR]	[NR]	Complete
Method	Test	Units	/9	/10	/11	/12
5.002	pH 1:5 Extract		8.1	8.1	8.5	7.3
External	Hydrocarbon Banding		[NR]	[NR]	[NR]	[NR]
External	BTEX		[NR]	[NR]	[NR]	[NR]
External	Polyaromatic Hydrocarbons		[NR]	[NR]	[NR]	[NR]
External	OC/OP Pesticides		[NR]	[NR]	[NR]	Complete
Method	Test	Units	/13	/14	/15	/16
5.002	pH 1:5 Extract		9.0	8.9	9.4	9.3
External	Hydrocarbon Banding		Complete	Complete	Complete	Complete
External	BTEX		Complete	Complete	Complete	Complete
External	Polyaromatic Hydrocarbons		[NR]	Complete	[NR]	[NR]
External	OC/OP Pesticides		[NR]	[NR]	[NR]	[NR]
Method	Test	Units	/17	/18	/19	/20
5.002	pH 1:5 Extract		5.5	8.8	6.2	9.1
External	Hydrocarbon Banding		[NR]	[NR]	[NR]	[NR]
External	BTEX		[NR]	[NR]	[NR]	[NR]
External	Polyaromatic Hydrocarbons		[NR]	[NR]	[NR]	[NR]
External	OC/OP Pesticides		[NR]	[NR]	[NR]	[NR]
Method	Test	Units	/21	/22	/23	/24
5.002	pH 1:5 Extract		9.6	9.1	9.2	9.8
External	Hydrocarbon Banding		[NR]	Complete	[NR]	Complete
External	BTEX		[NR]	Complete	[NR]	Complete
External	Polyaromatic Hydrocarbons		[NR]	[NR]	[NR]	[NR]
External	OC/OP Pesticides		Complete	[NR]	[NR]	[NR]

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the batches from which they were drawn.

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Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/25	/26	/27	/28
5.002	pH 1:5 Extract		8.4	8.5	8.2	6.2
External	Hydrocarbon Banding		[NR]	[NR]	Complete	[NR]
External	BTEX		[NR]	[NR]	Complete	[NR]
External	Polyaromatic Hydrocarbons		[NR]	Complete	[NR]	[NR]
External	OC/OP Pesticides		[NR]	Complete	[NR]	[NR]
Method	Test	Units	/29	/30	/31	/32
5.002	pH 1:5 Extract		9.5	6.1	8.5	9.3
External	Hydrocarbon Banding		[NR]	[NR]	[NR]	[NR]
External	BTEX		[NR]	[NR]	[NR]	[NR]
External	Polyaromatic Hydrocarbons		[NR]	[NR]	[NR]	[NR]
External	OC/OP Pesticides		[NR]	[NR]	[NR]	[NR]
Method	Test	Units	/33	/34		
5.002	pH 1:5 Extract		9.3	7.3		
External	Hydrocarbon Banding		Complete	Complete		
External	BTEX		Complete	Complete		
External	Polyaromatic Hydrocarbons		[NR]	Complete		
External	OC/OP Pesticides		[NR]	[NR]		

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the patches from which they were drawn.

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/1	/2	/3	/4
5.304	Calcium (Tot.) as Ca	mg/kg	25000	1700	550	3200
5.304	Magnesium (Tot.) as Mg	mg/kg	1100	<200	340	980
5.304	Sodium (Tot.) as Na	mg/kg	470	<400	<400	<400
5.304	Potassium (Tot.) as K	mg/kg	260	320	740	680
5.304	Aluminium (Tot.) as Al	mg/kg	6000	3000	2300	7000
5.304	Barium (Tot.) as Ba	mg/kg	190	41	74	220
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	16	3.1	2.3	17
5.304	Copper (Tot.) as Cu	mg/kg	84	4.0	6.7	58
5.304	Iron (Tot.) as Fe	mg/kg	21000	8100	12000	55000
5.304	Manganese (Tot.) as Mn	mg/kg	290	110	220	550
5.304	Nickel (Tot.) as Ni	mg/kg	14	<2.0	<2.0	13
5.304	Lead (Tot.) as Pb	mg/kg	380	53	99	520
5.304	Zinc (Tot.) as Zn	mg/kg	680	70	120	490
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10
Method	Test	Units	/5	/6	/7	/8
5.304	Calcium (Tot.) as Ca	mg/kg	2800	6900	1900	6500
5.304	Magnesium (Tot.) as Mg	mg/kg	3700	1100	1100	980
5.304	Sodium (Tot.) as Na	mg/kg	<400	<400	<400	<400
5.304	Potassium (Tot.) as K	mg/kg	980	400	900	1200
5.304	Aluminium (Tot.) as Al	mg/kg	6200	6300	6500	11000
5.304	Barium (Tot.) as Ba	mg/kg	83	120	130	270
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	1.3	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	7.3	19	8.5	15
5.304	Copper (Tot.) as Cu	mg/kg	11	18	22	23
5.304	Iron (Tot.) as Fe	mg/kg	16000	17000	22000	26000
5.304	Manganese (Tot.) as Mn	mg/kg	330	480	400	270
5.304	Nickel (Tot.) as Ni	mg/kg	4.3	5.9	4.6	7.4
5.304	Lead (Tot.) as Pb	mg/kg	38	210	100	710
5.304	Zinc (Tot.) as Zn	mg/kg	120	1500	400	710
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the batches from which they were drawn.

Page 5 of 9

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/9	/10	/11	/12
5.304	Calcium (Tot.) as Ca	mg/kg	1700	770	1200	1300
5.304	Magnesium (Tot.) as Mg	mg/kg	<200	<200	280	400
5.304	Sodium (Tot.) as Na	mg/kg	<390	<400	<400	<400
5.304	Potassium (Tot.) as K	mg/kg	620	510	1500	1000
5.304	Aluminium (Tot.) as Al	mg/kg	4400	3000	7900	11000
5.304	Barium (Tot.) as Ba	mg/kg	90	110	33	260
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	3.4
5.304	Chromium (Tot.) as Cr	mg/kg	2.8	<2.0	4.4	19
5.304	Copper (Tot.) as Cu	mg/kg	3.1	6.1	5.9	35
5.304	Iron (Tot.) as Fe	mg/kg	13000	18000	15000	15000
5.304	Manganese (Tot.) as Mn	mg/kg	97	550	90	240
5.304	Nickel (Tot.) as Ni	mg/kg	<2.0	<2.0	<2.0	3.8
5.304	Lead (Tot.) as Pb	mg/kg	36	100	48	650
5.304	Zinc (Tot.) as Zn	mg/kg	71	67	84	1400
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10
Method	Test	Units	/13	/14	/15	/16
5.304	Calcium (Tot.) as Ca	mg/kg	3900	3600	590	800
5.304	Magnesium (Tot.) as Mg	mg/kg	1000	690	<200	580
5.304	Sodium (Tot.) as Na	mg/kg	<400	1100	600	<400
5.304	Potassium (Tot.) as K	mg/kg	490	1000	1800	2400
5.304	Aluminium (Tot.) as Al	mg/kg	2600	5300	3000	4200
5.304	Barium (Tot.) as Ba	mg/kg	160	490	210	65
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	3.3	7.1	<2.0	<2.0
5.304	Copper (Tot.) as Cu	mg/kg	9.4	29	8.7	8.8
5.304	Iron (Tot.) as Fe	mg/kg	22000	26000	26000	16000
5.304	Manganese (Tot.) as Mn	mg/kg	670	600	470	510
5.304	Nickel (Tot.) as Ni	mg/kg	3.7	10	5.4	2.9
5.304	Lead (Tot.) as Pb	mg/kg	110	130	11	<10
5.304	Zinc (Tot.) as Zn	mg/kg	270	350	100	77
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	21

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the batches from which they were drawn.

Page 6 of 8

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/98

Method	Test	Units	/17	/18	/19	/20
5.304	Calcium (Tot.) as Ca	mg/kg	1100	690	<200	2100
5.304	Magnesium (Tot.) as Mg	mg/kg	2100	420	1100	960
5.304	Sodium (Tot.) as Na	mg/kg	<390	<400	<390	<400
5.304	Potassium (Tot.) as K	mg/kg	1500	1300	3100	<200
5.304	Aluminium (Tot.) as Al	mg/kg	20000	3200	7100	1600
5.304	Barium (Tot.) as Ba	mg/kg	35	75	46	18
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	24	3.2	2.8	<2.0
5.304	Copper (Tot.) as Cu	mg/kg	2.9	3.1	<1.0	9.9
5.304	Iron (Tot.) as Fe	mg/kg	32000	17000	11000	33000
5.304	Manganese (Tot.) as Mn	mg/kg	49	81	28	850
5.304	Nickel (Tot.) as Ni	mg/kg	4.8	2.5	<2.0	15
5.304	Lead (Tot.) as Pb	mg/kg	24	12	<10	<10
5.304	Zinc (Tot.) as Zn	mg/kg	50	69	37	100
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10
Method	Test	Units	/21	/22	/23	/24
5.304	Calcium (Tot.) as Ca	mg/kg	3800	890	1500	1900
5.304	Magnesium (Tot.) as Mg	mg/kg	470	650	520	890
5.304	Sodium (Tot.) as Na	mg/kg	<400	<400	<390	420
5.304	Potassium (Tot.) as K	mg/kg	480	<200	<200	1100
5.304	Aluminium (Tot.) as Al	mg/kg	1300	1500	1200	5100
5.304	Barium (Tot.) as Ba	mg/kg	19	15	28	57
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	<2.0	6.6	2.4	5.0
5.304	Copper (Tot.) as Cu	mg/kg	15	5.1	19	12
5.304	Iron (Tot.) as Fe	mg/kg	17000	8000	36000	28000
5.304	Manganese (Tot.) as Mn	mg/kg	130	91	610	650
5.304	Nickel (Tot.) as Ni	mg/kg	5.4	6.5	15	9.3
5.304	Lead (Tot.) as Pb	mg/kg	<10	19	11	31
5.304	Zinc (Tot.) as Zn	mg/kg	84	74	110	110
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the batches from which they were drawn.

Page 7 of 9

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/25	/26	/27	/28
5.304	Calcium (Tot.) as Ca	mg/kg	1000	2600	2600	1200
5.304	Magnesium (Tot.) as Mg	mg/kg	310	1800	2500	3500
5.304	Sodium (Tot.) as Na	mg/kg	<400	730	<400	570
5.304	Potassium (Tot.) as K	mg/kg	480	480	620	430
5.304	Aluminium (Tot.) as Al	mg/kg	2900	13000	14000	14000
5.304	Barium (Tot.) as Ba	mg/kg	20	66	73	58
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	3.0	20	28	40
5.304	Copper (Tot.) as Cu	mg/kg	26	8.5	8.3	9.7
5.304	Iron (Tot.) as Fe	mg/kg	39000	26000	19000	25000
5.304	Manganese (Tot.) as Mn	mg/kg	590	70	260	130
5.304	Nickel (Tot.) as Ni	mg/kg	9.3	10	13	11
5.304	Lead (Tot.) as Pb	mg/kg	14	<10	16	<10
5.304	Zinc (Tot.) as Zn	mg/kg	130	39	44	46
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10
Method	Test	Units	/29	/30	/31	/32
5.304	Calcium (Tot.) as Ca	mg/kg	2700	1900	980	1800
5.304	Magnesium (Tot.) as Mg	mg/kg	2500	2800	410	790
5.304	Sodium (Tot.) as Na	mg/kg	550	<400	<400	<400
5.304	Potassium (Tot.) as K	mg/kg	2700	1100	230	200
5.304	Aluminium (Tot.) as Al	mg/kg	12000	16000	2400	3000
5.304	Barium (Tot.) as Ba	mg/kg	160	97	17	20
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	6.9	28	5.4	7.8
5.304	Copper (Tot.) as Cu	mg/kg	13	6.8	12	25
5.304	Iron (Tot.) as Fe	mg/kg	31000	25000	16000	11000
5.304	Manganese (Tot.) as Mn	mg/kg	170	400	300	210
5.304	Nickel (Tot.) as Ni	mg/kg	8.1	17	7.1	7.3
5.304	Lead (Tot.) as Pb	mg/kg	23	20	11	18
5.304	Zinc (Tot.) as Zn	mg/kg	99	56	56	51
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10	<10	<10

s.73 Irrelevant information

Please note that the above results refer only to the samples tested, and not to the patches from which they were drawn.

Page 8 of 9

Client: City Design, Ground Engineering
Job Name: 98155 Howard Smith Walk

Batch Number: 99/0933
Report Date: 5/03/99

Method	Test	Units	/33	/34
5.304	Calcium (Tot.) as Ca	mg/kg	1500	4400
5.304	Magnesium (Tot.) as Mg	mg/kg	450	1200
5.304	Sodium (Tot.) as Na	mg/kg	<400	500
5.304	Potassium (Tot.) as K	mg/kg	890	480
5.304	Aluminium (Tot.) as Al	mg/kg	1600	9400
5.304	Barium (Tot.) as Ba	mg/kg	68	1200
5.304	Cadmium (Tot.) as Cd	mg/kg	<1.0	<1.0
5.304	Chromium (Tot.) as Cr	mg/kg	<2.0	19
5.304	Copper (Tot.) as Cu	mg/kg	8.0	43
5.304	Iron (Tot.) as Fe	mg/kg	19000	19000
5.304	Manganese (Tot.) as Mn	mg/kg	340	530
5.304	Nickel (Tot.) as Ni	mg/kg	3.3	21
5.304	Lead (Tot.) as Pb	mg/kg	21	180
5.304	Zinc (Tot.) as Zn	mg/kg	84	540
5.304	Arsenic (Tot.) as As	mg/kg	<10	<10

[ND] - Not Detected [NR] - Not Required [NT] - Not Tested

s.73 Irrelevant information

Authorised Signatory

Please note that the above results refer only to the samples tested,
and not to the batches from which they were drawn.

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**SCIENTIFIC ANALYTICAL SERVICES LABORATORY**

Scientific Analytical Services
240 Donaldson Road
Rocklea Brisbane Qld 4106

Telephone 07 3403 2611
Facsimile 07 3403 2646

A unit of the Brisbane City Council

Attention: s.73 Irrelevant info
Client: City Design, Ground Engineering
Job Name: 98113 Quarry Rd - Extra Analyses
Sampling Date: 20/01/99
Sampled By: Client
Sampling Method: Grab
Sample Matrix: Soil/sediment
Batch Number: 99/1286
Registration Date: 17 February 1999
Date of Report: 17 February 1999

Method	Test	Units	/1 TP7 0.2m (0534/7)	/2 TP8 0.2m (0534/9)	/3 TP9 0.2m (0534/10)	/4 TP17 0.2m (0534/24)	/5 TP18 0.2m (0534/26)
External	OC/OP Pesticides		Complete	Complete	[NR]	[NR]	Complete
External	Hydrocarbon Banding		[NR]	[NR]	Complete	Complete	[NR]
External	BTEX		[NR]	[NR]	Complete	Complete	[NR]

[ND] - Not Detected [NR] - Not Required [NT] - Not Tested

OC/OP Pesticides, Total Petroleum Hydrocarbons and BTEX analysis performed by ALS EB19357.

s.73 Irrelevant information

Authorised Signatory

Please note that the above results refer only to the samples tested,
and not to the patches from which they were drawn.

Page 1 of 1

AUSTRALIAN LABORATORY SERVICES P/L

A.C.N. 009 936 029

ANALYTICAL REPORT

PAGE 1 of 2

CONTACT: MS P BIANCHI
CLIENT: BRISBANE CITY COUNCIL
ADDRESS: ANALYTICAL SERVICES SECTION
240 DONALDSON ROAD
ROCKLEA QLD 4106

LABORATORY: ENV BRISBANE
BATCH NUMBER: EB19357
SUB BATCH: 0
No. OF SAMPLES: 3
DATE RECEIVED: 11/02/99
DATE COMPLETED: 17/02/99

ORDER No.: SAMPLE TYPE: SOIL PROJECT:

Method	Analysis description	Units	LOR	99/0534/7	99/0534/9	99/0534/26
EA-D55	Moisture Content (dried @ 103°C)	%	0.1	10.2	10.0	5.4
EP-D68A-SS	ORGANOCHLORINE PESTICIDES					
	alpha-BHC	ng/kg	0.05	<0.05	<0.05	<0.05
	HCB	ng/kg	0.05	<0.05	<0.05	<0.05
	beta-BHC & gamma-BHC	ng/kg	0.1	<0.1	<0.1	<0.1
	delta-BHC	ng/kg	0.05	<0.05	<0.05	<0.05
	Heptachlor	ng/kg	0.05	<0.05	<0.05	<0.05
	Aldrin	ng/kg	0.05	<0.05	<0.05	<0.05
	Heptachlor epoxide	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlordane - trans	ng/kg	0.05	<0.05	<0.05	<0.05
	Endosulfan I	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlordane - cis	ng/kg	0.05	<0.05	<0.05	<0.05
	Dieldrin	ng/kg	0.05	<0.05	<0.05	<0.05
	DDE	ng/kg	0.05	<0.05	<0.05	<0.05
	Endrin	ng/kg	0.05	<0.05	<0.05	<0.05
	Endosulfan 2	ng/kg	0.05	<0.05	<0.05	<0.05
	DDD	ng/kg	0.05	<0.05	<0.05	<0.05
	Endrin aldehyde	ng/kg	0.05	<0.05	<0.05	<0.05
	Endosulfan sulfate	ng/kg	0.05	<0.05	<0.05	<0.05
	DDT	ng/kg	0.2	<0.2	<0.2	<0.2
	Endrin ketone	ng/kg	0.05	<0.05	<0.05	<0.05
	Methoxychlor	ng/kg	0.2	<0.2	<0.2	<0.2
EP-D68B-SS	ORGANOPHOSPHORUS PESTICIDES					
	Dichlorvos	ng/kg	0.05	<0.05	<0.05	<0.05
	Demeton-S-methyl	ng/kg	0.05	<0.05	<0.05	<0.05
	Monocrotophos	ng/kg	0.2	<0.2	<0.2	<0.2
	Dinethoate	ng/kg	0.05	<0.05	<0.05	<0.05
	Diazinon	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlorpyrifos-methyl	ng/kg	0.05	<0.05	<0.05	<0.05
	Parathion-methyl	ng/kg	0.2	<0.2	<0.2	<0.2

COMMENTS:

s.73 Irrelevant information

Samples analysed on an as received basis. Results reported on a dry weight basis.

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19 FEB 1999

Results apply to sample(s) as submitted by client.

This is the Final Report which supersedes any preliminary reports with this batch number.



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No. 625

AUSTRALIAN LABORATORY SERVICES P/L

A.O.N. 008 996 029

ANALYTICAL REPORT

PAGE 2 of 2

CONTACT: MS P BIANCHI
CLIENT: BRISBANE CITY COUNCIL
ADDRESS: ANALYTICAL SERVICES SECTION
240 DONALDSON ROAD
ROCKLEA QLD 4106

LABORATORY: ENV BRISBANE
BATCH NUMBER: EB19357
SUB BATCH: 0
No. OF SAMPLES: 3
DATE RECEIVED: 11/02/99
DATE COMPLETED: 17/02/99

ORDER No.: SAMPLE TYPE: SOIL PROJECT:
99/0534/7 99/0534/9 99/0534/26

Method	Analysis description	Units	LOR	99/0534/7	99/0534/9	99/0534/26
EP-068B-SS	Malathion	ng/kg	0.05	<0.05	<0.05	<0.05
	Fenthion	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlorpyrifos	ng/kg	0.05	<0.05	<0.05	<0.05
	Parathion	ng/kg	0.2	<0.2	<0.2	<0.2
	Pirimphos-ethyl	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlorfenvinphos-E	ng/kg	0.05	<0.05	<0.05	<0.05
	Chlorfenvinphos-Z	ng/kg	0.05	<0.05	<0.05	<0.05
	Bromophos-ethyl	ng/kg	0.05	<0.05	<0.05	<0.05
	Fenamiphos	ng/kg	0.05	<0.05	<0.05	<0.05
	Prothiofos	ng/kg	0.05	<0.05	<0.05	<0.05
	Ethion	ng/kg	0.05	<0.05	<0.05	<0.05
	Carbophenothion	ng/kg	0.05	<0.05	<0.05	<0.05
	Azinphos-methyl	ng/kg	0.05	<0.05	<0.05	<0.05
EP-068S-SS	DREBANDCHLORINE PESTICIDE SURROGATE					
	Dibromo-DDE	%	1	97	83	94
EP-068T-SS	DREBANDPHOSPHORUS PESTICIDE SURROGATE					
	DEF	%	1	91	66	91

COMMENTS:

s.73 Irrelevant information

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19 FEB 1999

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Results apply to sample(s) as submitted by client.



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ANALYTICAL REPORT

PAGE 1 of 1

CONTACT: MS P BIANCHI
CLIENT: BRISBANE CITY COUNCIL
ADDRESS: ANALYTICAL SERVICES SECTION
240 DONALDSON ROAD
ROCKLEA QLD 4106

LABORATORY: ENV BRISBANE
BATCH NUMBER: EB19357
SUB BATCH: 1
No. OF SAMPLES: 2
DATE RECEIVED: 11/02/99
DATE COMPLETED: 17/02/99

ORDER No.:

SAMPLE TYPE: SOIL

PROJECT:

Method Analysis description Units LOR 99/0534/10 99/0534/24

EA-055	Moisture Content (dried @ 103°C)	%	0.1	9.6	8.9
EP-071-SS	TOTAL PETROLEUM HYDROCARBONS				
	C6 - C9 Fraction	mg/kg	2	<2	<2
	C10 - C14 Fraction	mg/kg	50	<50	<50
	C15 - C28 Fraction	mg/kg	100	196	<100
	C29 - C36 Fraction	mg/kg	100	398	169
EP-080-SS	BTEX				
	Benzene	mg/kg	0.2	<0.2	<0.2
	Toluene	mg/kg	0.2	<0.2	<0.2
	Chlorobenzene	mg/kg	0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.2	<0.2	<0.2
	meta- & para-Xylene	mg/kg	0.2	<0.2	<0.2
	ortho-Xylene	mg/kg	0.2	<0.2	<0.2
EP-080S-SS	VOLATILE TPH/BTEX COMPOUND SURROGATES				
	1,2-Dichloroethane-D4	%	1	81	85
	Toluene-D8	%	1	89	97
	4-Bromofluorobenzene	%	1	90	93

COMMENTS:

Samples analysed on an as received basis. Results reported on a dry weight basis.

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No. 825

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APPENDIX C
CHAIN OF CUSTODY FORMS

+29/1/99

**BRISBANE WATER
SCIENTIFIC ANALYTICAL SERVICES**

ENVIRONMENTAL SAMPLES
Location: 98155 - Howard Smith Wharf.

Batch No	0933	Analysis Code	W-MISCENT
Date	27/1/99 + 2-2-99	Matrix	SOIL
Sampler	CLIENT	Client	CD-ENG
Date/Time Recd	4-2-99 1550	Job	98155
Received by	CS	Sampling Method	GRAB
Correct Containers	Yes	Preservation	CHILLED
Sampling Time	—	hrs.	

Sample	Analysis Method Code	PH	HEAVY METAL	TPH	BTEX	PAH	OC/OP						
	Seq No												
BH1 0.2m	1	✓	✓			✓	✓						
0.5m	2	✓	✓										
BH3 0.2m	3	✓	✓										
BH4 0.2m	4	✓	✓			✓							
BH6 0.2m	5	✓	✓				✓						
BH7 0.35m	6	✓	✓	✓	✓	✓							
BH8 0.2m	7	✓	✓										
BH10 0.5m	8	✓	✓	✓	✓		✓						

s.73 Irrelevant information

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Date: 12/10/97

**BRISBANE WATER
SCIENTIFIC ANALYTICAL SERVICES**

ENVIRONMENTAL SAMPLES

Location:

Batch No	0933	Analysis Code	W-MISCIENT
Date	27/1 + 2/2/99	Matrix	SOIL
Sampler	CLIENT	Client	CO-ENG
Date/Time Recd	2/2/99 1550	Job	94155
Received by	CS	Sampling Method	GRAB
Correct Containers	YES	Preservation	CHILLED
Sampling Time		hrs.	

Sample	Analysis Method Code Seq No	pH	Heavy Metals	TPH	BTEX	PAH	OC/OP						
		Result	Result	Result	Result	Result							
BH12 0.5m	9	✓	✓										
BH15 0.2m	10	✓	✓										
BH17 0.2m	11	✓	✓										
BH20 0.2m	12	✓	✓				✓						
BH21 0.2m	13	✓	✓	✓	✓								
BH22 0.2m	14	✓	✓	✓	✓	✓							
0.5m	15	✓	✓	✓	✓								
BH23 0.2m	16	✓	✓	✓	✓								

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Date: 12/10/97

**BRISBANE WATER
SCIENTIFIC ANALYTICAL SERVICES**

ENVIRONMENTAL SAMPLES

Location:

Batch No	0933	Analysis Code	W-MISCENT
Date	27/1 + 2/2/99	Matrix	SOIL
Sampler	CLIENT	Client	CD-ENG
Date/Time Recd	4/2/99 1550	Job	98155
Received by	CS.	Sampling Method	GRAB
Correct Containers	YES	Preservation	CHILLED
Sampling Time		hrs.	

Sample	Analysis Method Code	pH	Heavy Metals	TPH	BTEX	PAH	OC/OP						
	Seq No	Result	Result	Result	Result	Result							
BH25 0.2m	17	✓	✓										
BH27 0.2m	18	✓	✓										
BH28 0.5m	19	✓	✓										
BH33 0.2m	20	✓	✓										
BH34 0.2m	21	✓	✓				✓						
BH36 0.2m	22	✓	✓	✓	✓								
BH37 0.2m	23	✓	✓										
BH39 0.1m	24	✓	✓	✓	✓								

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Date : 12/10/97

**BRISBANE WATER
SCIENTIFIC ANALYTICAL SERVICES**

ENVIRONMENTAL SAMPLES

Location:

Batch No	0933	Analysis Code	W-MISCINT
Date	27/1 + 2/2/99	Matrix	SOIL
Sampler	CLIENT	Client	CD-EN6
Date/Time Recd	4/2/99 1350	Job	98155
Received by	CS.	Sampling Method	GRAB
Correct Containers		Preservation	CHILLED
Sampling Time		hrs.	

Sample	Analysis Method Code	P _H	HEAVY METALS	TPH	BTEX	PAH	OC/OP						
	Seq No	Result	Result	Result	Result	Result							
BH41 0.2m	25	✓	✓										
BH43 0.2m	26	✓	✓			✓	✓						
BH44 0.2m	27	✓	✓	✓	✓								
1m	28	✓	✓										
BH46 0.2m	29	✓	✓										
0.5m	30	✓	✓										
BH48 0.1m	31	✓	✓										
BH50 0.2m	32	✓	✓										

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Date: 12/10/97

**BRISBANE WATER
SCIENTIFIC ANALYTICAL SERVICES**

ENVIRONMENTAL SAMPLES
Location:

Batch No	0933	Analysis Code	W-MISCINT
Date	27/1 + 2/2/99	Matrix	SOIL
Sampler	CLIENT	Client	CD-ENG
Date/Time Recd	4/2/99 1350	Job	98155
Received by		Sampling Method	GRAB
Correct Containers		Preservation	CHILLED
Sampling Time	hrs.		

Sample	Analysis Method Code Seq No	PH Result	HEAVY METALS Result	TPH Result	BTEX Result	PAH Result	OC/OP					
BH51 0.2m	33	✓	✓	✓	✓							
BH52 0.2m	34	✓	✓	✓	✓	✓						

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Appendix B – Summary of Soil Analysis Results and Statistical Analysis

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SUMMARY OF SOIL ANALYSIS RESULTS

Location (refer site layout plan) Laboratory ID Sample ID and Depth (mBGL)		Assessment Guidelines							1 BH1-0.2	2 BH1-0.5	3 BH3-0.2	4 BH4-0.1	5 BH6-0.2	6 BH7-0.35	7 BH8-0.2	8 BH10-0.5
Analyte	Limit of Reporting	Background	EITL	HIL 'A'	HIL 'D'	HIL 'E'	HIL 'F'	EPA								
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals																
Antimony		20														
Arsenic	0.5	0.2-30	20	100	400	200	500	-	10	10	10	10	10	10	10	10
Cadmium	0.5	0.04-2	3	20	80	40	100	-	1	1	1	1	1	1.3	1	1
Chromium (Total)	0.5	-	50	120,000	-	240,000	-	-	16	3.1	2.3	17	7.3	19	8.5	23
Copper	0.5	1-190	60	1,000	4,000	2,000	5,000	-	84	4.0	6.7	58	11	18	22	15
Lead	0.5	<2-200	300	300	1,200	600	1,500	300	380	53	99	520	38	210	100	710
Zinc	0.5	2-180	200	7,000	28,000	14,000	35,000	-	680	70	120	490	120	1500	400	710
TPH																
C6-C9	2	-	-	-	-	-	-	100						<2		<2
C10-C14	50	-	-	-	-	-	-	100						50		50
C15-C28	100	-	-	-	-	-	-	1,000						100		100
C29-C36	100	-	-	-	-	-	-	1,000						<100		<100
PAHs																
Napthalene	0.5	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Acenaphthylene	0.5	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Acenaphthene	0.5	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Flourene	0.5	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Phenanthrene	0.5	-	-	-	-	-	-	-	1.4			0.5		<0.5		
Anthracene	0.5	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Flouranthene	0.5	-	-	-	-	-	-	-	2			0.9		<0.5		
Pyrene	0.5	-	-	-	-	-	-	-	2.1			0.9		<0.5		
Benzo(a)anthracene	0.5	-	-	-	-	-	-	-	1			0.5		<0.5		
Chrysene	0.5	-	-	-	-	-	-	-	1.3			1.2		<0.5		
Benzo (b&k) flouranthene	1.0	-	-	-	-	-	-	-	2			1		<1.0		
Benzo(a)pyrene	0.5	-	-	1	4	2	5	1	1.2			0.5		0.5		
Indeno(1,2,3-cd)pyrene	1.0	-	-	-	-	-	-	-	0.6			<0.5		<0.5		
Dibenz(ah)anthracene	1.0	-	-	-	-	-	-	-	<0.5			<0.5		<0.5		
Benzo(ghi)perylene	1.0	-	-	-	-	-	-	-	0.7			<0.5		<0.5		
Total PAHs	-	0.95-5	-	20	80	40	100	20	15.3			9.5		8		

Notes:

LOR	All results in mg/kg unless otherwise specified
Background	Limit of Laboratory Reporting
EITL	Levels Commonly Found in the Local Environment (EPA, 1998)
HIL 'A'	Urban Ecological Investigation Threshold Levels (EPA, 1998)
HIL 'D'	Health Investigation Level - Residential with Soil Access (EPA, 1998)
HIL 'E'	Health Investigation Level - Residential with Minimum Opportunity for Soil Access (EPA, 1998)
HIL 'F'	Health Investigation Level - Parks, Recreational Open Spaces and Playign Fields (EPA, 1998)
EPA	Health Investigation Level - Commercial Industrial (EPA, 1998)
-	QLD EPA Draft 'Clean Site' Guidelines (EPA, 1999)
n/a	Not Available/Not Relevant
n/t	Not Applicable
	Not Tested

SUMMARY OF SOIL ANALYSIS RESULTS

Location (refer site layout plan) Laboratory ID Sample ID and Depth (mBGL)	9 BH12-0.5	10 BH15-0.2	11 BH17-0.2	12 BH20-0.2	13 BH21-0.2	14 BH22-0.2	15 BH22-0.5	16 BH23-0.2	17 BH25-0.2	18 BH27-0.2	19 BH28-0.5	20 BH33-0.2	21 BH34-0.1	22 BH36-0.2	23 BH37-0.2	24 BH39-0.1
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ng/kg
Metals																
Antimony																
Arsenic	10	10	10	10	10	10	10	21	10	10	10	10	10	10	10	10
Cadmium	1	1	1	3.4	1	1	1	1	1	1	1	1	1	1	1	1
Chromium (Total)	2.8	2	4.4	19	3.3	7.1	2	2	24	3.2	2.8	2	2	6.6	2.4	5
Copper	3.1	6.1	5.9	35	9.4	29	8.7	8.9	2.9	3.1	<1.0	9.9	15	5.1	19	12
Lead	36	100	48	650	110	130	11	10	24	12	10	10	10	19	11	31
Zinc	71	67	84	1400	270	350	100	77	50	69	37	100	84	74	110	110
TPH																
C6-C9					<2	<2	<2	<2								<2
C10-C14					50	50	50	50								50
C15-C28					100	240	100	100								100
C29-C36					<100	<100	<100	<100								<100
PAHs																
Napthalene						<0.5										
Acenaphthylene						<0.5										
Acenaphthene						<0.5										
Flourene						<0.5										
Phenanthrene						1.5										
Anthracene						0.8										
Flouranthene						4.1										
Pyrene						4										
Benzo(a)anthracene						2.6										
Chrysene						2.5										
Benzo (b&k) flouranthene						4										
Benzo(a)pyrene						1.9										
Indeno(1,2,3-cd)pyrene						1										
Dibenz(ah)anthracene						0.5										
Benzo(ghi)perylene						0.9										
Total PAHs						25.8										

Notes:

LOR	
Background	
EITL	
HIL 'A'	
HIL 'D'	
HIL 'E'	
HIL 'F'	
EPA	
-	
n/a	
n/t	

SUMMARY OF SOIL ANALYSIS RESULTS

Location (refer site layout plan) Laboratory ID Sample ID and Depth (mBGL)	25 BH41-0.2	26 BH43-0.2	27 BH44-0.2	28 BH44-1.0	29 BH46-0.2	30 BH46-0.5	31 BH48-0.1	32 BH50-0.2	33 BH51-0.2	34 BH52-0.2	Mean	SD	Upper Mean 95% Confidence
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals													
Antimony			<10										
Arsenic	10	10	10	10	10	10	10	10	10	10	10.3	1.9	11.0
Cadmium	1	1	1	1	1	1	1	1	1	1	1.1	0.4	1.2
Chromium (Total)	3	20	28	40	6.9	28	5.4	7.8	2	19	10.0	9.7	13.2
Copper	26	8.5	8.3	9.7	13	6.8	12	25	8	43	17.0	17.2	22.8
Lead	14	10	16	<9.9	23	20	11	18	21	180	110.5	184.3	172.4
Zinc	130	39	44	46	99	56	56	51	94	540	244.1	357.2	364.1
TPH													
C6-C9			<2						<2	<2			
C10-C14			50						127	274	77.36	69.19	118.25
C15-C28			100						100	1930	270.00	519.10	576.77
C29-C36			<100						<100	<100			
PAHs													
Napthalene		<0.5								<0.5			
Acenaphthylene		<0.5								<0.5			
Acenaphthene		<0.5								<0.5			
Flourene		<0.5								<0.5			
Phenanthrene		<0.5								0.7			
Anthracene		<0.5								<0.5			
Flouranthene		<0.5								<0.5			
Pyrene		<0.5								<0.5			
Benzo(a)anthracene		<0.5								<0.5			
Chrysene		<0.5								<0.5			
Benzo (b&k) flouranthene		<1.0								<1.0			
Benzo(a)pyrene		0.5								0.5	0.85	0.59	1.32
Indeno(1,2,3-cd)pyrene		<0.5								<0.5			
Dibenz(ah)anthracene		<0.5								<0.5			
Benzo(ghi)perylene		<0.5								<0.5			
Total PAHs		8								8.2	12.47	7.11	18.16

Notes:

LOR	
Background	
EITL	
HIL 'A'	
HIL 'D'	
HIL 'E'	
HIL 'F'	
EPA	
-	
n/a	
n/t	

Appendix C Photographs

Published on DES Disclosure Log
RTI Act 2009



View of Building Number 2 with walkway/cycle way in foreground



View of fenced holding area on Lot 4



View of Building Number 3 and walkway/cycle way looking east.



View of fenced car parking area on Lot 3.



View of masonry structure on Lot 4



View of site looking west



View of south west portion of Lot 4



View of disused diesel AST (Lot 3).

Appendix D Draft Site Management Plans

Published on DES Disclosure Log
RTI Act 2009

DRAFT SITE MANAGEMENT PLAN (SMP) –

LOT :4 PLAN : SP 128032 FILE REF : BNEXXXX

PRINTED:

DATE OF EFFECT:

1.0 SUMMARY OF CONTAMINATION

The site, Lot 4 SP 128032, 175 Bowen Terrace Fortitude Valley is currently used as a walkway with the remaining portion of the lot vacant and secured. The wharves on site were reportedly in use for most of last century and were also reportedly used in wartime by the Navy for ship maintenance and storage and loading of supplies. More recently (up to the late 1990s) the wharf buildings were used by various government departments to store various plant and equipment and to conduct maintenance and workshop activities. Low level radioactive materials such as medical equipment and consumables were stored on the site up until about 1989. A Queensland Health survey of the area where radioactive materials were stored reportedly cleared the area of any residual radioactivity at levels exceeding NHMRC guidelines. The site has largely remained vacant for the past 8 years.

Lot 4 is generally paved in concrete and bitumen with the exception of the wharf area which is constructed from timber. The site is characterised as a benched area between the southern face of a cliff/former quarry face and the Brisbane River. The bench area consists of a shallow layer (varying up to 1.0 metre) of fill overlying bedrock. The fill appears to predominantly consist of material consistent in terms of geological origin with the material observed in the cliff face.

The following maximum contaminants of concern were identified on the Howard Smith Wharf site of which Lot 4 on SP 128032 is part

arsenic 21 mg/kg
cadmium 3.4 mg/kg)
lead 710 mg/kg)
zinc 1500 mg/kg).
TPH (C₁₀-C₁₄ fraction) 274 mg/kg.
TPH (C₁₅-C₂₈ fraction) 1830 mg/kg.
Benzo(a)pyrene 1.9 mg/kg

These maximum contaminant contaminants were reported within shallow fill at the site.

2.0 OBJECTIVES OF THE SMP

The purpose of this SMP is to manage contamination on the site in a manner that protects human health and the environment.

3.0 ACHIEVEMENT AND MAINTENANCE OF OBJECTIVES

3.1 *Responsibility.* The owner of the land (as defined in the *Environmental Protection Act 1994*) is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

3.2 *Site Use.* The intended use of the site is for mixed use including commercial and open space and recreational use.

3.3 *Site Provision of SMP to appropriate persons.* The owner must provide all persons involved in building design and planning and all contractors and lessees conducting building and/or excavation works with a copy of the SMP prior to commencement of works. All persons occupying or working on the site must comply with the requirements of the SMP.

3.4 *Surface Capping and Protective Barriers.* As the contaminant levels are generally below levels that would pose a risk to human health and the environment given any use for the site there are no specific requirements to maintain surface capping or protective barriers over the site.

3.5 *Soil excavation & Removal.* Soil material excavated on the site should be assessed for contaminants of concern and/or physical properties to determine if the material is contaminated and to identify appropriate management and disposal/re-use options.

Representative sampling and analysis of soil from excavation in areas of fill must be managed by a suitably qualified and experienced person in accordance with Section 381 of the *Environmental Protection Act 1994* (EP Act). Contaminated soil must not be removed off-site without a disposal permit in accordance with Section 424 of the EP Act.

3.6 *Unexpected Contamination.* If during any site earthworks or excavation, offensive or noxious odours and/or evidence of gross contamination not previously detected is observed, site works are to cease in that area and action taken to immediately prevent or minimise environmental harm. The administering authority is to be notified in writing within two (2) business days of detection and advised of any remedial action undertaken.

Any remedial action is to be developed by an appropriately qualified and experienced person in accordance with Section 381 of the EP Act.

3.7 *General Environmental Protection.* All earthworks are to be undertaken in accordance with general environmental protection measures to avoid unwanted migration and deposition of soil. These measures include the control of dust, noise, stormwater runoff, sediment, erosion, spillage from haulage trucks and odour releases involving the handling or movement of contaminated material.

3.8 *Workplace Health and Safety.* A Workplace Health and Safety Plan (WH&S plan), which conforms to the requirements of the *Workplace Health and Safety Act 1995* is to be developed for any site excavation works in contaminated areas. The WH&S plan must specifically address contaminants of concern.

4.0 MONITORING AND REPORTING

Records are to be kept of any soil excavation in contaminated areas, disposal permits and site management plan compliance for review by the administering authority from time to time.

This Site Management Plan (SMP) has been developed to manage site contamination risks present at the issue date. Subsequent uses of the site may result in the need to review the plan.

DRAFT SITE MANAGEMENT PLAN (SMP) –

LOT 3 PLAN : SP 190810 FILE REF : BNEXXXX

PRINTED:

DATE OF EFFECT:

1.0 SUMMARY OF CONTAMINATION

The site, Lot 3 SP 190810, 5 Boundary Street Brisbane is currently used as a walkway with the remaining portion of the lot vacant and secured. The wharf area and buildings on the site had previously been used by the water police and police diving squad for administration and storage purposes as well as housing refuelling facilities.

Lot 3 is paved in concrete and bitumen with the exception of the wharf area which is constructed from timber. The site is characterised as a benched area between the southern face of a cliff/former quarry face and the Brisbane River. The bench area consists of a shallow layer (varying up to 1.0 metre) of fill overlying bedrock. The fill appears to predominantly consist of material consistent in terms of geological origin with the material observed in the cliff face.

The following maximum contaminants of concern were identified on the Howard Smith Wharf site of which Lot 3 on SP 190810 is part

arsenic 21 mg/kg
cadmium 3.4 mg/kg
lead 710 mg/kg
zinc 1500 mg/kg).
TPH (C₁₀-C₁₄ fraction) 274 mg/kg.
TPH (C₁₅-C₂₈ fraction) 1830 mg/kg.
Benzo(a)pyrene 1.9 mg/kg

These maximum contaminant contaminants were reported within shallow fill at the site.

2.0 OBJECTIVES OF THE SMP

The purpose of this SMP is to manage contamination on the site in a manner that protects human health and the environment.

3.0 ACHIEVEMENT AND MAINTENANCE OF OBJECTIVES

3.1 *Responsibility.* The owner of the land (as defined in the *Environmental Protection Act 1994*) is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

3.2 *Site Use.* The intended use of the site is for mixed use including commercial and open space and recreational use.

3.3 *Site Provision of SMP to appropriate persons.* The owner must provide all persons involved in building design and planning and all contractors and lessees conducting building and/or excavation works with a copy of the SMP prior to commencement of works. All persons occupying or working on the site must comply with the requirements of the SMP.

3.4 *Surface Capping and Protective Barriers.* As the contaminant levels are generally below levels that would pose a risk to human health and the environment given any use for the site there are no specific requirements to maintain surface capping or protective barriers over the site.

3.5 *Soil excavation & Removal.* Soil material excavated on the site should be assessed for contaminants of concern and/or physical properties to determine if the material is contaminated and to identify appropriate management and disposal/re-use options.

Representative sampling and analysis of soil from excavation in areas of fill must be managed by a suitably qualified and experienced person in accordance with Section 381 of the *Environmental Protection Act 1994* (EP Act). Contaminated soil must not be removed off-site without a disposal permit in accordance with Section 424 of the EP Act.

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Any remedial action is to be developed by an appropriately qualified and experienced person in accordance with Section 381 of the EP Act.

3.7 *General Environmental Protection.* All earthworks are to be undertaken in accordance with general environmental protection measures to avoid unwanted migration and deposition of soil. These measures include the control of dust, noise, stormwater runoff, sediment, erosion, spillage from haulage trucks and odour releases involving the handling or movement of contaminated material.

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4.0 MONITORING AND REPORTING

Records are to be kept of any soil excavation in contaminated areas, disposal permits and site management plan compliance for review by the administering authority from time to time.

This Site Management Plan (SMP) has been developed to manage site contamination risks present at the issue date. Subsequent uses of the site may result in the need to review the plan.

STATUTORY DECLARATION

(INVESTIGATION REPORT PREPARER)

Address of Site Investigated: 3 Boundary Street Brisbane, Queensland 4000 and 175 Bowen Terrace Fortitude Valley, Queensland 4006

Real Property Descriptions: Lot 3 on SP 190810 and Lot 4 on SP 128032

Title of Report: Report Review Howard Smith Wharf
May 2008

I, Gregory James McPherson of Brisbane City Council, Level 1, Green Square, South Tower, 505 St Paul's Terrace, Fortitude Valley, in the State of Queensland, do solemnly and sincerely declare that;

- I was the investigator and preparer of the report described above;
- I am a member of Environment Institute of Australia and New Zealand (EIANZ); and my qualifications and experience as previously submitted to the Environmental Protection Agency are relevant to this investigation,
- I have not knowingly included any false, misleading or incomplete information in the report;
- I have not knowingly failed to reveal any relevant information or document to the administering authority; and

I certify that:

- The report addresses the relevant matters for the investigation and is factually correct; and
- The opinions expressed in it are honestly and reasonably held.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*

s.73 Irrelevant information

Signature

Name GREGORY JAMES MCPHERSON

Taken and Declared before me at BRISBANE this 29TH day of MAY 2008

Witness (Justice of the Peace/Commissioner for Declarations)

s.73 Irrelevant information

Signature Jeffrey James Dowling
JP (Qual) 29422

s.73 Irrelevant

Name (& JP Number if applicable).....

26 March 2009

Environmental Protection Agency - Contaminated Land Unit
GPO Box 2771
Brisbane Qld 4001

Attention: Mr Allen Johns

Dear Allen

**RE: DEVELOPMENT APPLICATION FOR A PRELIMINARY
APPROVAL FOR A MATERIAL CHANGE OF USE FOR CENTRE
ACTIVITIES (SHORT TERM ACCOMMODATION, RESTAURANT,
SHOP, OFFICE, COMMUNITY FACILITY, CONVENTION CENTRE
AND INDOOR SPORT AND RECREATION) AND LANDING**

AND

**A PRELIMINARY APPROVAL TO CARRY OUT BUILDING WORK
FOR DEMOLITION ON THE SITE OF A HERITAGE PLACE**

**HOWARD SMITH WHARVES
BOUNDARY STREET, BRISBANE**

**LOT 2 ON SP 190806
LOT 3 ON SP 190810
LOT 2 ON RP 64991
LOT 3 ON RP 64991
LOT 4 ON RP 64991
LOT 4 ON RP 52849
LOT 4 ON SP 128032
LOT 1 ON RP44680**

PART OF WHARF STRUCTURES OVER BRISBANE RIVER

**APPLICATION REFERENCE: A002165832
RESPONSE TO INFORMATION REQUEST**

I refer to your letter dated 6 November 2008 being the EPA Contaminated Land Unit Concurrence Agency Response. In addition, I refer to the information requests made by the following agencies in relation to the application:

- Brisbane City Council's information request dated 19 November 2009; and
- The Environmental Protection Agency's (Coastal Management) information request dated 14 November 2008; and
- The Environmental Protection Agency's (Cultural Heritage) information request dated 20 November 2008.

Although not required under the *Integrated Planning Act 1997* (IPA), for your information, and for the sake of completeness, please find attached a copy of the applicant's partial response to the information requested by Council and the concurrence agencies.

Please do not hesitate to contact me should you have any queries.

Regards,
Yours sincerely
s.73 Irrelevant info

for **John Gaskell**
Director

BNE38747 v615.

John Gaskell

planning consultants

RECEIVED

31 MAR 2009

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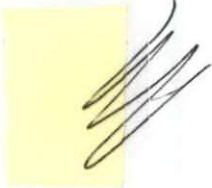
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Published on DES Disclosure Log
RTI Act 2009

26 March 2009

The Chief Executive Officer
Brisbane City Council
GPO Box 1434
Brisbane Qld 4001

Attention: Mr Phil Young
Principal Urban Planner, Development Assessment
Development Assessment Central BSQ

Dear Phil

**RE: DEVELOPMENT APPLICATION FOR A PRELIMINARY APPROVAL
FOR A MATERIAL CHANGE OF USE FOR CENTRE ACTIVITIES
(SHORT TERM ACCOMMODATION, RESTAURANT, SHOP, OFFICE,
COMMUNITY FACILITY, CONVENTION CENTRE AND INDOOR
SPORT AND RECREATION) AND LANDING**

AND

**A PRELIMINARY APPROVAL TO CARRY OUT BUILDING WORK
FOR DEMOLITION ON THE SITE OF A HERITAGE PLACE**

**HOWARD SMITH WHARVES
BOUNDARY STREET, BRISBANE**

LOT 2 ON SP 190806

LOT 3 ON SP 190810

LOT 2 ON RP 64991

LOT 3 ON RP 64991

LOT 4 ON RP 64991

LOT 4 ON RP 52849

LOT 4 ON SP 128032

LOT 1 ON RP44680

PART OF WHARF STRUCTURES OVER BRISBANE RIVER

APPLICATION REFERENCE: A002165832

RESPONSE TO INFORMATION REQUEST

1. INTRODUCTION

I refer to your letter dated 19 November 2008, being the information request under Section 3.3.6 of the *Integrated Planning Act 1997* (IPA). In addition, I refer to the following information requests made by the concurrence agencies:

- The Environmental Protection Agency's (Coastal Management) information request dated 14 November 2008; and
- The Environmental Protection Agency's (Cultural Heritage) information request dated 20 November 2008.

In addition, I refer to the Department of Infrastructure and Planning's (DIP) advice agency response dated 3 December 2008.

John Gaskell

planning consultants

RECEIVED
31 MAR 2009
ECSU



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Page 260 of 303

This letter is written in accordance with Section 3.3.8 (1)(b) & (2) of the IPA, and responds to part of the information requested by the Council and concurrence agencies.

In addition, although not required as part of the IDAS process, this letter also provides a response to matters raised in the DIP's advice agency response.

2. SUMMARY OF CHANGES AS A RESULT OF THE INFORMATION REQUEST

A. Overview

The Information Requests from Brisbane City Council and the concurrence agencies required a review and changes to the plans of layout, development guidelines and technical reports. The changes are in response to the each item in the Information Requests which is fully documented in Section 3 and 4 of this correspondence below.

This section provides a summary of:

- the amended plans of layout;
- the additional plans and reports; and
- the amendments to the development guidelines

B. Summary of Amendments

The proposed statutory plans for preliminary approval for a material change of use have been amended by Tract consultants with key changes made in Precincts 1 and 2 as described below, in response to the Information Requests. In addition, the development guidelines have also been updated to reflect the changes made to the proposed building envelopes in each precinct.

Precinct 1

The building envelope in precinct 1 has been reduced in area in order to retain the existing historic Air-Raid Shelter and Lavatory Block at this location (previously proposed to be demolished) including provision for a 5 metre setback from these historic structures consistent with the setbacks provided to the Air-Raid Shelters in other parts of the site. The retention of these structures addresses concerns about their removal raised by the Environmental Protection Agency in their information request dated 20 November 2008 (addressed in detail below) and concerns expressed by the general public.

In addition, the retention of the existing historic structures in Precinct 1 has resulted in a reduction in the building envelope at the southwestern extent of precinct 1 which has allowed the retention of existing views from the neighbouring Quay Terraces apartments, addressing a major concern raised by residents of Quay Terraces. This part of the building envelope is limited in height to RL12 metres consistent with the height of the Quay Terraces pool level (RL11.94 metres), to preserve existing views across the site from Quay Terraces. This part of the building envelope is also reserved for a Port Cochere or similar light weight structure.

It is important to note that although the building envelope has been reduced the proposed Gross Floor Area that may be located within the building envelope for Precinct 1 remains the same at 15,000m².

Precinct 2

The area of the precinct 2 building envelope has not changed and the proposed 5,000m² GFA within the building envelope also has not changed; however, the shape of the precinct 2 building envelope has been amended to more accurately reflect where buildings may be located in this precinct to maintain views to the cliffs, existing air-raid shelters, existing wharf buildings and historic timber wharf deck, to better address heritage issues. In particular, the following changes to the shape of the building envelope have been made in response to Brisbane City Council's information request dated 19 November 2008 (second dot point) and the Environmental Protection Agencies information request dated 20 November 2008 (item 2) for accuracy and clarification about where buildings may be located:

- appropriate separation from the existing historic Air-Raid Shelters (5 metres) is accurately shown and dimensioned on the plans;
- appropriate separation from the base of cliffs (10 metres for this precinct) is also accurately reflected in the shape of the building envelope and dimensioned; and
- The building envelope better reflects the conservation and adaptation of the historic wharf structure at this location (existing timber and concrete wharf deck). The shape has been amended as follows:
 - The building envelope no longer abuts the river's edge promoting the prominence of the existing historic wharf deck as a feature for pedestrian passage and appreciation along the river's edge. The building envelope originally proposed allowed the upper levels of buildings to extend all the way to the river's edge and this is no longer the case.
 - The lower level(s) below RL 9.0 metres is aligned with the northern edge of the existing historic wharf deck (both timber and concrete components) reflecting that the future building footprints at ground level are not located on top of the existing structure to ensure a corridor for pedestrian movement and appreciation of the historic structure in front of any new buildings along the riverfront. Accordingly the setback from the river for the building envelope below RL 9.0 metres matches the northern extent of the existing historic structure and ranges from approximately 8.5 metres to 25 metres.
 - The upper level(s) above RL 9.0 metres are similarly setback from the river for the extent of the existing timber wharf deck showing only a small extension (approximately 1.5 metres) of the upper levels over this part of the existing wharf deck to provide shading and amenity of this publicly accessible space along the riverfront without the need for supporting columns or other support structures for the upper levels located within the deck space. The upper levels continue to extend over the concrete component of the wharf deck to its southern alignment adjacent to the river reflecting that this existing structure is expected to have some capacity to accommodate support structures for the upper levels (unlike the timber component). Accordingly, the

3/17

setback from the river for the building envelope above RL 9.0 metres ranges from approximately 5 metres to 12 metres; and

- The shape of the building envelope has been narrowed in places and elongated along the southeast axis towards precinct 3 by the changes identified above which will allow greater flexibility in the placement and separation of buildings within the building envelope to address sensitive matters such as views of the Air-Raid shelters and the cliffs from the River.

The changes in precinct 2 are further described in terms of their positive heritage outcomes in the attached response provided by Allom Lovell.

Development Guidelines

The development guidelines have also been updated to reflect the above changes to the building envelopes in Precincts 1 and 2. In particular, a key change in the development guidelines is the recommended setback at ground level from the river in Precinct 2. A more robust outcome providing clarity and accuracy for the future location of buildings in Precinct 2 has been to describe the building envelope more strictly on the plans rather than relying on the development guidelines for interpretation about where buildings may be located. The recommendation for a 15 metre setback at ground level from the river has been removed from the development guidelines and instead the required setback from the river is now more strictly defined by the shape of the building envelope on the plans for clarity and accuracy in response to the Council's and the EPA's information requests.

Some parts of the setback from the river are now less than 15 metres and some parts are now more than 15 metres. A uniform 15 metre setback at ground level originally prescribed in the development guidelines did not allow buildings to abut the historic timber wharf deck (which is above the existing ground level of the site) to ensure good pedestrian connectivity to this existing structure and access to the riverfront in response to the last dot point of Council's information request. In addition, a uniform 15 metre setback from the river was not large enough towards the south western end of the building envelope to ensure the building footprints below RL 9.0 metres were not able to be located on top of the existing wharf deck (concrete component).

Accordingly, the range of setbacks from the river's edge now proposed from approximately 8.5 metres to 25 metres at ground level (below RL 9.0 metres) and from approximately 5 metres to 12 metres above ground level (above RL 9.0 metres) reflect and acknowledge the location, conservation, and respectful and sympathetic adaptation of the existing historic wharf deck as a prominent feature along the river's edge which is considered a better outcome than the uniform 15 metre setback originally prescribed in the development guidelines.

Preliminary Landscape Concept Plan and Perspective Drawings

In addition to the changes identified to the proposed statutory plans a preliminary landscape concept plan and perspective drawings have also been prepared by Tract in response to Council's information request, as a positive way of communicating the possibilities anticipated for the site.

The intent of the preliminary landscape concept plan is to demonstrate what may be possible under the proposed preliminary approval plans. They also provide the Local and State Government assessment teams as well as the general public a clearer understanding of the Council's intentions for the

development of the site. The landscape plan demonstrates how the site can effectively operate to achieve an appropriate and exciting outcome.

Some of the key concepts that are expressed through the landscape concept plan and perspective drawings include:

- The buildings that will eventually be constructed on-site will be subject to detailed design and subsequent approval processes and the landscape concept plan and perspective drawings provide an interpretation about what these buildings may look like and where they may be located within the building envelopes shown on the proposed statutory plans;
- Key concepts such as safe access through the site for pedestrians, cyclists, service and emergency vehicle are shown including how the proposed lift accesses from Bowen Terrace may be designed. These concepts are further communicated in the separate access diagram prepared by Tract for the site; and
- Additional features (some that will require additional development applications) are provided for context and to reflect Council's ultimate vision for the site including a possible 10m boardwalk adjacent to the historic wharf buildings along the riverfront, a possible CityCat terminal, a green amphitheatre for performances and similar events.

3. RESPONSE TO BRISBANE CITY COUNCIL'S INFORMATION REQUEST

BCC Request: *Provide further information detailing how the proposed range of uses satisfies the intent of the State Government MOU relating to redevelopment of the site and in particular how "... the site would be primarily used for public open space or parkland." The response should include details of how the final proposal delivers the best to use the site for public recreation purposes, the proposed quality and range of these recreation facilities and the relationship of the other uses in supporting the recreation function of the site.*

The proposed redevelopment satisfies the intent of the "Property Exchange for Riverside Developments" Memorandum of Understanding (MOU) established between the Department of Public Works (DPW) and Council in 2002 in that the DPW has consented to the development application in accordance with the terms of the MOU (refer to attached consent letter). In particular, the DPW's consent is conditional according to the following conditions set out in their letter:

- *Any new buildings constructed will have a total ground level site coverage of less than 10% of the total site area*
- *The entire site remains in public ownership with any commercial development being enabled through leasehold interests.*
- *All revenue generated from commercial developments and leases on the site is to be re-invested into activating the balance of the site for public open space, community uses, enhanced public access and stabilising the cliff faces.*
- *No residential apartment development is permitted on the site.*

The proposed redevelopment satisfies these conditions. The redevelopment is to include a minimum of 80% open space, sensitive reuse of the existing heritage buildings and commercial development on the balance of the site area limited to not greater than 10% new building site coverage at ground level. In particular, as a point of clarity raised by questions from the general public, the proposal plans have been amended to quantify that a maximum total ground level site coverage of 3,431m² (less than 10% or 3,431.8m²) is possible for new buildings within precincts 1 and 2. This calculation for 10% ground level site coverage has been calculated only over the allotments that the MOU relates to and does not include 231 Bowen Terrace, New Farm (Lot 1 on RP44680) located adjacent to Wilson's Outlook Reserve at the top of the cliffs. The exclusion of the Bowen Terrace lot from the calculation of 10% site coverage ensures that the site coverage of any new buildings is consistent with the MOU which does not relate to this lot.

It is acknowledged the DPW's consent letter refers to the intent of the MOU relating to the redevelopment of the site by the following statement:

In 2001, the Government provided a commitment that the Howard Smith Wharf site was to be used primarily for public open space or parkland. (Emphasis added)

Whilst some new significant structures are proposed the building footprints are managed to retain as much open space as possible whilst still achieving the public benefits afforded by the introduced uses. Due to the proposed ground level site coverage of the new buildings being less than 10% of the site area, the balance site coverage of the existing historic buildings means that greater than 80% of the site area at ground level is available for public open space which is a significant improvement on the current use of the site with the majority of the area secured by fencing. This contribution for valuable riverside land free of development is considered to satisfy the conditions of the MOU.

In addition, the proposal is for a preliminary approval for material change of use and the detail regarding specific usage and facilities of the site will be resolved in subsequent development applications; however, the preliminary approval provides a range of opportunities to incorporate facilities and features that will support the parkland, open space and recreation focus for the site and these have been detailed in Appendix B of the planning report provided with the application. In summary, the following opportunities are envisaged for the site and are made possible (subject to subsequent development permit applications where necessary) by the preliminary approval:

- The introduced uses and new buildings make the best use of the large site area and favourable dimensions to encourage visitation and activate the space for recreational use. In this regard the introduction of the proposed uses can be seen as ancillary to create a destination attraction supportive of the parkland use, providing a catalyst for this site to be used as more than just a thoroughfare and scenic leg on the journey between New Farm and the CBD;
- The open space and scenic qualities of the site are emphasised in addition to the heritage aspects for appreciation by visitors to the site through improved site access and accessible areas (improved by measures including stabilisation of the cliffs, the proposed lift access points and improved riverfront access);

- In addition to the recreation qualities of the site, landscape design will significantly improve the existing harsh run-down environment and improve the visual relief that the site provides from the surrounding built environment providing a variety of spaces and experiences for people to retreat to. These aspects are illustrated in the Preliminary Landscape Concept Plan provided by Tract and discussed further below;
- Opportunities for access to recreational water vessels along the Brisbane River through possible future CityCat and tour boat berthing facilities;
- Uninterrupted access through the site for commuting and recreation for pedestrian and cyclists including improved accessibility along the riverfront for passive recreational pursuits and appreciation of the river;
- Stabilisation of the cliffs may provide an opportunity for rock climbing/abseiling activities in Precinct 3; and
- The proposal will also include opportunities for community facilities that could be used for cultural and educational activities.

BCC Request: *Provide revised scaled dimensioned drawings of the proposed building envelopes and precinct boundaries. The drawings should clarify the exact location of building envelopes within precincts via dimensioning setbacks to property boundaries, existing structures and buildings.*

The statutory plans for preliminary approval for a material change of use have been updated and amended by Tract. The attached drawings by Tract (drawing numbers SD-L-002 to SD-L-006) entirely replace the drawings prepared by Verge that were submitted with the original application (drawing numbers 2036-01 Issue P9, 2036-03 Issue P4, 2036-04 Issue P5 and 2036-05 Issue P4).

Important changes that have been made to the preliminary approval for material change of use plans responding to this part of the Council's information request are as follows:

- All plans are now based on survey data for the existing site and accurately shown to scale and fully dimensioned for clarity and ease of interpretation;
- Accuracy in the shape of the building envelopes is provided in relation to existing defined set out points on the site such as the existing historic structures and other defined locations for clarity; and
- Building envelopes within each precinct are fully described in terms of their area, height limits, allowable gross floor area and site coverage.

The improvements to the drawings in terms of accuracy and interpretation better clarify the relationships of the proposed building envelopes to the existing historic structures and features on the site and in relation to surrounding buildings and features on surrounding land.

BCC Request: *Provide detail of any proposed "staging" planned in the redevelopment of the site. Further please clarify future land tenure*

arrangements (ie: subdivision or land held under lease) for the final redevelopment.

Staging of the redevelopment is not proposed as part of this preliminary approval application.

By way of background, the Council's objective is to revitalise the Howard Smith Wharves and deliver high quality public domain at minimal cost to Council. The Council also wants to ensure the level of redevelopment that occurs on the site is controlled so that the public domain elements are the predominant focus of the site.

It is Council's intention to offer the site for redevelopment to the development industry to enable delivery of the extensive works to the public domain within the site.

Following the preliminary approval, Council will be seeking Expressions of Interest from the development industry/consortium to fund, design and construct the revitalisation of the site. This includes development of the commercial elements to activate the site. The commercial elements will in turn generate revenue which will contribute to the costs of creating high quality public domain within the site.

The entire site remains in Council ownership with the successful proponent permitted to develop the site in return for long term commercial leasehold over the site providing a revenue stream to Council for the ongoing maintenance and management of the site.

Consequently, any proposed 'staging' for redevelopment of the site will be part of future subsequent development applications submitted by the successful proponent and is not resolved (or needed to be) for this application.

BCC Request: *Submit a revised Traffic Report detailing on-site traffic impacts likely to be experienced within the proposed redevelopment. The report should clarify proposed methods of managing potential future service vehicle and pedestrian conflicts.*

Please refer to the attached correspondence prepared by SKM and the attached circulation diagrams prepared by Tract providing a response to this item of Council's information request.

Given the application is for preliminary approval for a material change of use only, detailed arrangements for traffic, pedestrian and cyclist movement through the site are not yet resolved; however, the access diagrams prepared by Tract demonstrate the broad concepts for circulation and movement through the site and demonstrate how the site can be managed to avoid adverse impacts such as conflicts between pedestrians, service vehicles and cyclists. Many of the details will be resolved in full when subsequent development permit applications are made and the Council will have the opportunity to assess these details at that time.

The assessment by SKM of the access diagrams prepared by Tract details the provisions for access and servicing of the site as well as provisions for safe pedestrian and cyclist access. In addition, the response by SKM includes recommendations for future development permit applications to ensure appropriate access and servicing occurs in a safe and efficient manner. In

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summary the SKM assessment has found the proposed statutory plans for preliminary approval for a material change of use ensure that future detailed design for future development permit applications is able to provide safe and secure access for all modes of transport.

BCC Request: *Provide a CPTED analysis and assessment for the entire redevelopment site.*

Please refer to the attached correspondence prepared by The Hornery Institute which responds to this item of Council's information request. In summary the proposal plans make provision for the following to address CPTED principles:

- Increased access and entry points to reduce predictable routes;
- Improve and provide alternative routes and travel options, again reducing problems with predictable routes;
- Increased mix and location of uses across the site which will increase activation, observation, sight lines and social normalisation; and
- A diversity of uses that includes 24 hour monitoring and point of contact.

Following preliminary approval and public tender submission of detailed designs will occur. At this time the Destination Plan for the site includes recommendations for the preparation of a comprehensive CPTED analysis to be incorporated as part of the detailed design process and tenderers' final submissions. At this stage of the project more detailed aspects of CPTED will be addressed in full.

BCC Request: *Provide details of potential impacts on existing vegetation particularly as all native vegetation on the site is protected under the Natural Assets Local Law (Waterway Vegetation). Submit a Vegetation Survey showing the exact location, type and condition of vegetation likely to be impacted by the potential building envelopes.*

Please refer to the attached Vegetation Survey prepared by Rob Friend and Associates. In summary the vegetation survey has found the following:

- The majority of vegetation occurs on the cliff faces with some vegetation located along the banks of the river;
- The site (particularly the cliff faces) contains a significant number of environmental weed species as well as some native vegetation;
- The proposed building envelope in precinct 1 will require the removal of a significant number of environmental weeds (Chinese Elm and Camphor Laurels) with limited native plants requiring removal (possibly two white figs and a silky oak may need to be removed);
- No vegetation is expected to be removed as a direct result of the proposed building envelope in Precinct 2 or as a result of the use of Wharf Building E in Precinct 3.
- When details of required works for cliff stabilisation are resolved for future development permit applications, Council will have the opportunity to assess the removal of any vegetation required by the works at that time. Please note that the primary cause of cliff instability is vegetation roots expanding between rocks and levering them out of position to fall.

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The vegetation survey report also includes recommendations for the removal of weeds species and the rehabilitation and management of native vegetation on the site where appropriate.

BCC Request: *Submit a Visual Analysis and Assessment / Report for the proposed development.*

Please refer to the attached visual assessment report prepared by Place Design. In addition, the response prepared by Allom Lovell (also attached) provides a summary of key findings and includes an assessment of the findings in relation to the significant views of the site and views within the site looking out established in the Conservation Management Plan.

In summary, the visual assessment has found that the visual impacts of the proposed development are low to moderate as the proposed development is not seen as the dominant feature in the assessed views with factors including distance, topography, and shadowing softening the prominence and visual impact of the proposed development so that it becomes part of the landscape setting. In addition, the report includes recommendations for architectural and building treatments that can further reduce the visual impacts.

BCC Request: *Demonstrate that public access to and along the river has been maximised by the proposed development*

An important aspect in conserving the cultural significance of the site noted in the conservation management plan is in reflecting the layout of the site and the circulation patterns that were evident when the site operated as wharves. Accordingly, the proposed layout and central circulation corridor of the proposal is considered to interpret the historic operation of the site where the wharves fronting the river and the rear of the site used for the storage of goods were separated by a central road access.

The access diagram prepared by Tract shows the broad concepts for access and circulation through the site reflecting the historical setting of the site with the most significant corridor for movement through the site occurring behind the existing historic wharf buildings and structures as well as the proposed precinct 2 building envelope. This is considered an appropriate outcome in expressing the original circulation patterns of the heritage place.

Notwithstanding the efforts made to address the cultural significance of the site through the proposed layout and circulation, the conservation and adaptation of the historic structures fronting the river will provide an opportunity to allow public access to the existing structures and the river front which are areas of the site that historically have not been accessible by the public. This is considered an important achievement for the development in providing the opportunity for the public to better appreciate the history of the site and the existing buildings and structures which many would have never been seen.

The circulation plan shows that primary pedestrian access through the site is ultimately intended along the waterfront all the way through the site up to Wharf Building E in Precinct 3. Part of this access will rely on future development applications to reinstate the timber wharves in front of the sheds and shipping office building in Precinct 1.

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Pedestrian access along the riverfront in Precinct 2 has been a key factor in the shaping of the building envelope which includes a large setback at ground level to ensure a significant corridor for pedestrian movement is provided in front of any proposed buildings. In addition, as noted above, the shape of the building envelope in Precinct 2 has been amended to provide the best opportunities for any proposed buildings to abut the level of the existing wharf decking at this location which is located above the level of the existing ground level. This will provide better opportunities for users of the proposed buildings to connect with this existing structure and the riverfront.

Accordingly, public access to and along the river has been maximised in accordance with the conservation management plan and the heritage requirements for the site.

4. CONCURRENCE AGENCY INFORMATION REQUEST RESPONSE

Matters of Interest to Environmental Protection Agency (Coastal Management)

EPA (Coastal Management) Requested Information:

1. *A copy of the layout plans for the proposal, showing the landward boundary (linear plan position) of the Coastal Management District and erosion prone area in relation to all the proposed works and the property boundaries, signed as approved by an RPEQ or licensed surveyor.*

The erosion prone area is shown on the plan prepared by Tract (drawing number SD-L-005). Our understanding is that this is required to establish the EPA's jurisdiction in relation to the proposed development which only applies to the development included in the Erosion Prone Area (The Coastal Management District).

The plan prepared by Tract indicates the proposed development occurs partly in a Coastal Management District.

Referral to the EPA is necessary as the application is for a material change of use made assessable under a local planning instrument, and carrying out the change of use will involve -

1. operational work carried out completely or partly in a coastal management district; and
2. building work, carried out completely or partly in a coastal management district, that is:
 - (i) the construction of new premises with a gross floor area of 1000sq.m; or
 - (ii) the enlargement of the gross floor area of existing premises by more than 1000sq.m

An important aspect of the application is that it is for a preliminary approval for a material change of use under section 3.1.6 of the *Integrated Planning Act 1997* (IPA) and not for a development permit. As you may be aware a preliminary approval approves development but does not authorise assessable development to occur.

Accordingly, the purpose of this preliminary approval application is to provide the broad development framework (height, building location, GFA, site cover, landscape spaces, access provisions etc) to guide future development permit application processes, but maintain some flexibility as trends and circumstances change and more detailed design is carried out.

Details about future operational work or building work that will occur for the development is not known at this stage. Following the issuing of a preliminary approval, Council will be seeking expressions of interest from the development industry to fund, design and construct the development as well as make any necessary development permit applications required to this end. It is only at this time that detailed design will proceed and details about the required operational work and building work that will occur will be known. Future development permit applications are expected to be required to be referred to the EPA (Coastal Management) for consideration of the impacts associated with any work in the Coastal Management District.

Accordingly, the extent of the erosion prone area has limited relevance for the preliminary approval application as the EPA are not able to carry out a detailed assessment of any works at this stage. Therefore the provided plan prepared by Tract is sufficient for this application and a survey plan showing the erosion prone area is not needed at this stage and can be provided when subsequent development permit applications are made to assist the EPA's assessment of these detailed applications.

2. *Information on any subsurface (subsoil) material that will be excavated as part of the proposal. Accordingly the applicant will need to provide the following:*
- (i) Details on any potential contaminants in the material, including acid sulfate soils; and*
 - (ii) Details on the proposed disposal method for the material.*

It is not known at this stage what extent of excavation or filling will be required. The investigation of acid sulfate soils (ASS) is not an aspect to be investigated for the purposes of a preliminary approval for a material change of use application but may be required when future development permit applications are made and the extent of excavation or filling is known. As you are aware a review of previous contamination assessment reports carried out for the site is provided in the report by Brisbane City Council, City Design – Environmental Management provided with the application which includes a site management plan.

Future development permit applications are expected to be required to be referred to the EPA (Coastal Management) for consideration of the impacts associated with any excavation or filling that may occur in the Coastal Management District. Any required detail and any Acid Sulfate Soils reports will be provided at this time.

For your information, the Department of Natural Resources in their role as an advice agency in relation to acid sulfate soils matters and State Planning Policy 2/02 concurred with this view in the correspondence dated 6 January 2009 (attached) as follows:

Given that the current application is for a Preliminary Approval, NRW do not object to acid sulfate soil investigations and management plans

Matters of Interest to Environmental Protection Agency (Cultural Heritage)

EPA (Cultural Heritage) Requested Information:

1. *Provide a visual analysis report for the development, including detail on how significant views are to be preserved. This should include photo montages of views to the site from the river and land and across the site to demonstrate the visual impact of the mass of the proposed buildings on their setting.*

A visual analysis report has been prepared by Place Design Group and is attached. Please refer to the response above in relation to Council's information request and the response prepared by Allom Lovell on this matter.

2. *Provide revised scale drawings of the proposed building envelopes. These should show their relationships to heritage boundaries and buildings.*

The statutory plans for preliminary approval for a material change of use have been updated and amended by Tract. The attached drawings by Tract (drawing numbers SD-L-002 to SD-L-006) entirely replace the drawings prepared by Verge that were submitted with the original application (drawing numbers 2036-01 Issue P9, 2036-03 Issue P4, 2036-04 Issue P5 and 2036-05 Issue P4).

Please refer to the above response under "2. Summary of Changes to Statutory Plans and Development Guidelines" and also to the response to Brisbane City Council's information request. In particular, the changes to the drawings including detailed dimensions and improved accuracy have been specifically made to clearly identify the relationship to heritage boundaries and buildings and to provide clarity about the sensitivity to these historic parts of the site that has been applied to the shape of the building envelopes to avoid any adverse impacts.

3. *Demonstrate any benefits that will accrue to the Howard Smith Wharves and Story Bridge as a result of the proposal, such as conservation works to be carried out in conjunction with the new work.*

Please refer the attached response prepared by Allom Lovell. In summary, the following benefits will accrue:

- The proposal provides an opportunity to conserve and adapt all of the historic buildings on the site (that are currently exposed to threats resulting from underutilisation such as termite infestation, water penetration, fire and vandalism) according to the conservation management plan prepared by Allom Lovell.
- The conservation of the buildings will allow visitors and occupants to enjoy the interior and exterior of the historic buildings (which, except for the former shipping office, have not been publicly accessible) and appreciate the history and significance of the site.

- The scale of the proposal provides an opportunity to warrant adequate attention to express the interpretation potential of the site so that its history can be explored and explained to visitors.
 - The development will require substantial funds and the process established by Brisbane City Council to offer the site to the development industry under conditions for the conservation and adaptation of the historic structures is a valid outcome.
4. *Provide information on guidelines to be provided for developers on appropriate new uses of the wharf sheds and office building.*

Please refer to the response to this item in the attached report by Allom Lovell. In summary, new uses for the site will be governed by development guidelines and the policies in the conservation management plan which focus on the quality and aspects of significance of the existing buildings which should be protected. Each use must be tested against the cultural significance of the place to understand the likely impact it will have on that significance.

5. *Provide an interpretation plan setting out principles and policies, to be reviewed when more detail regarding the development is known.*

Please refer to the response to this item in the attached report by Allom Lovell.

The conservation management plan includes policies to provide guidance for the future interpretation of the site and a comprehensive interpretation plan will be prepared to accompany future development permit applications and the EPA will have the opportunity to assess these details at the appropriate time when an architectural concept for the site has been developed.

6. *Provide further information on how the proposed range of uses satisfies the intent of the State Government MOU to retain the use of the site for public open space or parkland.*

Please refer to the above response to this item in the response to Brisbane City Council's information request. The development is consistent with the intent of the MOU and the State Government has consented to the application.

Regarding the Department of Infrastructure and Planning's Response

I refer to the Department of Infrastructure and Planning's (DIPs) Advice Agency Response dated 3 December 2008. Although a response by the application is not required under the IPA for the DIP's Advice Agency response, the following provides clarity about matters raised by the DIP in their response.

In their letter, DIP identifies that the application should clearly identify the aspects of the planning scheme the application is seeking to amend consistent with the language and format of the Brisbane planning scheme. In response to this matter please refer to the attached table at attachment 1 of this letter which sets out the proposed levels of assessment for the proposed uses in each precinct and refers to the relevant sections of the City Plan which are overridden. You will note that the level of assessment is not varied for a

John Gaskell



planning consultants

Landing which is code assessable development in the Parkland Area in the City Plan.

In addition, DIP states that the applicant must identify how the applicable codes will operate in the context of non-compliance and suggests this should be in accordance with the existing arrangements in the planning scheme. This is clarified at the start of the level of assessment table shown at attachment 1 which refers to Chapter 3, Section 2 General Assessment Processes in the Brisbane City Plan 2000 which sets out the operation of codes. No new codes are proposed and the applicable codes for development are the existing relevant codes in the City Plan which will operate in accordance with the existing City Plan provisions.

This letter is written in accordance with Section 3.3.8 (1)(b) & (2) of the IPA, and responds to part of the information requested by the Council and concurrence agencies.

If there are any questions please do not hesitate to contact me.

Regards

Yours sincerely,

s.73 Irrelevant information

for
John Gaskell
Director

cc:

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Brisbane North Region
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Attachment 1 Level of Assessment

This table should be read in conjunction with Chapter 3, Section 2 General Assessment Processes in the Brisbane City Plan 2000.

The level of assessment table applies to development on land described in the following table:

Street Address	RPD	Area
11A Ivory Lane, Fortitude Valley	Lot 2 on SP 190806	762 m ²
5 Boundary Street, Brisbane	Lot 3 on SP 190810	4,932 m ²
123A Bowen Terrace, Fortitude Valley	Lot 2 on RP 64991	2,259 m ²
123B Bowen Terrace, Fortitude Valley	Lot 3 on RP 64991	119 m ²
123D Bowen Terrace, Fortitude Valley	Lot 4 on RP 64991	119 m ²
3C Boundary Street, Brisbane	Lot 4 on RP 52849	187 m ²
175 Bowen Terrace, Fortitude Valley	Lot 4 on SP 128032	25,940 m ²
231 Bowen Terrace, New Farm	Lot 1 on RP44680	926 m ²
Total		35,244 m²

The trigger for assessment in the level of assessment table is material change of use and/or building work (associated with a use or structure specified in the level of assessment table) where generally in accordance with the preliminary approval plans approved under application A0022165832..

The following level of assessment table provides exceptions to and overrides the level of assessment table for the Parkland Area in Chapter 3, Section 3.2.3 of the City Plan.

Precinct	Code Assessment	Applicable Codes ('Primary' ¹)
Precinct 1	Community Facility	<ul style="list-style-type: none"> Community Use Code Centre Design Code Centre Amenity and Performance Code
	Convention Centre	<ul style="list-style-type: none"> Centre Design Code Centre Amenity and Performance Code
	Indoor Sport and Recreation	
	Office	
	Restaurant	
	Shop	
	Short Term Accommodation	<ul style="list-style-type: none"> Short Term Accommodation Code Centre Design Code Centre Amenity and Performance Code
Precinct 2	Community Facility	<ul style="list-style-type: none"> Community Use Code Centre Design Code Centre Amenity and Performance Code

¹ Other 'secondary' codes in the City Plan 2000 may form part of the 'primary codes' in accordance with the provisions of the 'primary' code. Section 1 'Application' of each code will provide guidance as to whether each 'primary' or 'secondary' code is an applicable code for applications not involving any building work.



	Convention Centre	<ul style="list-style-type: none"> Centre Design Code Centre Amenity and Performance Code
	Office	
	Restaurant	
	Shop	
	Short Term Accommodation	<ul style="list-style-type: none"> Short Term Accommodation Code Centre Design Code Centre Amenity and Performance Code
Precinct 3	Community Facility	<ul style="list-style-type: none"> Community Use Code Centre Design Code Centre Amenity and Performance Code
	Convention Centre	<ul style="list-style-type: none"> Centre Design Code Centre Amenity and Performance Code
	Indoor Sport and Recreation	
	Restaurant	
	Shop	

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Howard Smith Wharves

Development Guidelines

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DEVELOPMENT GUIDELINES

The purpose of these development guidelines is to provide an additional site specific basis for the assessment of a future development permit application(s), and to reinforce the planning outcomes sought by Council for the site.

Possible Development Principle		Possible Outcomes	
PC1	<p>Provide public access through the site for pedestrians and cyclists linking the area of New Farm at the top of the cliffs to the River, park and CBD.</p> <p>Public accessibility must be maximised to promote the useability of the park and facilities, therefore increasing numbers of people and perceived safety.</p> <p>The networks must connect with existing pedestrian and bicycle paths including RiverWalk.</p>	AS1.2	<p>Provide pedestrian and bicycle networks through the park in accordance with the Preliminary Approval Plan. Detailed designs are to include dimensions, probable access locations with RiverWalk and commuter cycle paths.</p> <p>AS1.2</p> <p>Provide public lifts connecting the site to the top of the cliffs in Precinct 1 and 3. Lift structures are also able to include stair access.</p> <p>The lift in Precinct 1 can be located within the new building.</p> <p>The lift in Precinct 3 is able to include small integrated meeting/exhibition spaces as part of the structure.</p> <p>As far as possible the lift in precinct 3 is located to allow a direct path of travel for pedestrians from Kent Street.</p> <p>Both lifts are publicly accessible.</p>
PC2	<p>Provide public equitable access from the CBD and Fortitude Valley/ New Farm to the park and RiverWalk.</p>	AS2	<p>Development is to be in accordance with the <i>AS1428—Design for Access and Mobility</i>.</p> <p>Both lift structures provide equitable access.</p>
PC3	<p>Public parkland must be provided, and sited to connect, and have views of the cliffs and Brisbane River.</p> <p>Areas must be of an appropriate size to accommodate active and passive recreation.</p>	AS3.1	<p>Provide open space in accordance with the Preliminary Approval Plan and Development Guidelines – Schedule 1.</p> <p>AS3.2</p> <p>Maximum ground level site cover is in accordance with the Development Guidelines – Schedule 1.</p>

Possible Development Principle		Possible Outcomes	
PC4.1	Development must protect and retain the cultural heritage values of the site.	AS4.1	Retain Howard Smith Wharf buildings and structures in accordance with the Preliminary Approval Plan.
PC4.2	New uses must be provided to assist in reactivating the site. The Howard Smith Wharf buildings are sensitively reused. The heritage values of the Story Bridge are maintained.	AS4.2	The World War II Air-raid Shelters are retained and protected from development. Setbacks between new buildings in precinct 2 are in accordance with the Development Guidelines – Schedule 1 to retain views of the air-raid shelters from the river's edge.
		AS4.3	The existing wharves are to be retained and repaired and the remnants of the heritage shed (existing flat form section and wharf structure) in Precinct 2 are retained.
		AS4.4	Minimum setbacks defined in the Development Guidelines – Schedule 1 are maintained between any new buildings and the existing heritage structures.
		AS4.5	New buildings are provided and located in accordance with the building envelopes defined by the preliminary approval plans.
		AS4.6	The Howard Smith Wharf buildings (A, B, C & E on the preliminary approval plans) are sensitively reused in accordance with heritage requirements and do not remain vacant.
		AS4.7	Proposed uses in each precinct are in accordance with the preferred uses for each precinct set out in the Development Guidelines – Schedule 1.
		AS4.8	The minimum and maximum number of new buildings provided in each precinct is in accordance with Development Guidelines – Schedule 1.
		AS4.9	The views to the Story Bridge (including the Pier Structures) remain as a prominent feature of the site particularly from the CBD.

Possible Development Principle		Possible Outcomes	
PC5	The development must provide public access to the Brisbane River.	AS5.1	Public access is provided to the entire river frontage in accordance with the Preliminary Approval Plan.
		AS5.2	Building setbacks from the river's edge in Precinct 2 are in accordance with the preliminary approval plans.
PC6	Views from adjoining buildings to the Story Bridge and River must be protected. Development must retain views of the Story Bridge and partial views of the cliffs from significant vantage points including from the CBD, Kangaroo Point and New Farm. The scale and architecture of buildings must reflect the landscape amenity, visual prominence, traffic and servicing limitations, and heritage values of the site.	AS6.1	The heights of buildings are in accordance with the Preliminary Approval Plan and Development Guidelines - Schedule 1.
		AS6.2	Buildings are contained in the building envelopes nominated on the Preliminary Approval Plan and designed in accordance with the Development Guidelines - Schedule 1.
		AS6.2	The proposal complies with AS4.2 to retain views of the cliffs and air-raid shelters in precinct 2 from the river's edge.
PC7	New building design must be distinctive architecture to contrast from the bridge and bridge structures Setbacks of the new building in Precinct 1 to the Story Bridge must provide sufficient space to be respectful of the Heritage listed bridge and allow the bridge to continue its prominence Setbacks of the new building to the Story Bridge must allow appropriate equipment to access the bridge including the sides and underneath of the bridge for maintenance	AS7.1	New buildings have a contrasting appearance against the solid backdrop of the Story Bridge
		AS7.2	Building materials, textures and colours contrast those of the Story Bridge.
		AS7.3	Setbacks of the new building to the Story Bridge in Precinct 1 are in accordance with the building envelope defined by the Preliminary Approval Plans
PC8	Provide a service vehicle road to service the Howard Smith Wharf buildings, and the public parkland and RiverWalk.	AS8.1	Service vehicle and emergency vehicle access is provided in accordance with recommendations provided in a traffic engineering report prepared by a suitably qualified person(s).

Development Guidelines – Schedule 1

Preferred Land Uses	
Precinct 1	<ul style="list-style-type: none"> ▪ Short term accommodation in the new building. ▪ Restaurants, shops, office, indoor sport and recreation, and/or community facilities in the ground floor or lower floors of the new building and within Heritage Buildings A, B and C. ▪ A landing may also be accommodated.
Precinct 2	Short term accommodation, restaurants, landing, shops, convention centre, office and / or community facilities.
Precinct 3	Community facilities, landing, convention centre, restaurants and / or shops, and indoor sport and recreation within Heritage Building E.

New Building Requirements	Precinct 1 New Building in Building Envelope	Precinct 2 New Buildings in Building Envelope	Site overall
Maximum number of new buildings	1 (not including access structure)	3	4 (not including access or ancillary structures with no assessable GFA)
Minimum Number of New Buildings	1 (not including access structure)	2	3 (not including access or ancillary structures with no assessable GFA)
Minimum setback of a building to another building within building envelope	N/A	10m	As per precinct requirements

Maximum Height	RL 32 <i>Note: Access point and associated services are able to exceed RL32 to achieve a connection with the top of the cliffs</i>	RL 21	As per maximum precinct requirements <i>Note: Access point and associated services are able to exceed RL32 to achieve a connection with the top of the cliffs</i>
Maximum GFA	15,000m ²	5,000m ²	20,000m ² new GFA (does not include existing heritage buildings)
Maximum site cover	Below RL 15.9m: As per building envelope and overall site requirements Above RL 15.9m: As per building envelope and overall site requirements	Below RL 9.0m: Not greater than 30% of building envelope area. In addition, Precinct 2 must accommodate at least one open space area a minimum of 1,200m ² which has river frontage of at least 30m Above RL 9.0m: Not greater than 70% of the building envelope area	Less than 3,431.8m ² (10%) new building site cover at ground level (not including access or ancillary structures with no assessable GFA)
Minimum setback from Brisbane River	As described by the building envelope on the Preliminary Approval Plans	As described by the building envelope on the Preliminary Approval Plans <i>(Note: Column support structures for the "P2-Upper" building envelope shown on the preliminary approval plans are about to be located below RL 9 metres in the setback space from the River)</i>	As per precinct requirements

Minimum Setback from any Heritage Structure or Building	17m from Buildings A, B and C	5m from Buildings D	As per precinct requirements
Minimum Setback from any part of the Story Bridge	5m from the understorey of the Story Bridge	Not Applicable	As per precinct requirements

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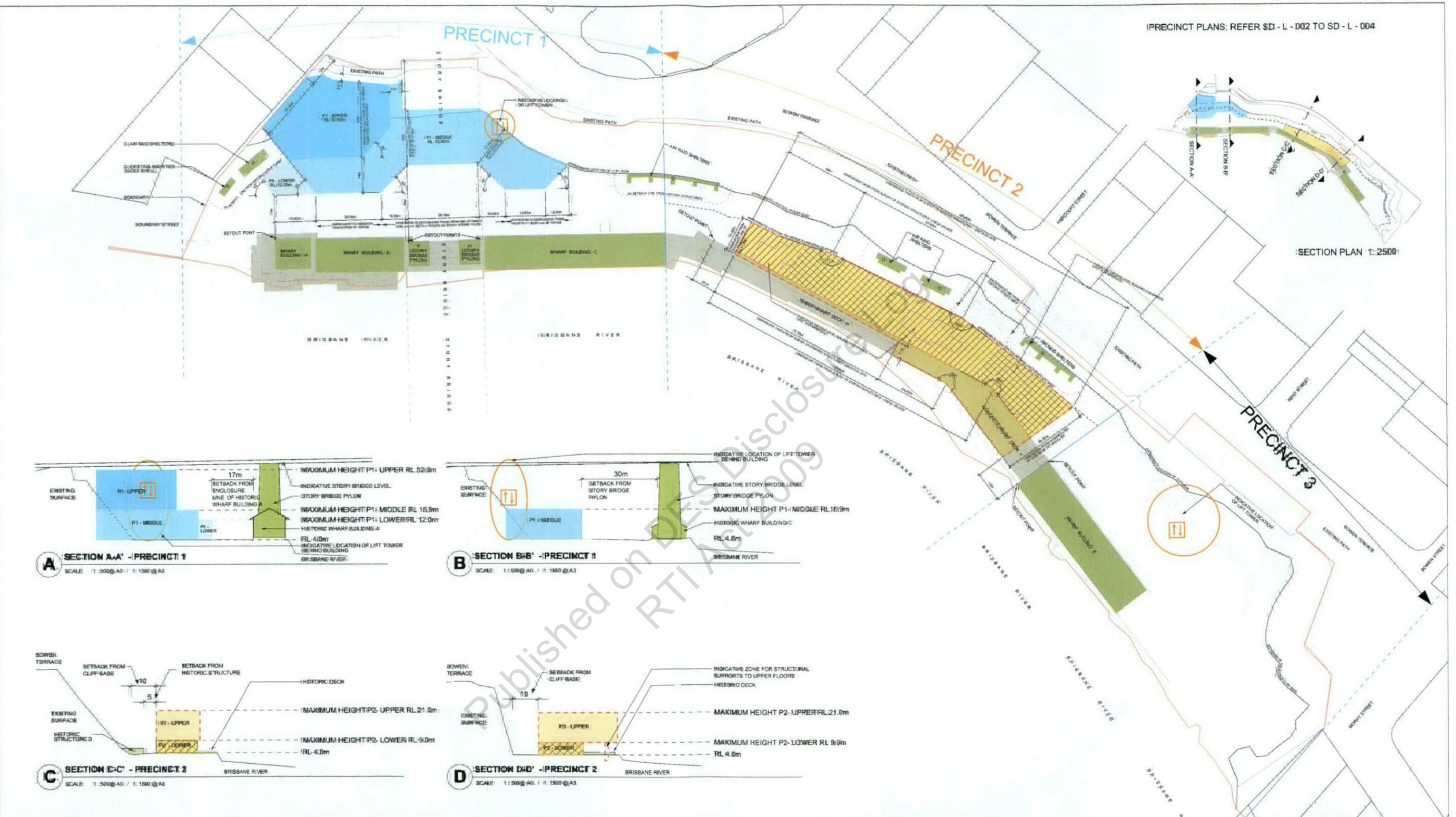
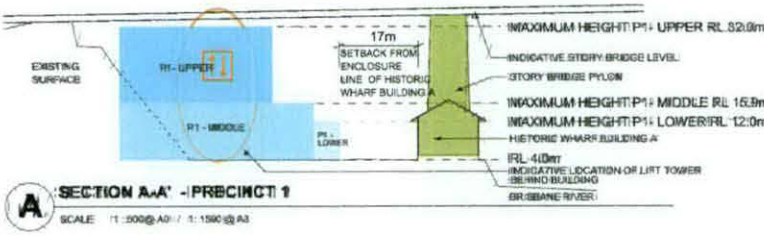
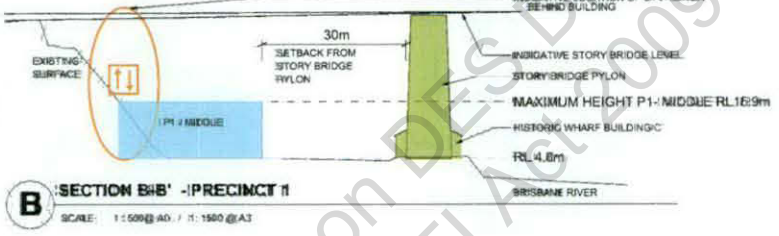
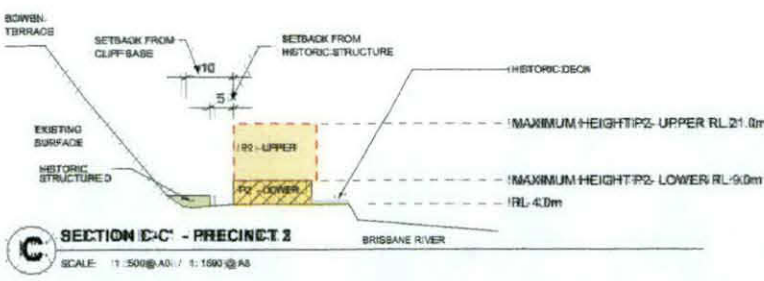
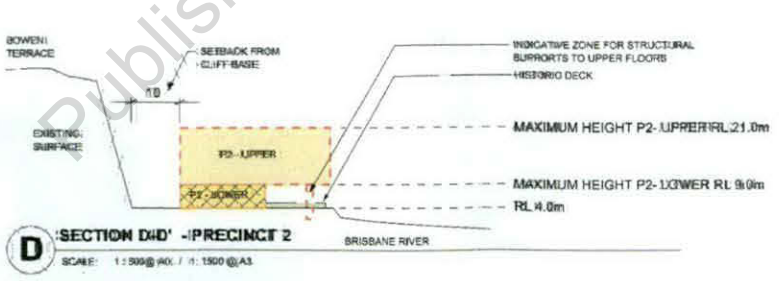
HOWARD SMITH WHARVES : LANDSCAPE CONCEPT PLAN



DATE SCALE DRAWN CHECKED

SCALE 1:500

0 10 20 30 40 50m



LEGEND

- SITE BOUNDARY
- INDICATIVE LOCATION OF LIFT TOWER
- LINE INDICATING THE REQUIRED 9m SETBACK DISTANCE FROM HISTORIC STRUCTURES TO MAINTAIN THEIR CONSERVATION (PREFERENCES FROM THE HOWARD SMITH WHARVES CONSERVATION MANAGEMENT PLAN CREATED BY ALISON LOVELL ARCHITECTS)
- HISTORIC STRUCTURES ENVELOPE
- HISTORIC SURFACES ENVELOPE

PRECINCTS

PRECINCT 1

P1 LOWER+P1 MIDDLE+P1 UPPER+ MAXIMUM ALLOWABLE PRECINCT 1 GROSS FLOOR AREA (GFA): 15,000 m² HENCE, ACTUAL BUILDING FOOTPRINTS WILL BE LESS THAN THE BUILDING AREA ENVELOPES INDICATED

- POTENTIAL BUILDING AREA ENVELOPE P1 - LOWER: 173m² (SPACE ALLOWED FOR PORTE COCHERE)
- ALLOWABLE HEIGHT: RL 12.00m
- ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.43m² (10%) MAXIMUM FOR THIS SITE
- POTENTIAL BUILDING AREA ENVELOPE P2 - MIDDLE: 3271m²
- ALLOWABLE HEIGHT: RL 16.9m
- ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.43m² (10%) MAXIMUM FOR THIS SITE
- POTENTIAL BUILDING AREA ENVELOPE P1 - UPPER: 1235m² ALLOWABLE HEIGHT: BETWEEN RL 15.9 AND RL 32.0m

PRECINCT 2

P2 LOWER+P2 UPPER+ MAXIMUM ALLOWABLE PRECINCT 2 GROSS FLOOR AREA (GFA): 6,000 m² HENCE, ACTUAL BUILDING FOOTPRINTS WILL BE LESS THAN THE BUILDING AREA ENVELOPES INDICATED

- POTENTIAL BUILDING AREA ENVELOPE P2 - LOWER: 264m²
- ALLOWABLE HEIGHT: RL 9.00m
- ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.43m² (10%) MAXIMUM FOR THIS SITE
- POTENTIAL BUILDING AREA ENVELOPE P2 - UPPER: 336m²
- ALLOWABLE HEIGHT: BETWEEN RL 9.00m AND RL 21.00m

INDICATIVE GROUND LEVEL BUILDING FOOTPRINTS - NOT FOR APPROVAL (NOTE: INDICATIVE FOOTPRINTS ARE LOCATED ACCORDING TO THE DEVELOPMENT GUIDELINES AND CONSERVATION MANAGEMENT PLAN TO RETAIN VIEWS OF CLIFF AND AIR RAIL SHelters FROM THE RIVER AS WELL AS OUTWARD VIEWS TO THE RIVER AND THE CITY FROM WITHIN THE SITE.)

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Document Control Status

Project: HOWARD SMITH WHARVES

Drawing Title: STATUTORY PLAN

Drawn: GEMC

Proj. Director: JDP

Proj. Landscape Architect: JDP

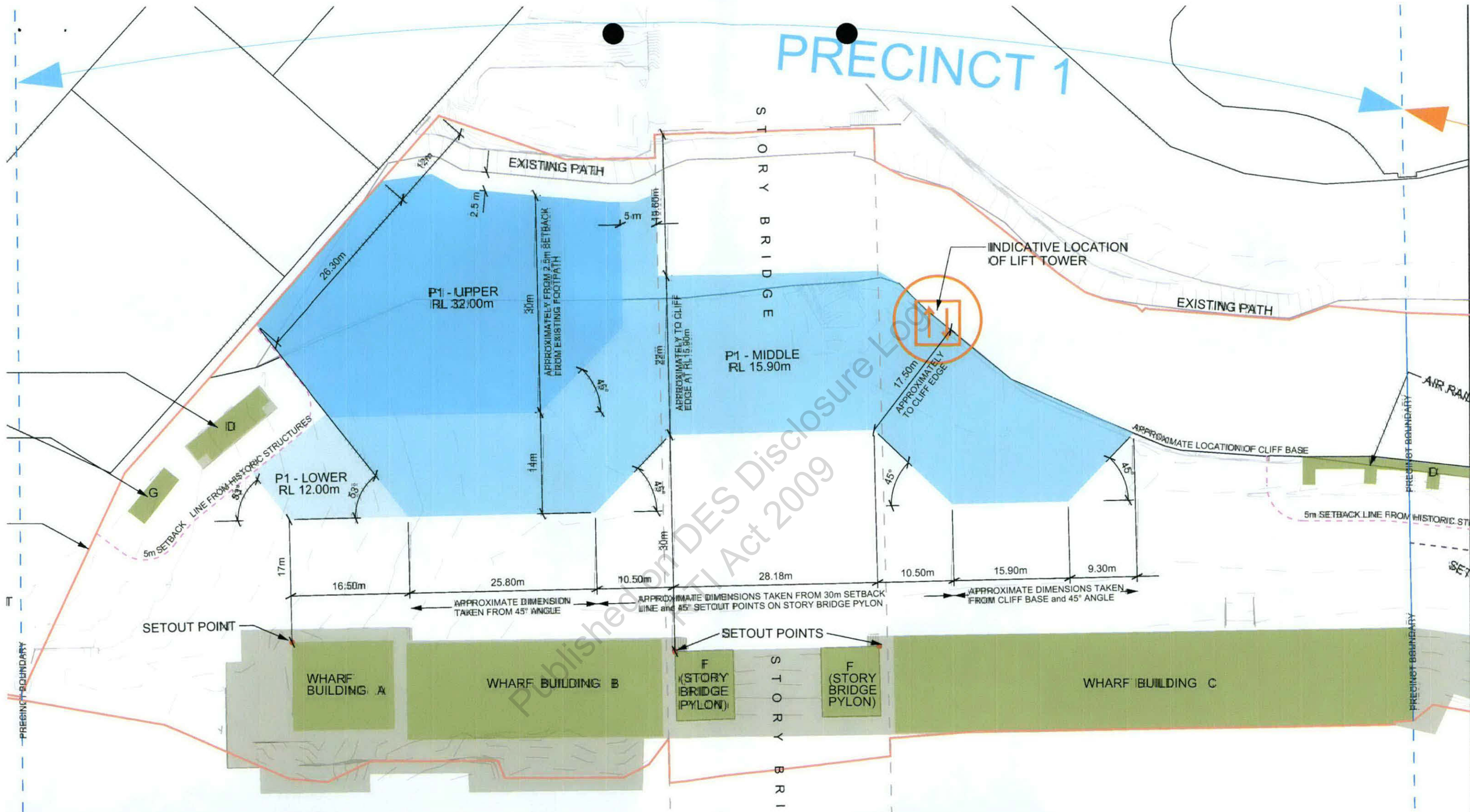
Co-ordinated: JDP

Scale: 1:500 @ A0 / 1:1500 @ A3

Project No: 708154

Drawing Number: SD - L - 001 / Supercedes Drawing 2036-01

Revision: 00



LEGEND

- SITE BOUNDARY
- LINE INDICATING THE REQUIRED 5m SETBACK DISTANCE FROM HISTORIC STRUCTURES TO ENSURE THEIR CONSERVATION (REFERENCED FROM THE HOWARD SMITH WHARVES CONSERVATION MANAGEMENT PLAN CREATED BY ALUM LOVELL ARCHITECTS)

PRECINCTS

- HISTORIC STRUCTURES ENVELOPE
- HISTORIC SURFACES ENVELOPE

PRECINCT 1

- P1-UPPER + P1-MIDDLE + P1-LOWER: MAXIMUM ALLOWABLE PRECINCT 1 GROSS FLOOR AREA (GFA): 15,000 m² HENCE, ACTUAL BUILDING FOOTPRINTS WILL BE LESS THAN THE BUILDING AREA ENVELOPES INDICATED
- POTENTIAL BUILDING AREA ENVELOPE P1 - LOWER: 173m² (GRADE ALLOWED FOR PORTE COCHERE AND ROOF TERRACE STRUCTURE) ALLOWABLE HEIGHT: RL 12.00m; ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.431m² (10% MAXIMUM FOR THE SITE)
- POTENTIAL BUILDING AREA ENVELOPE P1 - MIDDLE: 3271m²; ALLOWABLE HEIGHT: RL 15.90m; ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.431m² (10% MAXIMUM FOR THE SITE)
- POTENTIAL BUILDING AREA ENVELOPE P1 - UPPER: 1285m²; ALLOWABLE HEIGHT: BETWEEN RL 15.9 AND RL 32.00m

PRECINCT 2

- P2-LOWER + P2-UPPER: MAXIMUM ALLOWABLE PRECINCT 2 GROSS FLOOR AREA (GFA): 5,000 m² HENCE, ACTUAL BUILDING FOOTPRINTS WILL BE LESS THAN THE BUILDING AREA ENVELOPES INDICATED. PRECINCT 2 GFA IS TO BE DIVIDED BETWEEN 2-3 SEPARATE BUILDINGS ARRANGED TO ALLOW FOR VISUAL CONNECTION FROM THE CITY AND RIVER THROUGH TO THE CLIFFS AND AIR RAID SHELTERS AND FROM THE SITE TO THE CITY AND RIVER.
- POTENTIAL BUILDING AREA ENVELOPE P2 - LOWER: 2417m²; ALLOWABLE HEIGHT: RL 9.00m; ALLOWABLE SITE COVER AT GROUND LEVEL: BALANCE OF 3.431m² (10% MAXIMUM FOR THE SITE)
- POTENTIAL BUILDING AREA ENVELOPE P2 - UPPER: 3165m²; ALLOWABLE HEIGHT: BETWEEN RL 9.00m AND RL 21.00m

KEY PLAN

- INDICATIVE GROUND LEVEL BUILDING FOOTPRINTS - NOT FOR APPROVAL. NOTE: INDICATIVE FOOTPRINTS ARE LOCATED ACCORDING TO THE DEVELOPMENT GUIDELINES AND CONSERVATION MANAGEMENT PLAN TO RETAIN VIEWS OF CLIFF AND AIR RAID SHELTERS FROM THE RIVER AS WELL AS OUTWARD VIEWS TO THE RIVER AND THE CITY FROM WITHIN THE SITE.

Rev	Description	By	Date	Rev	Description	By	Date
01	ISSUED FOR REVIEW		09.02.09				
22-166							

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File B

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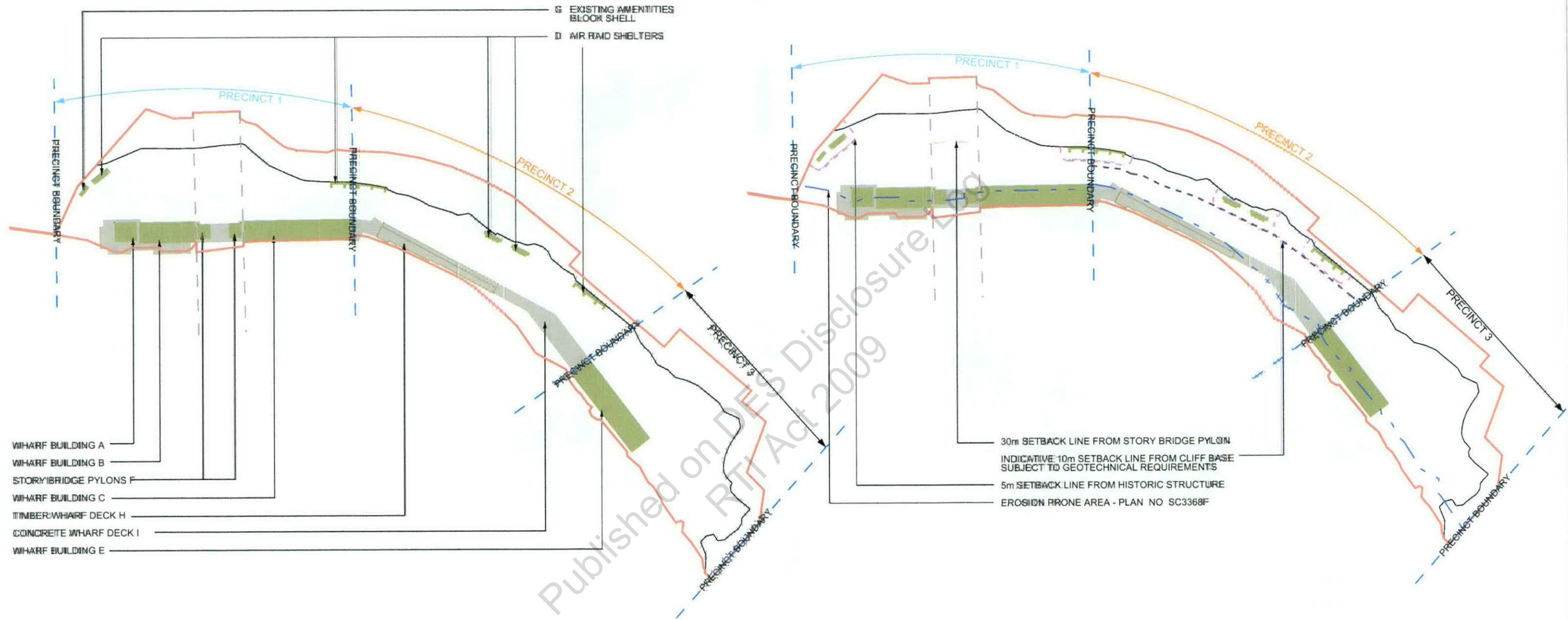
Project
HOWARD SMITH WHARVES
Client
BRISBANE CITY COUNCIL

Drawing Title
STATUTORY PLAN
PRELIMINARY APPROVAL PLAN
PRECINCT 1 PLAN
Drawn: GBMC
Proj. Director: DP
Proj. Landscape Architect: DP
Co-ordinated: DP
Scale: 1:500 @ A3
Project No: 706193
Drawing Number: SD - IL - 002 / Supersedes Drawing 2036-03
Revision: 00

Page 286 of 303

HISTORIC STRUCTURES TO BE RETAINED

SETBACK REQUIREMENTS DIAGRAM



LEGEND



Description		By	Date	Rev	Description	By	Date
ISSUED FOR REVIEW			09.02.09				
						</	

Emergency/ Service Vehicle/Cycle Access



Vehicle Access - Precinct 1 Hotel Parking



Vehicle Manoeuvre Zone

Primary Pedestrian Connectivity



Secondary Pedestrian Connectivity



Shared Pedestrian/ Cyclist Access



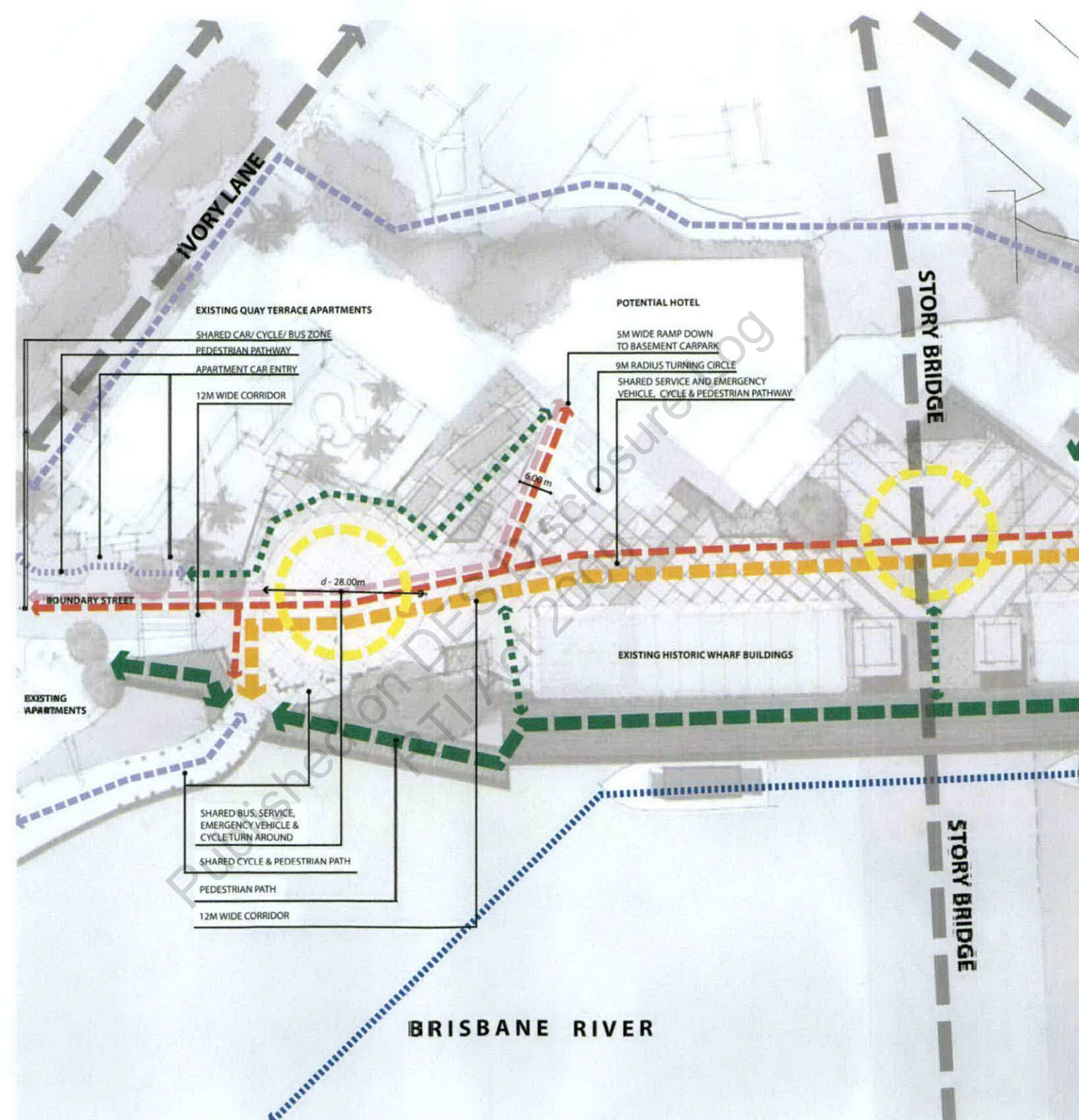
Existing Pedestrian/
Cycle Connectivity



Existing Road Network



Water Vehicle Access

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Tract

File B

Document Control Status

Project	HOWARD SMITH WHARVES
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BRISBANE
CITY
COUNCIL

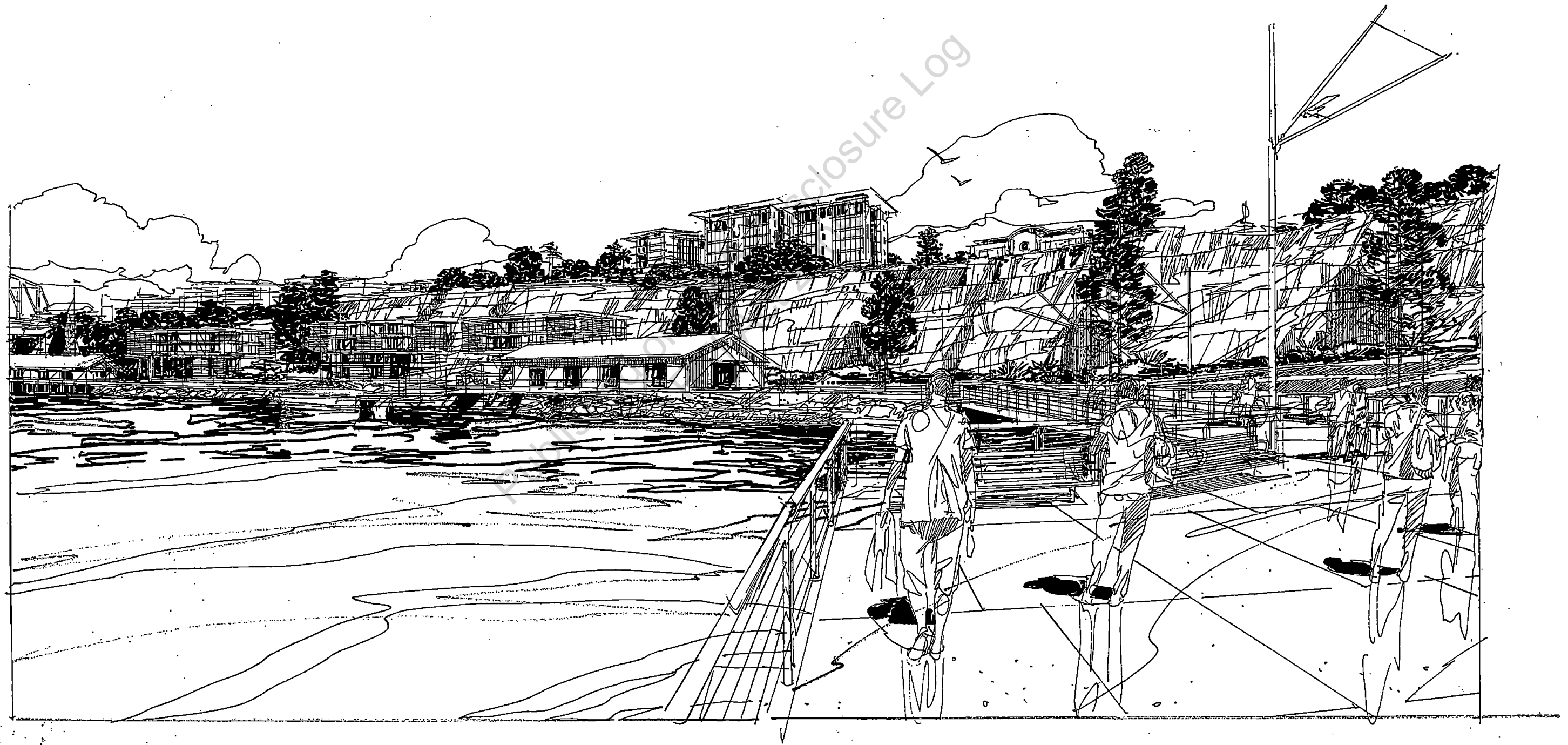
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STATUTORY PLAN
PRELIMINARY APPROVAL PLAN
ACCESS DIAGRAM ENTRANCE

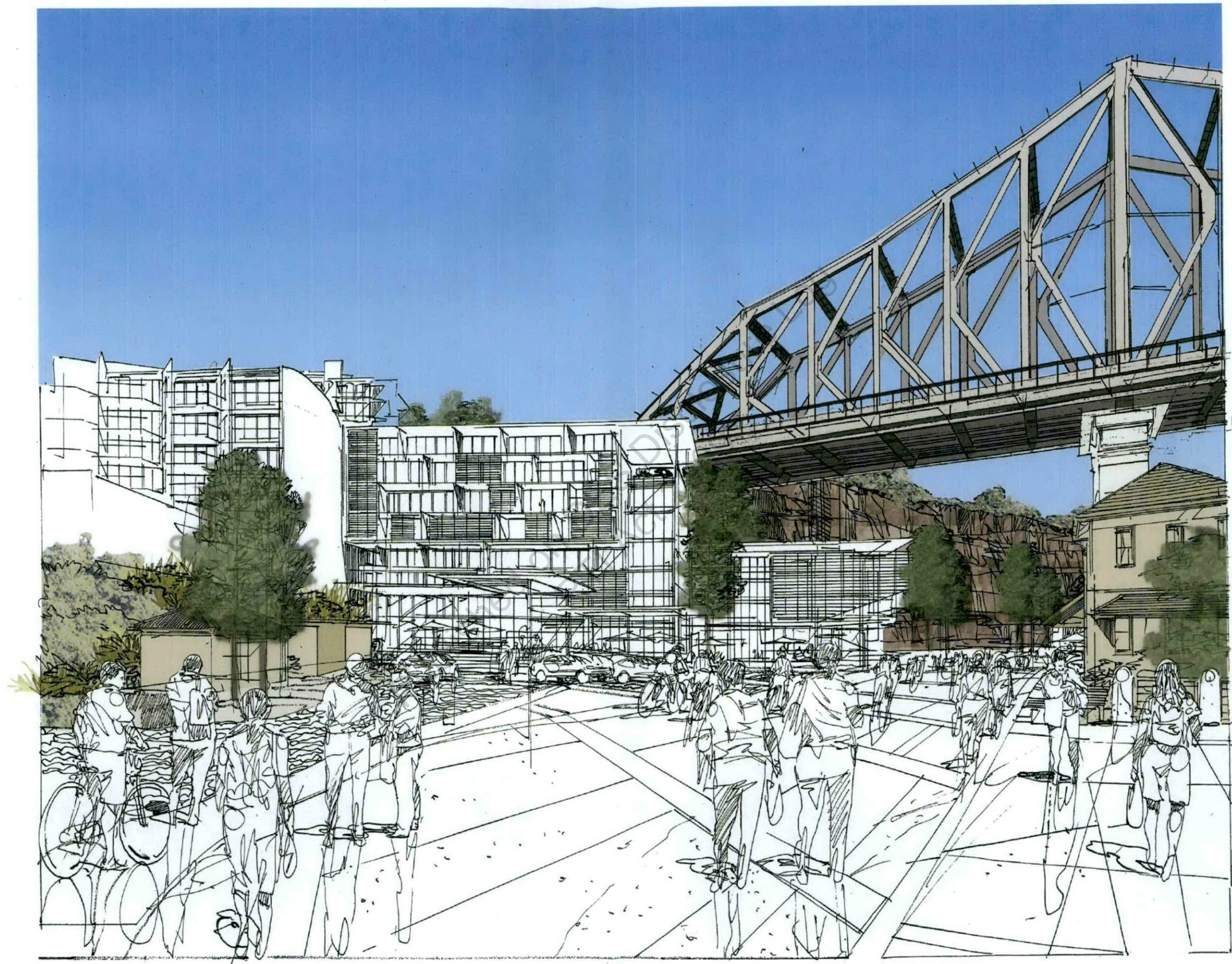


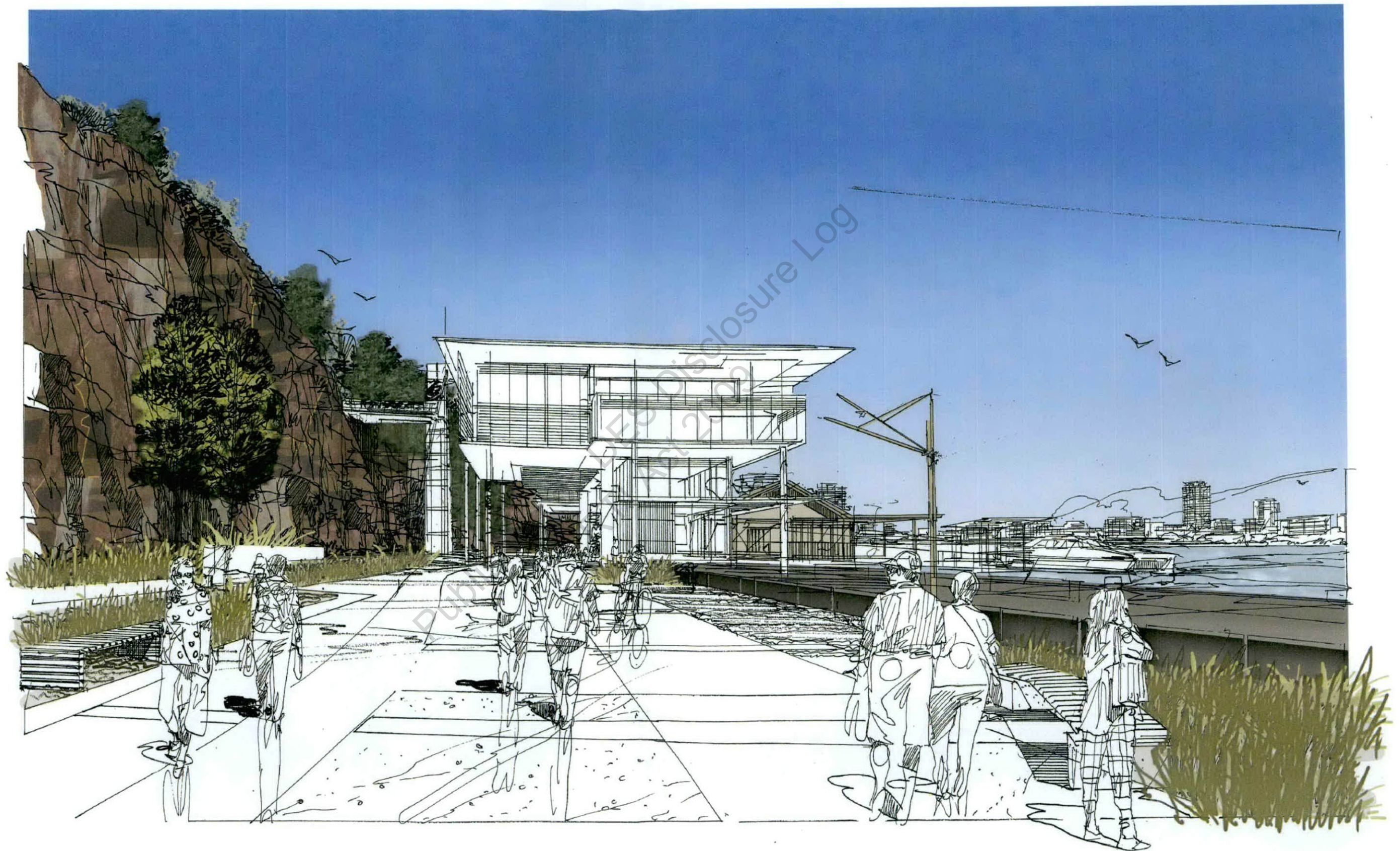
Drawn:	GB/MLC	Proj. Director:	DP
Proj. Landscape Architect	DP	Co-ordinated:	DP
Calc File		Project No	708153
Drawing Number: SD- L - 007		Revision: 00	

Page 291 of 303









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Phil Young
Principal Planner
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BRISBANE CITY COUNCIL
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18 February 2009

Response to Information request V2.docx
QI99872

Dear Phil,

Howard Smith Wharves DA - Traffic and Transport Report Addendum

This letter has been prepared in response to dot point four of the Information Request issued by Brisbane City Council (BCC) dated 19 November 2008:

'Submit a revised Traffic Report detailing on-site traffic impacts likely to be experienced within the proposed redevelopment. The report should clarify proposed methods of managing potential future service vehicle and pedestrian conflicts'.

The BCC requirement is to provide comments on the proposed measures of managing potential service vehicle and pedestrian conflicts within the proposed Howard Smith Wharves development, situated at the southern end of Boundary Street, Fortitude Valley (for which SKM has prepared a traffic and transport report for the preliminary approval in September 2008).

In response to Council's information request, SKM provides the following advice:

- The application is for preliminary approval only and detailed arrangements for service/emergency vehicle access, pedestrian and cyclist movement through the site are not yet resolved and will be addressed in subsequent development permit application;
- Notwithstanding the application is for a preliminary approval only, Tract consultants have prepared a preliminary landscape concept plan and accompanying access diagrams in order to demonstrate the broad concepts for circulation and movement through the site and to demonstrate how the site can be managed to avoid adverse impacts such as conflicts between pedestrians, service/emergency vehicles and cyclists. (refer to the attached plans)

The preliminary landscape access diagram has incorporated the following principles:

- Suitable pedestrian/cyclist facilities with connections to the external (existing) infrastructure including the RiverWalk will be provided;
- Service vehicle and emergency vehicle access into the site and to/from Boundary Street will be provided through a shared service vehicle/emergency vehicle, pedestrian and cyclist pathway.
- Two vehicle manoeuvre zones will be provided, one within the road reserve at the terminus of Boundary Street and the other providing a key servicing area in front of the precinct 1 building

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envelope. The turning facility situated next to the development access point would also be used as a bus turning facility. The bus turning facility is expected to be used by coaches/tourist buses to service the site.

- Service vehicle access will be designed for all the precincts in the development area, where service vehicle access is required. The final design of the development will:
 - allow for adequate provisions for on-site serving;
 - cater for the precinct's final designation; and
 - be in accordance with BCC's Transport, Access, Parking and Servicing Planning Scheme Planning Scheme Policy.
- Internally, access by service vehicle and emergency vehicles will be allowed through a pedestrian/cyclist/vehicular shared zone. Specific 'shared zone' treatment will be included in the final design (for subsequent development permit application) such as to provide optimal safety and amenity for pedestrians (including speed limits, well defined 'shared zone' limits, contrasting pavement surface, adequate signing, bollards, lighting and street furniture to support the pedestrianisation of the area). In addition to the shared access zone set behind the historic buildings centrally in the site, primary pedestrian access shown in access diagrams prepared by Tract is ultimately intended to be provided along the entire riverfront up to Wharf Building E in Precinct 3. In Precinct 1 this will rely on a future application (s) for the reinstatement of the wharf decks along river.
- Service and emergency vehicle access will also be regulated to ensure that they gain access to the development without undue hindrance.
- A turning facility for service/emergency vehicles will be provided at the south-eastern end of the proposed development, as shown in the access diagram (attached). The design of the turning facility will to comply with the *Austroads Design Vehicle and Turning Path Templates* (2006) and BCC's Transport, Access, Parking and Servicing Planning Scheme Planning Scheme Policy
- Access for private cars is restricted to car parking contained within the future hotel intended for Precinct 1 only, via the Boundary Street entry to the site as shown in the attached entry access diagram.



Recommendations

It is recommended that the following measures be implemented:

- A potential conflict point between pedestrians and cyclists has been determined at the intersection of the primary pedestrian path and the existing RiverWalk pedestrian/cyclist route. It is advisable that the conflict be managed through appropriate signage and/or traffic management specific devices (including warning signs, pavement messages and contrasting pavement surface, appropriate lighting,)
- A designated pedestrian/cyclist path that circumnavigates the proposed turning area at the end of Boundary Street should be provided enabling a direct connection to the main shared access corridor within the site to avoid potential conflicts with buses and/or service/emergency vehicle using the turning facility.
- Minimum turning radius for buses (design vehicle for the turning facility at the Boundary Street entry) should be determined in accordance with *Austroads Design Vehicle and Turning Path Templates* (2006). The requirement is to provide a minimum turning radius of :
 - 12.5m for 5km/h
 - 15m for 5 to 15km/h
 - 20m for 15 to 20km/h
 - 30m for 20 to 30km/h.

A turning radius of 14m has been allowed in the preliminary landscape entry accessibility plan provided. As the operating speed on the turning facility is not expected to be more than 10km/h, the turning radius allowed in the preliminary landscape design of 14m is considered suitable for the type of bus/coaches required to perform this operation. Further consideration to this matter will be given in the subsequent development applications

Conclusion

The preliminary landscape design prepared by Tract for the Howard Smith Wharves BCC's preliminary approval incorporates the principles of the integrated pedestrian/cyclist and occasional service/emergency vehicle access. These intended principles and subject to appropriate implementation of the above recommendations will ensure the Howard Smith Wharves development will provide a safe and secure access to all modes of transport.

Yours sincerely

s.73 Irrelevant information

Traffic/Transport Engineer

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The Hornery Institute

Date: 23rd March 2009

To John Gaskell Planning Consultants
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Qld 4102

Re: Howard Smith Wharves: Crime Prevention Through Environmental Design (CPTED)

Purpose

In response to the request for information by Brisbane City Council dated 19 November 2008 for a CPTED study as part of the proposed preliminary approval for Howard Smith Wharves this letter outlines how CPTED objectives have been progressed within the planning process to date. In addition the letter outlines how CPTED objectives will continue to be identified and progressed at appropriate stages in the development process.

Background

The letter has been written by The Hornery Institute (THI), an independent not for profit social and cultural planning, community development and place management agency. As part of the planning process for Howard Smith Wharves, THI was commissioned by Brisbane City Council to implement a program of community consultation and a destination plan for Howard Smith Wharves.

Consultation:- A recurrent theme within the community consultation was safety. The primary issues relating to safety included the following:

- Isolation of the site and use by marginalised groups such as homeless people.
- Inter action of bikes and pedestrians.
- Behavior of people leaving facilities within the development

Destination Plan:- The development of the Destination Plan was informed by a internationally recognised place management vitality and viability index. A key principle of the index is safety. That is that if people do not feel safe they will not go there and the development's basic viability is undermined. The safety element of the index draws on the CPTED principles as outlined in Brisbane City Council's City Plan. The Destination Plan considered safety issues that emerged during the consultation and provided advice on the development of the proposed preliminary approval.

As you are aware it is the intent of the owner that once preliminary approval is obtained the site will be developed with the private sector who will be responsible for final design.

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The Hornery Institute

Implementation

The preliminary approval has progressed issues of safety identified within the community consultation and broader CPTED objectives appropriate at this stage of the planning process. Other CPTED elements can only be addressed during more detailed design and ongoing place management. A key recommendation of the Destination Plan is that a CPTED analysis be incorporated as part of the final design submitted by tenderers for the development.

This letter now outlines how planning for Howard Smith Wharves development has already responded to safety objectives and issues, the current position and next steps to be considered during the detailed design phase.

Specific safety issues identified through the consultation	Current Position	Next Steps (Detailed design and Place Management)
Isolation of the site	Currently the site attracts around 3000 people a day using RiverWalk and mostly at peak commuter times. The preliminary approval allows a diverse mix of uses and improved active and public transport links. These two elements can provide for reducing isolation and increasing activation.	Through the detailed design and place management strategy maintain the focus on active and public transport links and diversity of activity across the precinct.
Inter action of bikes and pedestrians	An access and mobility plan is being developed as part of the proposed preliminary approval.	Access and mobility will be included as a theme to be addressed as part of final proposals from tenderers and detailed design.
Behavior	The Destination Plan recommends a place management body as part of the precinct. The place management agency would have a responsibility for monitoring and developing strategies to reduce anti social behavior.	Model of Place Management will be a theme to be addressed within tender submissions.
CEPTED Principles BCC City Plan	Current Position	Next Steps



The Hornery Institute

Casual surveillance and sightlines	The proposed plan maintains the main existing sight lines and building envelopes allow for activation and increased observation and sightlines especially around public space within the site..	An assessment of sightlines will be included as part of the CPTED analysis during detailed design and once the location of buildings has been confirmed.
Land use and activity generators	<p>The proposed plan allows for compatible land use and a diversity of activity across the length of the site, generating activity at different times of day.</p> <p>The inclusion of the hotel as a permitted use is highly desirable. The inclusion of the hotel creates a destination (along with restaurants and tour boats) and provides 24hr monitoring, observation and point of assistance for members of the public.</p>	Ensure detailed design includes seating and other activity generators around active edges to encourage passive surveillance.
Definition of use and ownership	The proposed preliminary approval defines clear areas of activities and uses. This is important in helping ensure the illegitimate use is obvious and therefore less likely.	<p>Any areas with undefined uses such as the heritage bomb shelters and toilets need to be considered and addressed through the detailed design and place management plan.</p> <p>Other elements to be included in the detailed design include a signage (symbolic and literal) strategy for confirming intended uses. Symbolic can include plantings, change in pavement textures etc.</p> <p>This will be carried out by the tenderers during detailed design.</p>
Basic exterior building design	The proposed preliminary approval does not address the role of building design in delivering safety outcomes.	The destination plan recommends a CPTED audit as part of the detailed design process. This will be carried out by the tenderer when submitting their final plans.



The Hornery Institute

		<p>Assessment will be carried out as per the BCC City Plan.</p> <p><i>Exterior design and treatment of buildings can directly support and reduce crime by reducing opportunities for entrapment, concealment and vandalism.</i> (4.4)</p>
Lighting	<p>The proposed preliminary approval does not address the role of lighting design in delivery of safety outcomes. This can only be addressed once more detailed design and location of buildings and facilities is complete.</p>	<p>The destination plan recommends a CPTED audit as part of the detailed design process. This will be carried out by the tenderer when submitting their final plans and through the place management plan.</p> <p>Assessment will be carried out as per the BCC City Plan including.</p> <p>Use of multiple lights rather than single fittings to provide consistent lighting levels..</p> <p>Ensure all inset spaces, access and egress routes and signage are well lit. Ensure lighting illuminates pathways and potential entrapment areas.</p> <p>Identify and light safe routes.</p>
Way-finding	<p>The natural form of the site and proposed pedestrian routes within the preliminary approval provide excellent cues on how to navigate the development area.</p> <p>The proposed plan does not include a signage strategy as final design is dependent on location of buildings and facilities.</p>	<p>A signage strategy will be provided as part of the detailed design. At a minimum the signage plan will be clearly visible (ideally 20 metres) and identify where assistance and key areas are located.</p>
Predictable routes	<p>As outlined in BCC's City Plan predictable routes are a safety concern as they enable potential attackers to</p>	<p>Detailed design to ensure there are no entrapment spaces at key points with the site such as access points to the lifts, entry</p>



The Hornery Institute

	<p>easily identify the route taken by users. These include stairwells and pedestrian paths. This is of particular concern when a route ends at a entrapment spot. Entrapment spots are small confined spaces usually shielded on 3 sides by barriers.</p> <p>The proposed plan significantly expands the number of routes within the site including two public lifts and options for routes through the site.</p>	<p>and exit to the site and around buildings.</p> <p>An assessment to identify any predictable routes and entrapment zones will form part of the detailed design and CPTED analysis.</p>
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In conclusion the planning process to date for Howard Smith Wharves has been very aware of the site's isolation and issues of safety. A number of key issues have already been addressed by the proposed preliminary approval. The proposed plan makes provision for the following:

- Increased access and entry points to reduce the risk of predictable routes.
- Improved pedestrian routes and travel options, again reducing problems with predictable routes.
- Increased mix and location of uses across the site which will increase activation, observation, sight lines and social normalisation.
- A diversity of uses that includes 24 hour monitoring through the inclusion of a hotel and a point of contact.

The next stage for implementing the development of Howard Smith Wharves includes a public tender and submission of detailed designs. The Destination Plan for Howard Smith Wharves recommends that a CPTED analysis be incorporated as part of the detailed design and tenderers final submissions. This stage of the project will progress other CPTED elements including:

- Lighting
- Signage and way finding
- Building design; and
- Site Lines

If you require any further information please contact me on the number below.

s.73 Irrel

Yours Sincerely

s.73 Irrelevant information

Senior Consultant
The Hornery Institute.

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